UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 40-F

[Check one]

☐ **REGISTRATION STATEMENT PURSUANT TO SECTION 12 OF THE SECURITIES EXCHANGE ACT OF 1934**

OR

☒ **ANNUAL REPORT PURSUANT TO SECTION 13(a) OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended December 31, 2018

Commission File Number 001-38336

NUTRIEN LTD.

(Exact name of Registrant as specified in its charter)

Canada
(Province or other jurisdiction of incorporation or organization)

2870
(Primary Standard Industrial Classification Code Number (if applicable))

98-1400416
(I.R.S. Employer Identification Number (if applicable))

Suite 500, 122 – 1st Avenue South
Saskatoon, Saskatchewan, Canada
S7K 7G3

13131 Lake Fraser Drive S.E.
Calgary, Alberta
T2J 7E8 Canada

(306) 933-8500
(Address and telephone number of Registrant's principal executive offices)

CT Corporation System
28 Liberty St.
New York, NY 10005
(212) 894-8940
(Name, address (including zip code) and telephone number (including area code) of agent for service in the United States)

Securities registered or to be registered pursuant to Section 12(b) of the Act:

Title of each class	Name of each exchange on which registered
Common Shares	New York Stock Exchange

Securities registered or to be registered pursuant to Section 12(g) of the Act:

Not Applicable
(Title of Class)

Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act:

Not Applicable
(Title of Class)

For annual reports, indicate by check mark the information filed with this Form:

☒ **Annual information form** ☒ **Audited annual financial statements**

Indicate the number of outstanding shares of each of the issuer's classes of capital or common stock as of the close of the period covered by the annual report.

608,535,477 Common Shares outstanding as of December 31, 2018

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Exchange Act during the preceding 12 months (or for such shorter period that the registrant was required to file such reports) and (2) has been subject to such filing requirements for the past 90 days.

☒ Yes ☐ No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files).

☒ Yes ☐ No

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 12b-2 of the Exchange Act.

☐ Emerging growth company

If an emerging growth company that prepares its financial statements in accordance with U.S. GAAP, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards† provided pursuant to Section 13(a) of the Exchange Act. ☐

† The term "new or revised financial accounting standard" refers to any update issued by the Financial Accounting Standards Board to its Accounting Standards Codification after April 5, 2012.

This Annual Report on Form 40-F shall be incorporated by reference into the Registration Statements on Form S-8 (File Nos. 333-222384, 333-222385 and 333-226295) of the registrant. In addition, the registrant's Annual Information Form, Management's Discussion and Analysis and Audited Annual Consolidated Financial Statements for the fiscal year ended December 31, 2018, including Management's Annual Report on Internal Control over Financial Reporting, included as Exhibits 99.1, 99.2 and 99.3, respectively, to this Annual Report on Form 40-F, are incorporated by reference into and as an exhibit to the registrant's Registration Statement on Form F-10 (File No. 333-223273).

PRINCIPAL DOCUMENTS

The following documents have been filed as part of this Annual Report:

1. Annual Information Form for the fiscal year ended December 31, 2018 (filed as Exhibit 99.1 hereto);
2. Management's Discussion and Analysis for the fiscal year ended December 31, 2018 (the "2018 MD&A") (filed as Exhibit 99.2 hereto); and
3. Audited Annual Financial Statements, including the Reports of Independent Registered Public Accounting Firm, for the fiscal year ended December 31, 2018 (the "2018 Audited Annual Financial Statements") (filed as Exhibit 99.3 hereto).

CONTROLS AND PROCEDURES

A. Certifications

The required disclosure is included in Exhibits 99.6, 99.7 and 99.8 to this Annual Report, and is incorporated herein by reference.

B. Evaluation of Disclosure Controls and Procedures

The required disclosure is included in "*Controls and Procedures—Disclosure Controls and Procedures*" in the 2018 MD&A, filed as Exhibit 99.2 to this Annual Report, and is incorporated herein by reference.

C. Management's Annual Report on Internal Control over Financial Reporting

Management is responsible for establishing and maintaining an adequate system of internal control over financial reporting as defined in Rules 13a-15(f) and 15d-15(f) under the Securities Exchange Act of 1934, as amended. The required disclosure is included in "*Management's Responsibility—Management's Responsibility for Financial Reporting—Management's Annual Report on Internal Control over Financial Reporting*" that accompanies the 2018 Audited Annual Financial Statements, filed as Exhibit 99.3 to this Annual Report, and is incorporated herein by reference.

D. Attestation Report of the Independent Registered Public Accounting Firm

The required disclosure is included in the "*Report of Independent Registered Public Accounting Firm*" that accompanies the 2018 Audited Annual Financial Statements, filed as Exhibit 99.3 to this Annual Report.

E. Changes in Internal Control over Financial Reporting

During the period covered by this report, there was no change in Nutrien's internal control over financial reporting that has materially affected, or is reasonably likely to materially affect, its internal control over financial reporting. See "*Controls and Procedures—Internal Controls Over Financial Reporting*" in the 2018 MD&A, filed as Exhibit 99.2 to this Annual Report, and incorporated herein by reference.

IDENTIFICATION OF THE AUDIT COMMITTEE

The Board has a separately-designated standing audit committee established in accordance with section 3(a)(58)(A) of the Exchange Act. The members of the Audit Committee are Maura J. Clark, Christopher M. Burley, David C. Everitt, Russel K. Girling, Alice D. Laberge, Keith G. Martell, Derek G. Pannell and Aaron W. Regent.

AUDIT COMMITTEE FINANCIAL EXPERT

The Nutrien Board of Directors (the "Board") has determined that it has at least one "audit committee financial expert" (as such term is defined in paragraph 8(b) of General Instruction B to Form 40-F) serving on its Audit Committee. Ms. Maura J. Clark has been determined to be such audit committee financial expert and was "independent" as such term is defined under the Canadian Securities Administrators' National Instrument 52-110 (Audit Committees) and the standards of the U.S. Securities and Exchange Commission (the "SEC") and the New York Stock Exchange (the "NYSE") relating to the independence of audit committee members.

The Board's designation of Ms. Maura J. Clark as an audit committee financial expert does not impose on her any duties, obligations or liability that are greater than the duties, obligations and liability imposed on her as a member of the Audit Committee and Board in the absence of such designation or identification. In addition, the designation of Ms. Maura J. Clark as an audit committee financial expert does not affect the duties, obligations or liability of any other member of the Audit Committee or Board. See also *"Item 17—Audit Committee"* of Nutrien's Annual Information Form, filed as Exhibit 99.1 to this Annual Report, and incorporated herein by reference.

COMPLIANCE WITH NYSE LISTING STANDARDS ON CORPORATE GOVERNANCE

Our common shares are listed on the NYSE, but as a listed foreign private issuer, the NYSE does not require us to comply with all of its listing standards regarding corporate governance. Notwithstanding this exemption, we are in compliance in all material respects with the NYSE listing standards and we intend to continue to comply with such standards so as to ensure that there are no significant differences between our corporate governance practices and those practices required by the NYSE of other publicly listed companies.

CODE OF CONDUCT AND ETHICS

Nutrien has adopted a "code of ethics" (as that term is defined in Form 40-F), entitled the Nutrien Code of Ethics that applies to all directors, officers, employees and representatives of Nutrien and its subsidiaries (the "Nutrien Code"). A copy of the Nutrien Code is posted on Nutrien's website at https://www.nutrien.com/what-we-do/governance. Copies may be obtained, free of charge, by contacting Nutrien in writing at Suite 500, 122 – 1st Avenue South, Saskatoon, Saskatchewan, Canada S7K 7G3, by telephone at (306) 933-8500 or on Nutrien's website at www.nutrien.com. Nutrien intends to post any amendments to and waivers from the Nutrien Code on its website as identified above.

NOTICES PURSUANT TO REGULATION BTR

Not applicable.

PRINCIPAL ACCOUNTANT FEES AND SERVICES

In July 2018, KPMG LLP was appointed by the Board of Directors as the sole external auditor of Nutrien. The following table sets out the fees billed to Nutrien by KPMG LLP and its affiliates for professional services rendered during the year ended December 31, 2018.

Category	Year Ended December 31, 2018[5] US$
Audit Fees [1]	5,942,200
Audit-Related Fees [2]	325,900
Tax Fees [3]	362,400
All Other Fees [4]	0
Total	**6,630,500**

1 For professional services rendered by KPMG LLP for the audit and review of Nutrien's financial statements or services that are normally provided by KPMG LLP in connection with statutory and regulatory filings or engagements.

2 For professional services rendered by KPMG LLP for specified audit procedures regarding financial assurances issued to certain government agencies, and services which are reasonably related to the performance of the audit of Nutrien's financial statements and are not included in Audit Fees.
3 For professional services rendered by KPMG LLP for tax compliance, tax advice and tax planning with respect to the Canadian, US and key international jurisdictions; review of tax filings; assistance with the preparation of tax filings; tax advice relating to asset dispositions; and other tax planning, compliance, and transaction services. These amounts include fees paid to KPMG LLP specifically for tax compliance and preparation services rendered in 2018 in the amount of $289,200.
4 KPMG LLP did not provide any "other services" during the period.
5 Does not reflect one-time fees paid to KPMG LLP and Deloitte LLP for the jointly-conducted audit of Nutrien's financial statements for the period from June 2, 2017 (the date that Nutrien was incorporated), to December 31, 2017, during which period Nutrien did not conduct any business or hold any significant assets. Such audit was prepared solely to comply with Canadian securities laws in connection with the Merger (as defined below).

The following table sets out the fees billed to Agrium Inc. ("Agrium"), one of the predecessors of Nutrien under the U.S. Securities Exchange Act of 1934, as amended (the "Exchange Act"), by KPMG LLP and its affiliates for professional services rendered during the year ended December 31, 2017.

Category [1]	Year Ended December 31, 2017 CDN$
Audit Fees [2]	4,201,500
Audit-Related Fees [3]	10,000
Tax Fees [4]	440,200
All Other Fees [5]	65,000
Total	**4,716,700**

1 Nutrien is a successor issuer to Agrium pursuant to Rule 12g-3 under the Exchange Act as a result of the merger of equals transaction contemplated by the arrangement agreement dated as of September 11, 2016 between PotashCorp and Agrium pursuant to which PotashCorp and Agrium became wholly-owned subsidiaries of Nutrien pursuant to a plan of arrangement under the *Canada Business Corporations Act* (the "Merger"). Accordingly, the fees included in the table above are those fees incurred by Agrium for KPMG LLP's audit of Agrium for the fiscal year ended December 31, 2017.
2 For professional services rendered by KPMG LLP for the audit and review of Agrium's financial statements or services that are normally provided by KPMG LLP in connection with statutory and regulatory filings or engagements.
3 For professional services rendered by KPMG LLP for specified audit procedures regarding financial assurances issued to certain government agencies, and services which are reasonably related to the performance of the audit of Agrium's financial statements, and are not included in Audit Fees.
4 For professional services rendered by KPMG LLP for tax compliance, tax advice and tax planning with respect to Canadian, U.S. and key international jurisdictions; review of tax filings; assistance with the preparation of tax filings; tax advice relating to potential asset and business acquisitions/combinations; and other tax planning, compliance, and transaction services. These amounts include fees paid to KPMG LLP specifically for tax compliance and preparation services rendered in 2017 in the amount of $326,200.
5 For professional services rendered by KPMG LLP for cyber security risk assessment.

The following table sets out the fees billed to Potash Corporation of Saskatchewan ("PotashCorp"), the other predecessor of Nutrien under the Exchange Act, by Deloitte LLP and its affiliates for professional services rendered during the year ended December 31, 2017.

Category [1]	**Year Ended December 31, 2017 US$**
Audit Fees [2]	2,013,962
Audit-Related Fees [3]	305,734
Tax Fees [4]	362,078
All Other Fees [5]	39,877
Total	**2,721,651**

1 As a result of the Merger, PotashCorp is the accounting predecessor to Nutrien under applicable U.S. securities laws, and Nutrien is a successor issuer to PotashCorp pursuant to Rule 12g-3 of the Exchange Act. Accordingly, the fees included in the table above are those fees billed to PotashCorp by Deloitte LLP and its affiliates for professional services rendered during the year ended December 31, 2017.
2 For professional services rendered by Deloitte LLP for the audit of PotashCorp's annual consolidated financial statements, review of interim financial statements, the provision of consent letters and the provision of comfort letters.
3 For professional services rendered by Deloitte LLP for employee benefit plan audits, audits of individual statutory financial statements, verification letters issued for certain of PotashCorp's environmental liabilities, and specified procedure engagements.
4 For professional services rendered by Deloitte LLP for general tax compliance and advice.
5 For professional services rendered by Deloitte LLP for operational consulting, subscription based services for human resource related literature, and subscription based service for accounting literature.

AUDIT COMMITTEE'S PRE-APPROVAL POLICIES AND PROCEDURES

The required disclosure is included in *"Item 17—Audit Committee—17.4—Pre-Approval Policies and Procedures"* of Nutrien's Annual Information Form, filed as Exhibit 99.1 to this Annual Report, and incorporated herein by reference.

OFF-BALANCE SHEET ARRANGEMENTS

The required disclosure is included in *"Off-Balance Sheet Arrangements"* of the 2018 MD&A, filed as Exhibit 99.2 to this Annual Report, and incorporated herein by reference.

TABULAR DISCLOSURE OF CONTRACTUAL OBLIGATIONS

The required disclosure is included in "*Liquidity & Capital Resources—Cash Requirements*" of the 2018 MD&A, filed as Exhibit 99.2 to this Annual Report, and incorporated herein by reference.

RESERVE AND RESOURCE ESTIMATES

Nutrien's mineral reserves have been estimated in accordance with National Instrument 43-101 - *Standards of Disclosure for Mineral Projects* ("NI 43-101"), as required by Canadian securities regulatory authorities. For United States reporting purposes, Industry Guide 7 under the Securities Act of 1933, as amended, as interpreted by the Staff of the SEC, applies different standards in order to classify mineralization as a reserve. In addition, while the terms "measured", "indicated" and "inferred" mineral resource are required pursuant to NI 43-101, Industry Guide 7 does not recognize such terms. Canadian standards differ significantly from the requirements of Industry Guide 7, and mineral resource information contained in the documents incorporated into this Annual Report by reference is not comparable to similar information regarding mineral reserves disclosed in accordance with the requirements of Industry Guide 7. Investors should understand that "inferred" mineral resources have a great amount of uncertainty as to their existence and great uncertainty as to their economic and legal feasibility. In addition, investors are cautioned not to assume that any part or all of our mineral resources constitute or will be converted into reserves.

MINE SAFETY DISCLOSURE

The information concerning mine safety violations or other regulatory matters required by Section 1503(a) of the Dodd-Frank Wall Street Reform and Consumer Protection Act and Item 16 of General Instruction B to Form 40-F is included in Exhibit 99.14 to this Annual Report.

WEBSITE INFORMATION

Notwithstanding any reference to Nutrien's website or other websites on the World Wide Web in this Annual Report or in the documents attached as exhibits hereto, the information contained in Nutrien's website or any other website on the World Wide Web referred to in this Annual Report or in the documents attached as exhibits hereto, or referred to in Nutrien's website, is not a part of this Annual Report and, therefore, is not filed with the SEC.

UNDERTAKING AND CONSENT TO SERVICE OF PROCESS

The Registrant undertakes to make available, in person or by telephone, representatives to respond to inquiries made by the SEC staff, and to furnish promptly, when requested to do so by the SEC staff, information relating to: the securities registered pursuant to Form 40-F; the securities in relation to which the obligation to file an annual report on Form 40-F arises; or transactions in said securities.

Concurrently with the filing of this Annual Report, the Registrant is filing an Appointment of Agent for Service of Process and Undertaking on Form F-X with respect to the class of securities in relation to which the obligation to file the Form 40-F arises. Any change to the name or address of the Registrant's agent for service of process shall be communicated promptly to the SEC by amendment to the Form F-X referencing the file number of the Registrant.

SIGNATURES

Pursuant to the requirements of the Exchange Act, the Registrant certifies that it meets all of the requirements for filing on Form 40-F and has duly caused this annual report to be signed on its behalf by the undersigned, thereto duly authorized.

NUTRIEN LTD.

By: /s/ Robert A. Kirkpatrick
Name: Robert A. Kirkpatrick
Title: VP & Corporate Secretary

Date: February 27, 2019

EXHIBIT INDEX

Exhibit Number	Description
99.1	Annual Information Form for the fiscal year ended December 31, 2018
99.2	Management's Discussion and Analysis for the fiscal year ended December 31, 2018
99.3	Audited Annual Consolidated Financial Statements for the fiscal year ended December 31, 2018
99.4	Consent of KPMG LLP, Independent Registered Public Accounting Firm
99.5	Consent of Deloitte LLP, Independent Registered Public Accounting Firm
99.6	Certification of Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
99.7	Certification of Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
99.8	Certifications pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
99.9	Consent of Craig Funk, B.Sc., M.Sc., P. Eng., P.Geo.
99.10	Consent of A. Dave Mackintosh, B. Sc., P. Geo.
99.11	Consent of ADM Consulting Limited
99.12	Consent of Michael Ryan Bartsch, P.Eng.
99.13	Consent of Dennis William Aldo Grimm, P.Eng.
99.14	Mine Safety Disclosure
101	Interactive Data File

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Exhibit 99.1



NUTRIEN LTD.

ANNUAL INFORMATION FORM
Year Ended December 31, 2018

February 20, 2019

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Following is a table of contents of this Annual Information Form ("AIF") referencing the applicable requirements of Form 51-102F2 of the Canadian Securities Administrators. Certain portions of this AIF are disclosed in Nutrien Ltd.'s Management's Discussion & Analysis ("2018 MD&A") and Consolidated Financial Statements for the year ended December 31, 2018 ("2018 Financial Statements") and are incorporated by reference herein to the extent noted below and are available on the Canadian Securities Administrators' SEDAR website at www.sedar.com and on the EDGAR section of the United States Securities and Exchange Commission's ("SEC") website at www.sec.gov.

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ITEM 2 – ADVISORIES

2.1 FORWARD-LOOKING INFORMATION

This AIF, including the documents incorporated by reference, contains and incorporates by reference "forward-looking statements" or "forward-looking information" (within the meaning of the United States ("US") *Private Securities Litigation Reform Act of 1995,* and other US federal securities laws and applicable Canadian securities laws) (collectively, "forward-looking statements") that relate to future events or our future financial performance. These statements can be identified by expressions of belief, expectation or intention, as well as those statements that are not historical fact. These statements often contain words such as "should," "could", "expect", "may", "anticipate", "forecast", "believe", "intend", "estimates", "plans" and similar expressions. These statements are based on certain factors and assumptions as set forth in this AIF and the documents incorporated by reference herein, including with respect to: foreign exchange rates, expected synergies, expected growth, results of operations, performance, business prospects and opportunities, and effective tax rates. While Nutrien Ltd. considers these factors and assumptions to be reasonable, based on information currently available, they may prove to be incorrect.

Forward-looking statements are subject to risks and uncertainties that are difficult to predict. The results or events set forth in forward-looking statements may differ materially from actual results or events. Several factors could cause actual results or events to differ materially from those expressed in forward-looking statements including, but not limited to, the following:

- a number of matters relating to the Merger (as defined herein), including the failure to realize the anticipated benefits of the Merger;
- the risk that our credit ratings may be downgraded or there may be adverse conditions in the credit markets;
- any significant impairment of the carrying amount of certain of our assets;
- variations from our assumptions with respect to foreign exchange rates, expected growth, results of operations, performance, business prospects and opportunities, and effective tax rates;
- fluctuations in supply and demand in the fertilizer, sulfur and petrochemical markets;
- changes in competitive pressures, including pricing pressures;
- risks and uncertainties related to any operating and workforce changes made in response to our industry and the markets we serve, including mine and inventory shutdowns;
- adverse or uncertain economic conditions and changes in credit and financial markets;
- economic and political uncertainty around the world;
- changes in capital markets;
- the results of sales contract negotiations;
- unexpected or adverse weather conditions;
- changes in foreign currency and exchange rates;
- risks related to reputational loss;
- the occurrence of a major safety incident;
- inadequate insurance coverage for a significant liability;
- inability to obtain relevant permits for our operations;
- catastrophic events or malicious acts, including terrorism;
- certain complications that may arise in our mining process, including water inflows;

- risks and uncertainties related to our international operations and assets;
- our ownership of non-controlling equity interests in other companies;
- our prospects to reinvest capital in strategic opportunities and acquisitions;
- risks associated with natural gas and other hedging activities;
- security risks related to our information technology systems;
- imprecision in mineral resource and reserve estimates;
- costs and availability of transportation and distribution for our raw materials and products, including railcars and ocean freight;
- changes in, and the effects of, government policies and regulations;
- earnings and the decisions of taxing authorities which could affect our effective tax rates;
- increases in the price or reduced availability of the raw materials that we use;
- our ability to attract, develop, engage and retain skilled employees;
- strikes or other forms of work stoppage or slowdowns;
- rates of return on, and the risks associated with, our investments and capital expenditures;
- timing and impact of capital expenditures;
- the impact of further innovation;
- adverse developments in new and pending legal proceedings or government investigations; and
- violations of our governance and compliance policies.

In addition to the factors mentioned above, see “Risk Factors” discussed in this AIF for a description of other factors affecting forward-looking statements. As a result of these and other factors, there is no assurance that any of the events, circumstances or results anticipated by forward-looking statements included in this AIF will occur or, if they do, of what impact they will have on our business, our performance, the results of our operations and our financial condition.

These forward-looking statements are based on certain assumptions and analyses made by us in light of our experience and perception of historical trends, current conditions and expected future developments as well as other factors Nutrien believes are appropriate in the circumstances. Readers are cautioned not to place undue reliance on the forward-looking statements which involve known and unknown risks and uncertainties that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements.

Forward-looking statements in this AIF are given only as of the date of this AIF and Nutrien disclaims any obligation to update or revise any forward-looking statements included in this AIF, whether as a result of new information, future events or otherwise, except as required by law.

2.2 BASIS OF PRESENTATION

2018 Nutrien consolidated financial information and 2017 and 2016 Potash Corporation of Saskatchewan Inc. (“PotashCorp”) and Agrium Inc. (“Agrium”) consolidated financial information presented and discussed in this AIF are prepared in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board (“IFRS”). This AIF is dated February 20, 2019, and the information contained herein is current as of such date, unless otherwise specified.

ITEM 3 – CORPORATE STRUCTURE

In this AIF, unless otherwise specified, the term "Nutrien" refers to Nutrien Ltd. and, unless the context requires otherwise, the terms "we", "us", "our", "Nutrien" and the "Company" refer to Nutrien and its direct and indirect subsidiaries, including PotashCorp and Agrium, individually or in any combination, as applicable. References to "dollars", "$", and "US$" are to United States dollars and references to "CA$" are to Canadian dollars.

3.1 NAME, ADDRESS AND INCORPORATION

Effective January 1, 2018, pursuant to the merger of equals transaction ("Merger") contemplated by the arrangement agreement dated as of September 11, 2016 ("Arrangement Agreement"), between PotashCorp and Agrium, PotashCorp and Agrium became wholly-owned subsidiaries of Nutrien pursuant to a plan of arrangement under the *Canada Business Corporations Act* ("CBCA"). Nutrien is a corporation incorporated under the CBCA on June 2, 2017 for the sole purpose of participating in the Merger. Prior to completion of the Merger, Nutrien did not conduct any business activities, other than those required for its formation and matters contemplated by the Arrangement Agreement.

Nutrien's registered head office is Suite 500, 122 – 1st Avenue South, Saskatoon, Saskatchewan, Canada S7K 7G3. It also has corporate offices at 13131 Lake Fraser Drive SE, Calgary, Alberta, Canada T2J 7E8 and 5296 Harvest Lake Drive, Loveland, Colorado, US 80538.

3.2 INTERCORPORATE RELATIONSHIPS

Principal Subsidiaries [1]	Jurisdiction of Incorporation or Organization	Ownership
Potash Corporation of Saskatchewan Inc.	Canada	100%
Agrium Inc.	Canada	100%
Agrium Canada Partnership	Alberta, Canada	100%
Agrium Potash Ltd.	Canada	100%
Agrium U.S. Inc.	Colorado, US	100%
Cominco Fertilizer Partnership	Texas, US	100%
Landmark Operations Ltd. ("Landmark")	Western Australia	100%
Nutrien Ag Solutions (Canada) Inc.	Canada	100%
Nutrien Ag Solutions, Inc.	Delaware, US	100%
PCS Nitrogen Fertilizer, LP	Delaware, US	100%
PCS Sales (USA), Inc.	Delaware, US	100%
Phosphate Holding Company, Inc.	Delaware, US	100%
Potash Holding Company, Inc.	Delaware, US	100%

(1) In aggregate, our remaining subsidiaries not listed herein accounted for less than 20 percent of our total consolidated assets or 20 percent of our total consolidated sales as at and for the year ended December 31, 2018.

ITEM 4 – GENERAL DEVELOPMENT OF THE BUSINESS

4.1 THREE YEAR HISTORY

NUTRIEN

The Merger

Effective January 1, 2018, PotashCorp and Agrium completed the Merger by way of a court approved plan of arrangement under Section 192 of the CBCA, involving, among others, Nutrien, PotashCorp and Agrium.

Pursuant to the Merger, the holders of common shares of PotashCorp ("PotashCorp Shares") received common shares of Nutrien ("Common Shares") at a ratio of 0.40 of a Common Share for each PotashCorp Share ("PotashCorp Exchange Ratio") and the holders of common shares of Agrium ("Agrium Shares") received Common Shares at a ratio of 2.23 Common Shares for each Agrium Share ("Agrium Exchange Ratio").

Upon completion of the Merger, each share-based compensation award of PotashCorp and Agrium was assumed or replaced by Nutrien based on the PotashCorp Exchange Ratio and Agrium Exchange Ratio, as applicable, and all other material terms and conditions of each such share-based compensation award remained substantially similar with their pre-Merger terms and conditions. Nutrien also assumed the obligations in respect of awards under PotashCorp's and Agrium's non-share-based compensation plans.

Acquisitions and Investments

In 2018, we expanded our retail operations by acquiring 53 farm centers in North America and Australia, in addition to acquiring companies operating within the digital agriculture, proprietary products and agricultural services segments, for total consideration of $433 million. Benefits of the acquisitions include expansion of geographical coverage for the sale of crop input products, increased customer base and workforce, continued growth in the digital agricultural field and the ability to realize synergies between Nutrien and the acquired businesses. See note 3 of the 2018 Financial Statements for additional information.

On February 5, 2019, we announced the planned acquisition of Actagro, LLC, a developer, manufacturer and marketer of environmentally sustainable soil and plant health products and technologies, for an estimated purchase price of $340 million. Closing of the transaction is subject to US regulatory approval and is expected to be completed in the first half of 2019.

Dispositions

In connection with antitrust approvals necessary for the completion of the Merger, during 2018, we completed the disposition of the following minority equity interests: (i) sale of shares in Israel Chemicals Ltd. ("ICL") through a private secondary offering for proceeds of $685 million, net of commissions; (ii) sale of shares in Arab Potash Company ("APC") for proceeds of $501 million, net of commissions; and (iii) sale of shares in Sociedad Química y Minera de Chile S.A. ("SQM") for proceeds of $5.1 billion, net of commissions.

In addition to the above dispositions of minority equity interests, in 2018, we also completed the sale of our (i) Conda, Idaho phosphate production facility and adjacent phosphate mineral rights; and (ii) North Bend, Ohio nitric acid facility and related assets.

See note 10 of the 2018 Financial Statements for additional information.

New Brunswick Potash Operations

After a strategic portfolio review was completed during the third quarter of 2018, it was determined the New Brunswick Potash operations would no longer be part of our medium term or long-term strategic plans. As a result, the New Brunswick Potash operations will be taken out of care and maintenance and permanently shut down. The decision to shut down these operations resulted in a non-cash impairment of $1,809 million to the property, plant and equipment of the New Brunswick Potash operations. For additional information, refer to note 16 of the 2018 Financial Statements.

Normal Course Issuer Bid

During 2018, we completed the repurchase of 36,332,197 Common Shares for cancellation, representing approximately six percent of our outstanding Common Shares, under a normal course issuer bid ("NCIB"), which our Board of Directors ("Board") had approved earlier in 2018. See note 24 of the 2018 Financial Statements for additional information. As of the date hereof, an additional 5,933,135 Common Shares have been acquired under the NCIB in 2019.

On February 20, 2019, our Board of Directors approved the renewal of the share repurchase program of up to 5 percent of our outstanding Common Shares over a one-year period through the NCIB. Purchases under the NCIB will be made through open market purchases at market price as well as by other means as may be permitted by applicable securities regulatory authorities, including private agreements.

Debt Exchange

In 2018, an aggregate of $7,578 million of PotashCorp senior notes and Agrium debentures (other than Agrium's debentures due 2027) were tendered and accepted in exchange for the same amount of new notes issued by Nutrien ("Nutrien Notes"). The Nutrien Notes have interest rates and maturities identical to those of the applicable exchanged series of senior notes or debentures. In addition, we solicited consents from the holders of PotashCorp senior notes and Agrium debentures to amend the terms and remove certain financial reporting covenants and events of default under the indentures governing those senior notes and debentures. A small portion of senior notes and debentures were not exchanged and remain outstanding with the issuing subsidiary. See note 23 of the 2018 Financial Statements for additional information.

Credit Facilities

In 2018, we replaced the existing $3.5 billion unsecured revolving credit facility of PotashCorp and the $2.5 billion multijurisdictional unsecured revolving credit facility of Agrium with a new Nutrien $4.5 billion unsecured revolving term credit facility ("Nutrien Credit Facility"). The Nutrien Credit Facility matures April 10, 2023, subject to extension at the request of Nutrien provided that the resulting maturity date shall not exceed five years from the date of the request.

In 2018, we also entered into an amending agreement to replace PotashCorp's existing $75 million unsecured line of credit with a new $500 million uncommitted revolving demand facility.

See note 22 and note 23 of the 2018 Financial Statements for additional information.

Commercial Paper Program

In 2018, we launched a commercial paper program having an aggregate authorized amount of $4.5 billion. The amount drawn under the commercial paper program is backstopped by the Nutrien Credit Facility. Concurrent with the launch, we discontinued new issuances under the commercial paper programs of PotashCorp and Agrium that existed prior to the completion of the Merger. See note 22 of the 2018 Financial Statements for additional information.

Accounts Receivable Securitization Program

In 2016, Agrium established a trade accounts receivable securitization program which was continued by Nutrien in 2018. Under this program, we sell certain trade account receivables to a special purpose vehicle, which is a consolidated entity within Nutrien. We control and retain substantially all of the risks and rewards of the receivables sold to the special purpose vehicle. Should we wish to draw funds under the program, the sold accounts receivable balances may be used as capacity for collateralized borrowings from a third-party financial institution. As at December 31, 2018, there were no outstanding funds drawn under this program. For additional information, see note 22 of the 2018 Financial Statements.

POTASHCORP

Incremental Expansion

In 2016, PotashCorp completed its expansion project to increase the nameplate capacity from 3.0 million tonnes to approximately 6.0 million tonnes at its Rocanville mine operations in Saskatchewan, Canada. Production was ramped up through 2017, reaching a nameplate capacity of 6.5 million tonnes of finished potash product. For additional information, refer to Item 5.3 and "Schedule B – Mineral Projects – d) Rocanville Potash Operations".

Bond Offerings

In 2016, PotashCorp completed an offering for $500 million aggregate principal amount of four percent senior notes due December 15, 2026. The senior notes were issued pursuant to an existing indenture and registered under a shelf registration statement of PotashCorp on Form S-3 (No. 333-212301) filed in 2016 with the SEC. These senior notes were included in the exchange of notes completed in 2018, as discussed above under *Nutrien – Debt Exchange*.

New Brunswick Potash Operations

In 2016, in light of challenging market conditions, PotashCorp indefinitely suspended Potash operations at its Picadilly facility in New Brunswick. These potash operations will be permanently shut down, as discussed above under *Nutrien – New Brunswick Potash Operations.*

AGRIUM

Acquisitions and Investments

In 2017 and 2016, Agrium acquired 44 and 71 Retail facilities, respectively, located in North America for consideration of $145 million and $251 million, respectively, excluding working capital.

Incremental Expansion

In 2017, Agrium completed the commissioning of the 610,000 tonnes per year urea facility in Borger, Texas, the construction of which was completed during 2016 as part of Agrium's brownfield expansion project at Borger. The project was undertaken to leverage Agrium's distribution network in the region and to enable the Borger, Texas facility to become a competitive and low-cost producer of nitrogen, enhancing its long-term viability.

4.2 SIGNIFICANT ACQUISITIONS

The Merger was considered a significant acquisition for the purposes of Part 8 of National Instrument 51-102 – *Continuous Disclosure Obligations* and, therefore, Nutrien filed a Business Acquisition Report (Form 51-102F4) on February 26, 2018 under its SEDAR profile on www.sedar.com in respect of the Merger. For additional information, see note 3 of the 2018 Financial Statements.

ITEM 5 – DESCRIPTION OF THE BUSINESS

5.1 BUSINESS OF NUTRIEN

We are a world-class integrated provider of crop nutrients and services, playing a critical role in helping growers increase food production in a sustainable manner. We directly supply growers through our leading global retail network – including crop nutrients, crop protection products, seed, as well as agronomic and application services. We operate more than 1,700 retail facilities across the US, Canada, Australia and key areas of South America, servicing more than 500,000 grower accounts.

Nutrien is the world's largest crop nutrient company by capacity, producing the three crop nutrients: potash, nitrogen and phosphate. We produce and distribute approximately 27 million tonnes of crop nutrient products from our facilities in Canada, the US and Trinidad, and our Canadian potash operations represent more than one-fifth of global nameplate capacity.

As of December 31, 2018, Nutrien estimates its potash operations represented 22 percent of global potash capacity, its nitrogen operations represented 3 percent of global nitrogen capacity and its phosphate operations represented 3 percent of global phosphate capacity.

a) SUMMARY

i) Retail Operations

Nutrien's Retail segment markets crop nutrients, crop protection products, seed, merchandise, as well as agronomic application services and solutions through more than 1,700 retail locations across the US, Canada, Australia and key areas of South America. North American retail locations include more than 800 branches, which are facilities supporting a specific market area and customer base, and more than 450 satellites, which are used to position equipment and product to specific markets and customers in support of a branch. Retail's market is primarily retail sales directly to growers, but also includes wholesale sales of

crop protection products to third party retail operations. Retail also has an in-house lending program called Nutrien Financial Services™ to provide competitive crop input loans to customers.

Crop nutrients sales accounted for approximately 36 percent of Retail's total third-party sales in 2018. Crop nutrients are generally mixed in a custom blend to suit the particular nutrient requirements for each grower's field based on soil fertility tests or plant tissue sampling. Nutrien offers custom crop nutrient application services and employs a large fleet of application equipment to custom-apply these nutrients at the prescribed rates. Many of the Company's crop nutrient application rigs are also capable of precision application using global positioning system ("GPS") technology, which allows nutrient application rates to be adjusted when required, based on GPS grid soil sample test results and other data.

Crop protection products sales were approximately 39 percent of Retail's total third-party sales in 2018. Similar to its crop nutrient application services, Nutrien employs a large fleet of crop protection application equipment. By its nature, Retail's crop protection business operates within a framework of government regulation and oversight. Nutrien formulates and distributes private label and proprietary crop protection products through its Loveland Products, Inc. business across North America, South America and Australia.

Seed sales accounted for approximately 13 percent of Retail's total third-party sales in 2018. Seed treatment is also a growing service that we provide growers. This service involves applying chemical to seeds prior to planting to protect them from pests and disease. Our seed sales have been further supported by growth in our private label seed product line under the brand names Dyna-Gro® and Proven™.

Merchandise sales accounted for approximately 6 percent of Retail's total third-party sales in 2018. In addition to offering crop nutrient, crop protection and seed, our Retail business in Australia also offers a wide variety of livestock-related merchandise, including fencing, animal identification merchandise and various animal health products and services.

Services and other revenues accounted for approximately 6 percent of Retail's total third-party sales in 2018. Retail has a large group of qualified crop advisors throughout the organization who help develop crop input recommendations and monitor customers' crops in order to optimize yields and maximize grower's bottom line. Nutrien's Retail segment offers a variety of agronomic services to our growers, including custom application services and soil and leaf testing. The Company owns and operates laboratories across the US performing soil and leaf testing for growers. In the Western US, the Company uses a system of weather tracking stations to monitor crop disease conditions and irrigation requirements in high-value crops. Retail offers digital tools that provide customer account management, agronomic insights and hands-on customer support that drive economic value and can provide environmental benefits for our growers, including our Echelon® precision agriculture offering, which includes services such as yield data mapping, record keeping, soil fertility management, variable-rate fertility and variable-rate seeding recommendations. In Australia, Retail offers various other services, including wool sales and marketing, livestock marketing and auction services, insurance products, financial services and real estate agency services. Retail also offers financial services to its US customers.

ii) Potash Operations

Our Potash operations include the mining and processing of potash, which is predominantly used as fertilizer.

The Saskatchewan Ministry of Energy and Resources has granted Nutrien the exclusive right to mine potash on approximately 345,300 hectares (or approximately 853,000 acres) of Crown land pursuant to subsurface mineral leases. Of the approximately 345,300 hectares, roughly 244,000 hectares are comprised of our Potash operations at the Allan, Cory, Lanigan, Patience Lake, Rocanville, and Vanscoy mines. Leases also exist with freehold mineral rights owners within the Crown subsurface mineral lease areas and elsewhere in Saskatchewan.

Our subsurface mineral leases with the Province of Saskatchewan are for 21-year terms, renewable at our option. Our significant leases with other parties are also for 21-year terms. Such other leases are renewable at our option, provided generally that production is continuing and that there is continuation of the applicable lease with the Province of Saskatchewan.

Potash we produce in Canada for sale to destinations outside Canada and the US is sold exclusively to Canpotex Limited ("Canpotex"). Since January 1, 2018, Canpotex has been owned in equal shares by us and another potash producer in Canada. Prior to the completion of the Merger, Canpotex was owned in equal shares by PotashCorp, Agrium and another potash producer in Canada. Canpotex, which was incorporated in 1970 and commenced operations in 1972, acts as an export company providing integrated sales, marketing and distribution for all Canadian potash produced by its shareholders/producers that is exported to destinations outside the US and Canada. Each shareholder of Canpotex has an equal voting interest as a shareholder and a right to equal representation on the Canpotex board of directors. For 2018, sales of potash to Canpotex represented 59 percent of our total third-party potash sales.

In general, Canpotex sales are allocated among Canpotex producers based on production capacity. In 2018, Nutrien supplied approximately 64 percent of Canpotex's requirements. Canpotex generally sells potash to private and public firms and government agencies pursuant to term and spot contracts at agreed upon prices. Canpotex has a long history of being a reliable supplier of potash to international markets and of proven logistics and marketing capabilities. Other major potash exporting countries include Russia, Belarus and Germany.

iii) Nitrogen Operations

Our nitrogen operations include the production of nitrogen fertilizers and nitrogen feed and industrial products, including ammonia, urea, urea ammonium nitrate ("UAN") solutions, diesel emission fluid ("DEF"), ammonium nitrate, nitric acid and the controlled-release product Environmentally Smart Nitrogen® ("ESN®").

We own and operate eight major nitrogen production facilities in North America, four located in Alberta, Canada and one in each of the following US states: Georgia, Louisiana, Ohio and Texas. We also own and operate a major nitrogen production facility in Trinidad.

The following table sets forth the major nitrogen facility locations and products produced.

Plant Locations	Nitrogen Products Produced
Augusta, Georgia	Ammonia, urea, UAN, DEF, nitric acid and ammonium nitrate
Borger, Texas	Ammonia, urea and DEF
Carseland, Alberta	Ammonia and urea
Fort Saskatchewan, Alberta	Ammonia and urea
Geismar, Louisiana	Ammonia, UAN, DEF and nitric acid
Joffre, Alberta	Ammonia
Lima, Ohio	Ammonia, urea, UAN, DEF, nitric acid and ammonium nitrate
Point Lisas, Trinidad	Ammonia and urea
Redwater, Alberta	Ammonia, urea, ammonium nitrate and UAN

We also operate a number of facilities that upgrade ammonia and urea to other products such as UAN, ammonium nitrate, nitric acid and ESN®.

Plant Locations	Nitrogen Products Produced
Americus, Georgia	Rainbow plant food
Carseland, Alberta	ESN®
Florence, Alabama	Rainbow plant food
Granum, Alberta	UAN
Kennewick, Washington	UAN, ammonium nitrate and nitric acid
New Madrid, Missouri	ESN®
Standard, Alberta	UAN

Our owned and operated facilities have a combined annual gross ammonia nameplate capacity of approximately 7.1 million tonnes.

We also have a 50 percent joint venture ownership in Profertil S.A. (“Profertil”), a joint venture that owns a nitrogen facility in Bahia Blanca, Argentina. In addition, through our ownership of shares of Misr Fertilizers Production Company S.A.E., we hold a 26 percent interest in a nitrogen facility located in Egypt.

iv) Phosphate and Sulfate Operations

Our Phosphate and Sulfate operations include the manufacture and sale of solid and liquid phosphate fertilizers, phosphate feed and purified phosphoric acid, which is used in food and industrial products. We have phosphate mines and mineral processing plant complexes in White Springs, Florida and Aurora, North Carolina. We also have three Phosphate feed plants in the US and produce phosphoric acid and granular ammonium sulfate at Redwater, Alberta using purchased imported rock. In 2018, we made the decision to repurpose our Redwater Phosphate facility in order to increase our ammonium sulfate capacity. The production of phosphoric acid at the Redwater Phosphate facility is expected to cease in the second quarter of 2019 once phosphate rock inventory at the facility is depleted. Rock for the Redwater facility had been sourced through a long-term supply agreement with OCP S.A. (“OCP”) which ended in 2018. To facilitate the transportation of the remaining phosphate rock to North America, we entered into a freight contract in December 2018 to complete delivery of the final rock purchased. In 2018, we also made the decision to close our Geismar, Louisiana Phosphate facility, with production of merchant grade phosphoric acid (“MGA”) ceasing in December 2018.

In addition to our production facilities, we have also entered into a supply and offtake agreement with Itafos Conda LLC to market an estimated 330,000 tonnes per year of monoammonium phosphate (“MAP”) produced at Conda, Idaho.

Our other Phosphate properties include:

- animal feed plants in Marseilles, Illinois, Joplin, Missouri, and Weeping Water, Nebraska;
- a technical and food grade phosphate plant in Cincinnati, Ohio; and
- a terminal facility at Morehead City, North Carolina.

Plant Locations	**Primary Products Produced** (1)
Aurora, North Carolina	DAP, MAP, SPA, animal feed, liquid fertilizer, purified acid, MGA, hydrofluosilicic acid, deflourinated merchant grade acid and low magnesium SPA (“LOMAG”)
Cincinnati, Ohio	Blended purified acid products
Geismar, Louisiana	MGA (ceased production in December 2018)
Joplin, Missouri	Animal feed
Marseilles, Illinois	Animal feed
Redwater, Alberta	MAP and ammonium sulfate
Weeping Water, Nebraska	Animal feed
White Springs, Florida	SPA, MGA (2), LOMAG and MAP

(1) The following scientific terms have the following meanings:
DAP diammonium phosphate, 46% P_2O_5 (solid)
MAP monoammonium phosphate, 52% P_2O_5 (solid)
SPA superphosphoric acid, 70% P_2-O_5 (liquid)

(2) All of the MGA from White Springs is consumed internally in the production of additional products.

The Company executes offshore marketing and sales for its solid phosphate fertilizer through PCS Sales (USA), Inc.

In 2019, the performance of sulfate products will be reviewed as part of the Nitrogen operating segment, rather than the Phosphate and Sulfate operating segment. See note 4 of the 2018 Financial Statements for additional information.

v) Transportation, Storage and Distribution

We have an extensive infrastructure system to store and transport our products strategically located across distribution points in Canada and the US to serve our customers. In addition to storage located at our production facilities, we leased or owned approximately 400 terminal and warehouse facilities within North America, some of which have multi-product capability. To complement our distribution system in Canada and the US, we also leased or owned approximately 15,000 railcars and approximately 31,000 retail vehicles and application equipment.

Retail

Our North American Retail distribution assets include 83 terminals and 17 distribution centers to support distribution of crop nutrients, crop protection products and seed. Terminals are major crop nutrient storage facilities used to receive large quantities of crop nutrient for redistribution to retail centers and to growers directly. Distribution centers are used to more effectively distribute crop protection products and seed. These facilities are used to coordinate product supply to the retail centers and allow us to manage inventory levels across our distribution network.

Due to the bulk nature of our crop nutrient and seed products, delivery to end users through the supply chain can often take a significant amount of time. Supply chain management, utilizing our extensive storage and distribution network and transportation capabilities, allows us to ensure that crop nutrient and seed product is available to customers at the necessary time as growers have a short application and planting window, the precise timing of which is unpredictable due to both the seasonal nature of crop planting and the impact of weather.

Potash

Transportation costs can be a significant component of the total cost of potash. Producers may have an advantage in serving markets close to their sources of supply depending on prevailing transportation costs. International shipping cost variances permit offshore producers to effectively compete with our potash production in many geographies.

Most of our potash for North American customers is shipped by rail. We believe we have a strategic advantage in this market with approximately 260 owned or leased potash distribution points and a fleet of approximately 6,100 owned and leased railcars. We believe this is the most extensive domestic distribution network in the potash business. Shipments are also made by rail from each of our Saskatchewan mines to Thunder Bay, Ontario for shipment by lake vessel to our warehouses and storage facilities in Canada and the US.

In the case of our sales to Canpotex, potash is transported by rail to port facilities which store potash pending overseas shipment by ocean-going vessels. We have an equity interest in Canpotex Bulk Terminals Limited, which is a part owner of the port facilities utilized by Canpotex in Vancouver, British Columbia. Through Canpotex, we also transport potash to a port facility in Thunder Bay, Ontario and we have an interest in and transport potash to, a port facility located in Portland, Oregon. Following the suspension of PotashCorp's New Brunswick potash operations in early 2016, storage and loading facilities at the Port of Saint John – including our capacity of up to 2.5 million tonnes per year – has been made available to Canpotex for offshore shipping.

Nitrogen

We distribute our Nitrogen products by vessel, barge, railcar, truck and direct pipeline to our customers and, in high consumption areas, through our strategically located storage terminals. We lease or own approximately 210 storage terminals in Western Canada and throughout the US, as well as a fleet of approximately 4,000 owned or leased railcars. We also own and lease dry and liquid storage capacity in Europe. These locations provide a network of field and production site storage capacity sufficient to serve local dealers during the peak seasonal demand period and are also used to provide off-season storage.

We distribute products from Trinidad primarily to markets in the US, South America, Europe and North Africa. We employ four long-term chartered ocean-going vessels and utilize short-term and spot charters as necessary for the transportation of ammonia for our marine distribution operations in Trinidad. All bulk urea production from Trinidad is shipped through third-party carriers. In addition, Profertil's terminal on the Parana River includes a dedicated berth and two 100,000-tonne dry storage buildings in a key agricultural region of Argentina.

Phosphate and Sulfate

With respect to Phosphate, we have approximately 130 owned or leased phosphate distribution points and a fleet of approximately 4,900 owned and leased railcars. We also own one multi-purpose vessel used for molten sulfur and phosphoric acid transportation. We have long-term leases on shipping terminals in Morehead City and Beaufort, North Carolina through which we receive and store Aurora facility raw materials and finished product. Most of our offshore phosphate sales are shipped through the terminal at Morehead City. We use barges and tugboats to transport solid products, phosphoric acid and sulfur between the Aurora facility and shipping terminals. Raw materials and products, including sulfur, are also transported to and from the Aurora facility by rail and truck.

Purchased rock for our Redwater facility was imported into the port of Vancouver using ocean-going vessels and shipped by rail to Alberta. Our contract for phosphate rock from Africa to supply the Redwater phosphate facility ended as of December 31, 2018 and we expect to deplete our phosphate rock inventories in the second quarter of 2019. Sulfur used in production at our Redwater facility is sourced locally in Alberta and delivered exclusively by truck. MAP and ammonium sulfate are shipped out of the plant by either railcar or truck to customers primarily in Western Canada.

Sulfur is delivered to the White Springs facility by rail and truck from Canada and the US. Most of the phosphoric acid and chemical fertilizers produced at the White Springs facility are shipped to North American destinations by rail. Ammonia for Aurora and White Springs is supplied by rail and truck from our production facilities in Lima, Ohio; Geismar, Louisiana; and Augusta, Georgia.

vi) Selected Financial Information

Sales classified by operating segment and applicable category of products and services for the Company's 2018 fiscal year are provided in note 4 to the 2018 Financial Statements. 2018 sales or transfers to certain entities in which the Company has an investment that is accounted for under the equity method are provided in note 30 of the 2018 Financial Statements.

For the year ended December 31, 2017, sales classified by operating segment and applicable category of products and services are provided in note 3 to the consolidated financial statements of PotashCorp as at and for the year ended December 31, 2017 ("PotashCorp 2017 Financial Statements") and note 2 to the consolidated financial statements of Agrium as at and for the year ended December 31, 2017 ("Agrium 2017 Financial Statements"). 2017 sales or transfers to certain entities accounted for under the equity method are provided in note 28 to the PotashCorp 2017 Financial Statements and note 15 to the Agrium 2017 Financial Statements.

b) PRODUCTION METHODS

Production methods for Nutrien's manufactured products are set out below.

Potash

We produce potash using primarily conventional methods, but we also have a solution mine. In conventional operations, shafts are sunk to the ore body, which is approximately one kilometer below the surface. Mining machines cut out the ore, which is hoisted to the surface for processing. The ore is a mixture of potassium chloride, salt and insoluble particles. In solution mining, the potash is dissolved in warm brine and pumped to the surface for processing. Removing the clay and salt through a milling process produces saleable potash. Seven grades of potash are produced to suit different preferences of the various markets we serve.

In 2018, our conventional potash operations mined 39.58 million tonnes of ore at an average mineral grade of 23.60 percent potassium oxide ("K_2O"). In 2018, our potash production from all our operations consisted of 12.84 million tonnes of potash ("KCl" or "finished product") with an average grade of 60.94 percent K_2O, representing an estimated 56 percent of North American production.

In 2018, our nameplate capacity represented an estimated 56 percent of the North American total capacity (based on our nameplate capacity, see table below for further information). We allocate production among our mines on the basis of various factors, including cost efficiency and the grades of product that can be produced. The Patience Lake mine, which was originally a conventional underground mine, began employing a solution mining method in 1989. The other Saskatchewan mines we own employ conventional underground mining methods.

The following table sets forth, for each of the past two years, the production of ore, grade and finished product for each of our potash mines:

	Annual Nameplate Capacity [1]	Annual Operational Capability [2]		2018 Production			2017 Production		
		2019	2018						
	Finished Product (Millions of tonnes)	Finished Product (Millions of tonnes)	Finished Product (Millions of tonnes)	Ore (Millions of tonnes)	Grade % K_2O	Finished Product (Millions of tonnes)	Ore (Millions of tonnes)	Grade % K_2O	Finished Product (Millions of tonnes)
Rocanville	6.5	5.4	5.2	16.74	22.7	5.22	15.10	23.7	4.86
Allan	4.0	2.8	2.6	6.55	25.9	2.41	5.22	25.1	1.83
Vanscoy	3.0	2.2	2.7	6.49	26.1	2.24	7.37	24.38	2.42
Lanigan	3.8	2.1	2.0	6.98	21.0	1.96	6.31	21.0	1.82
Cory [3]	3.0	1.0	0.8	2.82	24.1	0.81	3.41	24.0	0.99
Patience Lake [4]	0.3	0.3	0.3	–	–	0.20	–	–	0.30
Totals	20.6	13.8	13.6	39.58		12.84	37.41		12.22

(1) Represents estimates of capacity as of December 31, 2018. Estimates are based on capacity as per design specifications or Canpotex entitlements once determined. In the case of Patience Lake, estimate reflects current operational capability. Estimates for all other facilities do not necessarily represent operational capability.
(2) Estimated annual achievable production level at current staffing and operational readiness (estimated at beginning of year). Estimate does not include inventory-related shutdowns and unplanned downtime.
(3) In November 2016, we announced operational changes at Cory to produce only white potash, with an expected operational capability of approximately 0.8 million tonnes per year. In 2019, Cory commenced partial operation of the red mill. Additional operational capability is achievable with increased staffing.
(4) Solution mine.

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 hazards, such as unusual or unexpected geological conditions, subsidence, water inflows, and other conditions involved in mining potash ore.

Nitrogen

Ammonia is produced by taking nitrogen from the air and reacting it with a hydrogen source, usually natural gas reformed with steam.

Ammonia is the feedstock used to produce a full line of upgraded products, including urea, ammonium nitrate, nitric acid and nitrogen solutions, including both UAN solutions and DEF products, and ESN®. Urea is produced by combining ammonia with carbon dioxide ("CO_2") and forming liquid urea, which can be further processed into a solid form. UAN solutions are liquid fertilizers that are produced by combining liquid urea, liquid ammonium nitrate and water. Urea solutions are produced by combining liquid urea with water. ESN® is a patented coated-fertilizer product that is made by coating the urea substrate with layers of polymers, allowing for more efficient delivery of nitrogen to the plant.

Ammonia, urea and nitrogen solutions are sold as fertilizers to agricultural customers and to industrial customers for various applications. Nitric acid and ammonium nitrate are sold to industrial customers for various applications. Urea is also sold for feed applications. ESN® is sold to agricultural customers.

Phosphate and Sulfate

We extract phosphate ore using surface mining techniques. At each mine site, the ore is mixed with recycled water to form a slurry, which is pumped from the mine site to our processing facilities. The ore is then screened to remove coarse materials, washed to remove clay and floated to remove sand to produce phosphate "rock". The annual production capacity of our mines is currently 7.4 million tonnes of phosphate rock. During 2018, the Aurora facility's total production of phosphate rock was 4.03 million tonnes and the White Springs facility's total production of phosphate rock was 1.85 million tonnes. The sequence for mining portions of the Aurora property was identified in the permit issued by the US Army Corps of Engineers in June 2009. The permit authorizes mining in excess of 22 years. Phosphate rock is the major input in our phosphorus processing operations. Substantially all the phosphate rock produced is used internally for the production of phosphoric acid, SPA, chemical fertilizers, purified phosphoric acid and animal feed products. At Geismar and Redwater, phosphoric acid was produced using imported rock. The Geismar Phosphate operation ceased production at the end of 2018 and the Redwater Phosphate operation is expected to shut down in the second quarter of 2019. We will continue to manufacture nitrogen fertilizers and industrial products at Geismar and nitrogen fertilizers and ammonium sulfate at the Redwater facility.

In addition to phosphate ore, the other principal raw materials we require are sulfur and ammonia. The production of phosphoric acid requires substantial quantities of sulfur, which we purchase from third parties. Any significant disruption in our sulfur supply to the phosphate facilities could adversely impact our financial results. We produce sulfuric acid at the Aurora, White Springs and Redwater facilities from purchased sulfur. At Geismar we purchased sulfuric acid.

Our phosphate operations purchase all their ammonia at market rates from or through our nitrogen and sales subsidiaries. Phosphoric acid is reacted with ammonia to produce DAP and MAP as well as liquid fertilizers.

We produce MGA at our Aurora and White Springs facilities. Some MGA from Aurora is sold to foreign and domestic fertilizer producers and industrial customers. We further process the balance of the MGA to make solid fertilizer (DAP and MAP), liquid fertilizers, animal feed supplements for the poultry and livestock markets, and purified phosphoric acid for use in a wide variety of food, technical and industrial applications.

Ammonium sulfate is produced by reacting ammonia and sulfuric acid and then granulated to form a solid granular product. We produce approximately 360,000 tonnes of ammonium sulfate at our Redwater, Alberta facility. This capacity is expected to double in the latter half of 2019 once MAP production has ceased and the second ammonium sulfate train is commissioned.

c) SPECIALIZED SKILL AND KNOWLEDGE

Nutrien believes its success is dependent on the performance of its management and key operational employees, many of whom have specialized skills and knowledge relating to the retail, potash, nitrogen and phosphate and

sulfate industries, and to the conduct of the retail, potash, nitrogen and phosphate and sulfate operations. Nutrien believes that it has adequate personnel with the specialized skills and knowledge to successfully carry out the Company's business and operations.

d) COMPETITIVE POSITION

The market for Nutrien's crop nutrients and crop production inputs is highly competitive. The Company's competitors include other large integrated fertilizer producers, co-operatives, divisions of agribusiness companies, regional distributors and independent dealers.

Retail

Retail operates more than 1,700 retail locations across the US, Canada, Australia and key areas of South America. We are a major distributor of crop nutrients, crop protection products and seed in a highly competitive industry. The principal competitors in the distribution of crop production inputs include agricultural co-operatives, other major agriculture retailers and smaller independent retailers and distributors. Retail also produces a range of high quality proprietary crop protection, seed and crop nutrient products that generate higher margins for our Retail segment. Retail offers a digital tool that provides customer account management, agronomic insights and hands-on customer support that drives economic value for our growers.

Potash

Potash is a commodity, characterized by minimal product differentiation, and, consequently, producers compete based on price, quality and service. We price competitively, sell high quality products and provide high quality service to our customers. Our service includes maintaining warehouses, leasing railcars and chartering vessels to enhance our delivery capabilities. The high cost of transporting potash affects competition in various geographic areas. During 2018 our principal competitors in North America included PA Belaruskali, ICL, Intrepid Potash Inc., K+S Group, The Mosaic Company ("Mosaic"), SQM and PJSC Uralkali. In 2018, outside of Canada and the US, Canpotex competed with producers such as APC, PA Belaruskali, Eurochem Group AG, ICL, K+S Group, SQM and PJSC Uralkali.

Nitrogen

Nitrogen-based fertilizer is a global commodity, and customers, including end-users, dealers and other fertilizer producers and distributors, base their purchasing decisions principally on the delivered price and availability of the product. The relative cost of, and availability of transportation for, raw materials and finished products to manufacturing facilities are also important competitive factors.

Within North America, transportation costs play a factor in regional price differences and we compete with other domestic producers, including CF Industries Holdings, Inc., CVR Partners, L.P., Koch Industries, Inc., LSB Industries, Inc., and OCI N.V. and with imported product from suppliers in the Middle East, North Africa, Trinidad, Central and Eastern Europe and China. In the offshore market, we compete with a wide range of offshore and domestic producers. Nitrogen is also an input into industrial production of a wide range of products. Many manufacturers want consistent quality and just-in-time delivery to keep their plants running.

Our North American plants are geographically well positioned to service agriculture, industrial and feed customers across Canada and the US. Our robust North American distribution network provides in-market support, during seasonal peak demand, ensuring timely product availability. Trinidad mainly supplies our international fertilizer and industrial customers.

Our US production has continued to benefit from the low cost of natural gas, and to a greater extent our Western Canadian production, which utilizes natural gas indexed to the Alberta benchmark price, has also benefited. In Trinidad, the price at which we purchase natural gas varies primarily with ammonia market prices, and annual escalating floor prices. Ammonia and urea predominate our offshore sales of nitrogen and originate primarily from Trinidad, with other sales coming from purchased product locations. For 2018, our offshore sales of nitrogen products represented 22 percent of our total third-party nitrogen sales.

Phosphate and Sulfate

Markets for phosphate fertilizer products are highly competitive and based largely on price, reliability and deliverability. Our principal advantages at Aurora and White Springs are that we produce higher value, diversified products and that we operate integrated phosphate mine and phosphate processing complexes. Our Redwater production is well positioned to capture higher regional netbacks, in the Western Canadian market. Our in-market distribution network ensures product supply during peak demand periods.

Our competitors for North American phosphate fertilizer sales are Mosaic, J.R. Simplot Company and offshore imports primarily from China, Morocco and Russia.

In offshore markets, we compete primarily with OCP, as well as producers from Africa and the Middle East. For 2018, our offshore sales of phosphate products represented 18 percent of our total third-party phosphate and sulfate sales.

Within the animal feed supplement business in the phosphate segment, opportunities exist to differentiate products based on nutritional content. We have a significant presence in the domestic feed supplement market segments. We compete with Mosaic, J.R. Simplot Company and Chinese and Russian producers for feed sales.

Industrial products are the least commodity-like of the phosphate products as product quality is a more significant consideration for customer buying decisions. We market industrial phosphate products principally in the US and we compete with ICL, Innophos Holdings, Inc. and Chinese producers for North American industrial sales.

e) SOURCES OF RAW MATERIALS

Potash

The production of potash requires a sustained fresh water supply for the milling process which is sourced from subsurface reservoirs located on the mining projects. These reservoirs provide a sustainable source of process water for the milling operations.

Nitrogen

Natural gas is the primary raw material used for producing ammonia, which is the base for virtually all nitrogen products. In North America, we may enter into natural gas hedging transactions with the goal of minimizing risk from volatile gas prices. In Trinidad, natural gas is purchased under contract using a pricing formula related to the market price of ammonia. In 2018, we entered into a new five-year gas supply contract, which includes minimum take or pay requirements, to provide the entire Trinidad ammonia complex with 90 percent of its expected requirements for 2019 through 2023. With the exception of the Trinidad facility, we purchase most of our natural gas from producers or marketers at the point of delivery of the natural gas into the pipeline system, then pay the pipeline company and, where applicable, the local distribution company to transport the natural gas to our nitrogen facilities. Approximately 90 percent of our North American consumption of natural gas by our nitrogen operations is delivered pursuant to firm transportation contracts, which do not permit the pipeline or local distribution company to interrupt service to, or divert natural gas from, the plant.

Phosphate and Sulfate

Phosphate rock is the major input in our phosphorus processing operations, which is mined at our Aurora and White Springs facilities. Until the end of 2018, we also purchased phosphate rock from OCP for our Geismar and Redwater Phosphate facilities. We closed our Geismar Phosphate facility at the end of 2018 and we also made the decision to repurpose our Redwater Phosphate facility in order to increase our ammonium sulfate capacity.

In addition to phosphate ore, the other principal raw materials we require are sulfur and ammonia. The production of phosphoric acid requires substantial quantities of sulfur, which we purchase from third parties. Any significant disruption in our sulfur supply to the phosphate facilities could adversely impact our financial results. We produce sulfuric acid at the Aurora, White Springs and Redwater facilities from purchased sulfur. Ammonia for Aurora is supplied by rail and truck from our production facilities in Lima, Ohio and Augusta, Georgia.

Ammonia for White Springs is primarily supplied by truck from our Augusta nitrogen plant. At Redwater, ammonia is supplied on site from our nitrogen plants. The Redwater Phosphate facility is expected to be shut down in the second quarter of 2019.

f) INTANGIBLE PROPERTIES

We have registered and pending trademarks in Canada, the US and other countries where our products are sold. In addition, it has been the Company's practice to seek patent protection for inventions and improvements that are likely to be incorporated into its products, where appropriate, and to protect the freedom to use its inventions in its manufacturing processes. We consider several factors in assessing the materiality of our patents including, but not limited to, scope and breadth of claims, sales volumes of products incorporating the technology, strategic importance and patent duration. The Company has registered patents in Canada, the US and other countries where its products are sold.

While these trademarks and patents constitute valuable assets, we do not regard any single trademark or patent as being material to our operations as a whole. Refer to note 17 of the 2018 Financial Statements for disclosure on estimated useful lives of intangible assets.

g) SEASONALITY

The agricultural products business is seasonal. Crop input sales are primarily concentrated in the spring and fall crop input application seasons. Crop nutrient inventories are normally accumulated leading up to each application season. Our cash collections generally occur after the application season is complete, and our customer prepayments are concentrated in December and January. Feed and industrial sales are more evenly distributed throughout the year. See "Risk Factors" below for a description of any risks related to seasonality.

h) ENVIRONMENTAL MATTERS

Our operations are subject to numerous environmental requirements under federal, provincial, state and local laws, regulations and permits of the countries we operate in. These laws, regulations and permits govern matters such as air emissions, wastewater discharges, land use and reclamation, groundwater quality, and solid and hazardous waste management. Many of these laws, regulations and permit requirements are becoming increasingly stringent, and the cost of compliance with these requirements can be expected to increase over time.

Asset retirement obligations typically involve the removal of the asset, remediation of any contamination resulting from the use of that asset and reclamation of the land. We record provisions under IFRS for environmental remediation and asset retirement obligations. See note 20 of the 2018 Financial Statements for the financial impact of asset retirement obligations and accrued environmental costs recorded as operating expenses in earnings and capitalized to property, plant and equipment in 2018. If a matter does not meet the requirements for recognition as a provision under IFRS, it is classified as an environmental contingency. For additional information, see note 31 of the 2018 Financial Statements.

Future environmental capital expenditures are subject to a number of uncertainties, including changes to environmental laws and regulations and interpretations by regulatory authorities or changes in circumstances affecting the Company's operations. At this time, we are unable to estimate the capital expenditures we may make in subsequent years to meet pollution prevention and emissions control objectives, as well as other environmental requirements.

i) Environmental Requirements, Permits and Regulatory Approvals

Many of our operations and facilities are subject to a variety of regulatory requirements, permits and approvals, all of which vary depending on the operation in question. Licenses, permits and approvals at operating sites are obtained in accordance with applicable laws and regulations, which may limit or regulate: operating conditions, rates and efficiency; land, water and raw material use and management; product storage, quality and transportation; waste storage and disposal; and emissions and other discharges. Additional legal requirements may apply in circumstances where site contamination predates the current applicable regulatory framework,

where remediation is ongoing or where there is otherwise evidence that historic remediation activities have not been successful in protecting the environment. These additional requirements may result in an environmental remediation liability that must be resolved.

We believe that we are currently in material compliance with existing regulatory requirements, permits and approvals. Permits and approvals are typically required to be renewed or reissued periodically. We may also become subject to new laws or regulations that impose new requirements or require us to obtain new or additional permits or approvals. However, there can be no assurance that such permits or approvals will be issued in the ordinary course. Further, the terms and conditions of future regulations, permits and approvals may be more stringent and may require increased expenditures by the Company.

Air Quality

With respect to air emissions, we anticipate that additional actions and expenditures may be required to meet increasingly stringent federal, provincial and state regulatory and permit requirements in the areas in which we operate, including existing and anticipated regulations under the US federal Clean Air Act. The US Environmental Protection Agency ("EPA") has issued a number of regulations establishing requirements to reduce air pollutant emissions. We continue to monitor developments in these various programs and assess their potential impact on our operations. The calciners at our Aurora, North Carolina phosphoric acid plant are subject to mercury emission limits adopted by the EPA in 2015, which do not reflect actual emissions during normal operations. The EPA has announced that it intends to issue a revised rule to address the issue and remove the need for the state consent order under which the calciners have been operating while the EPA addresses the issue. In 2015, we entered a consent decree that requires reductions in sulfur dioxide emissions at specified sulfuric acid plants with the final compliance dates occurring at the beginning of 2020. See note 31 of the 2018 Financial Statements for additional information.

Water Quality

There are international, federal, provincial and state regulatory initiatives underway that may result in new regulatory restrictions on discharges of nutrients, including discharges of nitrogen and phosphorus to waters in the US ("Nutrient Criteria"). There are also ongoing litigation efforts in several jurisdictions of the US that seek to require US environmental agencies to develop new Nutrient Criteria. These litigation and regulatory proceedings may result in new Nutrient Criteria that apply to water discharges from several of the Company's facilities in the US. Some of the proposed restrictions imposed through Nutrient Criteria also have the potential to require our customers to reduce or eliminate their uses of the Company's products. These Nutrient Criteria could have a material effect on either the Company or its customers, but the impact is not currently predictable or quantifiable with reasonable certainty because many of these initiatives are in relatively early stages and compliance alternatives may be available that do not create material impacts. The Company is closely monitoring and evaluating the impact of these initiatives on its operations.

Waste Management

In 2003, the EPA began investigating the phosphate industry as part of its National Enforcement Initiative regarding the mineral processing industry. The purpose of the EPA's National Enforcement Initiative is to ensure that waste resulting from mineral processing is managed in accordance with regulations under *The Resource Conservation and Recovery Act* , which is the US federal statute that governs the generation, transportation, treatment, storage and disposal of hazardous wastes. The EPA is also evaluating the mineral processing industry's compliance with certain US *Clean Air Act* programs, including Maximum Achievable Control Technology and Prevention of Significant Deterioration, the US *Emergency Planning and Community Right to Know Act* and the *Comprehensive Environmental Response, Compensation and Liability Act of 1980* ("CERCLA").

Several of the Company's phosphoric acid production facilities have received notices of violation or entered orders with the EPA as a result of the EPA's National Enforcement Initiative. These facilities include the Conda, Idaho Phosphate production facility sold in January 2018, for which Nutrien retained environmental liabilities attributable to its historic activities. The Company is negotiating with the EPA and the relevant state environmental agencies to resolve the matters relating to the Company's facilities, and these negotiations are ongoing. In these negotiations, we are seeking to minimize the costs and impact on our future operations consistent with applicable legal requirements, including financial assurance for the future closure, maintenance and monitoring of phosphogypsum stack systems. The full scope of the costs that we may ultimately incur to bring these matters to a conclusion could be material to our operations, but are not currently predictable or quantifiable with reasonable certainty. See note 31 of the 2018 Financial Statements for additional information.

ii) Asset Retirement Obligations

Provisions are recognized when: (i) the Company has a present legal or constructive obligation as a result of past events; (ii) it is probable that an outflow of resources will be required to settle the obligation; and (iii) the amount can be reliably estimated.

We have recorded in the 2018 Financial Statements provisions for decommissioning obligations (also known as asset retirement obligations) primarily related to mining and mineral activities. The major categories of asset retirement obligations include reclamation and restoration costs at our potash and phosphate mining operations (phosphate mining, in particular), including the management of materials generated by mining and mineral processing, such as: various mine tailings and gypsum; land reclamation and revegetation programs; decommissioning of underground and surface operating facilities; general clean-up activities aimed at returning the areas to an environmentally acceptable condition; and post-closure care and maintenance.

The estimation of the costs of asset retirement obligations depends on the development of environmentally acceptable closure and post-closure plans. In some cases, this may require significant research and development to identify preferred methods for such plans that are economically sound and that, in most cases, may not be implemented for several decades. We have continued to use appropriate technical resources, including outside consultants, to develop specific site closure and post-closure plans in accordance with the requirements of the various jurisdictions in which we operate.

The asset retirement obligations are generally incurred over an extended period. As at December 31, 2018, we had accrued a total of $1,295 million for asset retirement obligations, the current portion of which totaled $122 million. For additional information, see note 20 of the 2018 Financial Statements.

iii) Site Assessment and Remediation

We are also subject to environmental statutes that may require investigation and, where appropriate, remediation of contaminated properties. Canadian federal and provincial laws as well as CERCLA and other US federal and state laws impose liability on, among others, past and present owners and operators of properties or facilities at which hazardous substances have been released into the environment and persons who arrange for disposal of hazardous substances that are released into the environment. Liability under these laws may be imposed jointly and severally and without regard to fault or the legality of the original actions, although such liability may be divided or allocated according to various equitable and other factors. We have incurred and expect to continue to incur costs and liabilities in respect of our current and former operations, including those of divested and acquired businesses. We have generated and, with respect to our current operations, continue to generate substances that could result in liability for us under these laws.

As at December 31, 2018, we had accrued environmental costs of $534 million for costs associated with site assessment and remediation, including consulting fees, related to the clean-up of contaminated sites currently or formerly associated with the Company or its predecessors' businesses. As at December 31, 2018, the current portion of these costs totaled $34 million. The accrued amounts include the Company's

and its subsidiaries' expected final share of the costs for the site assessment and remediation matters to the extent future outflow of resources is probable and can be reliably estimated. For additional information, see note 20 of the 2018 Financial Statements.

It is often difficult to estimate and predict the potential costs and liabilities, including natural resource damages, associated with these programs, and there is no guarantee that we will not in the future be identified as potentially responsible for additional costs under these programs, either as a result of changes in existing laws and regulations or as a result of the identification of additional matters or properties covered by these programs. For certain matters, we are unable to make a reliable estimate of the amount and timing of any financial effect in excess of the amounts accrued for reasons including complexity of the matters, early phases of most proceedings, lack of information on the nature and timing of future actions in the matters, dependency on the completion and findings of investigations and assessments, and the lack of specific information as to the nature, extent, timing and cost of future remediation with respect to those matters. Until we have greater clarity as to our liability and the extent of our financial exposure, it is not practicable to make a reliable estimate of the financial effect. For additional information, see note 31 of the 2018 Financial Statements.

iv) Climate Change and Greenhouse Gas ("GHG") Emissions

Nutrien generates GHG emissions directly and indirectly through the production, distribution and use of its products. These emissions may be subject to climate change policies and regulations, all of which are developing in unique ways within various federal, provincial and state jurisdictions. Increasing regulation of GHGs may impact our operations by requiring changes to our production processes or increasing raw material, energy, production or transportation costs in order to ensure compliance. There are also significant differences in the climate change policies of countries where Nutrien operates as some are parties to the Paris Agreement, negotiated in December 2015, under the United Nations Framework Convention on Climate Change, and some are not.

Sources of GHGs from our production operations include emissions from the reforming of natural gas to produce hydrogen, which is used to synthesize ammonia, as well as process emissions from some of our nitric acid plants. We estimate that the production stage of our operations accounts for approximately 95 percent of our overall emissions. About 60 percent of the natural gas required to produce ammonia – the basic building block of all nitrogen fertilizer – is used to provide the necessary hydrogen for the process. Given current economically viable technologies, the CO_2 emissions related to this process are fixed by the laws of chemistry and cannot be reduced. We have developed strategies to attempt to improve energy efficiency in our production operations, to capture and store carbon, and to reduce the amount of nitrous oxide ("N_2O") emissions from our nitric acid facilities. We are also investing in developing new precision agriculture technologies and agronomic services that improve the efficiency of fertilizer applications within our Retail operations, so more grain can be produced with the same amount of fertilizer and with reduced loss to the environment.

Our Canadian facilities are primarily located in the provinces of Alberta and Saskatchewan and are subject to a variety of provincial and federal requirements to reduce GHG emissions ranging from carbon taxes to emissions intensity reduction requirements. The Company attempts to minimize its Canadian compliance costs through the implementation of various efficiency and emissions reduction projects, including: overall efforts to increase operational efficiency; operating a cogeneration facility in partnership with TransCanada Energy Ltd., a subsidiary of TransCanada Corporation, at Carseland, Alberta that captures waste heat and produces emission offset credits; operating a cogeneration facility in partnership with ATCO Power Ltd. and SaskPower at the Company's Cory, Saskatchewan potash mine that captures waste heat and provides all of the mine's steam requirements; and the development and implementation of the Nitrous Oxide Emissions Reduction Protocol designed to generate emission offset credits for farmers who reduce their N_2O emissions.

In 2018, the Alberta government established industrial emission intensity benchmarks for regulated industries. Product benchmarks that are applicable to Nutrien's Alberta facilities are for ammonia and

ammonium nitrate, as well as a site-specific benchmark for other fertilizer products produced at each site. The benchmark for ammonia is based on 90 percent of the Alberta ammonia industry production-weighted average emission intensity. The ammonium nitrate benchmark was based on the best performer in Alberta (Nutrien's Redwater facility), and the site-specific other product benchmark is based on 80 percent of the remainder of each other Alberta facility's emissions.

Alberta is phasing the new Carbon Competitiveness Incentive Regulation ("CCIR") program over 2018 and 2019, where facilities will be allowed an additional transitional emission allowance representing 50 percent of the facility's historical compliance obligation (based on emissions and production) for 2018 and 25 percent of historical compliance obligation for 2019. Starting in 2020, all Alberta facilities will be subject to the full compliance obligation. Also starting in 2020, the "free" emission allowance for each product will be reduced by one percent per year.

With the CCIR program being phased in slowly over the initial years, Nutrien is forecasting aggregate carbon costs of approximately $3.0 million to $5.0 million by 2022 in Alberta based on the increasing emission stringency and forecasted carbon price. These forecasts depend heavily on ammonia plant reliability and turnaround schedules because starting up and shutting down the ammonia plants results in significant greenhouse gas venting over normal operations.

In late 2016, Canada and its provinces, other than Saskatchewan and Manitoba, agreed to the Pan-Canadian Framework on Clean Growth and Climate Change ("Framework"). Manitoba subsequently signed onto the Framework, whereas Ontario and Alberta have since pulled out of it. The Framework is the blueprint by which Canada will attempt to meet its commitment under the Paris Agreement. The *Greenhouse Gas Pollution Pricing Act* ("GGPPA") is Canada's legislative proposal for implementing the Framework and is intended to serve as a regulatory backstop in the event a province does not otherwise implement an adequate provincial GHG regime. Saskatchewan continues to oppose both the Framework and the GGPPA and has launched a constitutional legal challenge to the validity of the GGPPA. Ontario has launched a similar challenge. Until court decisions are rendered in those cases, it is unclear what effect, if any, the GGPPA will have on Nutrien's Canadian operations.

In September 2018, the Canadian federal government announced that the federal backstop would apply in Saskatchewan, Manitoba, Ontario and New Brunswick; however, the Saskatchewan heavy emitters program was deemed equivalent, which allows for a five percent reduction of a specified three-year average by 2030. This applies to all facilities that emit over 50,000 tonnes, which includes all six of Nutrien's potash facilities. Negotiations between the Saskatchewan Ministry of Environment and the federal Department of Environment and Climate Change Canada are underway to develop a system that would apply to power generation and, as a result, pass-through costs on electricity from the backstop are yet to be determined.

In the US, the EPA has issued GHG emissions regulations that establish a reporting program for emissions of CO_2, methane and other GHGs, as well as a permitting program for certain large GHG emissions sources. Beyond that, there is significant uncertainty regarding the likelihood of new or amended federal GHG regulations in the US under the current presidential administration, and the potential impact on the Company cannot be determined at this time. Apart from federal regulation of GHGs, some US states have also enacted laws concerning GHG emissions that we are monitoring for impacts on our operations.

The impacts of climate change and future restrictions on emissions of GHGs on the Company's operations could be material but cannot be determined with any certainty at this time.

v) Facility and Product Security

Through our Safety, Health and Environment department, we regularly evaluate and address actual and potential security issues and requirements associated with our operations in the US and elsewhere using approved security vulnerability methodologies. Additional actions and expenditures may be required in the future. In the US, chemical facilities are regulated under the *Maritime Transportation Security Act*, the *Chemical Facility Anti-Terrorism Standards*, and the *Food Safety Modernization Act* (Mitigation Strategies

to Protect Food Against Adulteration). It is anticipated that the US Congress will continue to consider federal legislation designed to reduce the risk of any future terrorist acts at industrial facilities. We believe that we are in material compliance with applicable security requirements, and we have also developed and adopted security measures and enhancements beyond those presently required at both our regulated and non-regulated facilities. To date, neither the security regulations nor our expenditures on security matters have had a material adverse effect on our financial position or results of operations. We are unable to predict the potential future costs to us of any new governmental programs or voluntary initiatives.

i) EMPLOYEES

At December 31, 2018, we employed 20,300 people. Of these 20,300 employees, our Retail operations employed approximately 12,500 people and our Potash, Nitrogen, Phosphate and Sulfate operations employed approximately 6,600 people, with the remaining approximately 1,200 people employed within our Corporate functions.

We have entered into 16 collective bargaining agreements with labor organizations representing employees. The following table sets forth the plant locations where we have entered into collective bargaining agreements and their respective expiry dates.

Plant Location	Collective Bargaining Agreement Expiry Date
Allan, Saskatchewan	April 30, 2019
Cory, Saskatchewan	April 30, 2019
Lanigan, Saskatchewan	January 31, 2021
Patience Lake, Saskatchewan	April 30, 2019
Regina, Saskatchewan	December 31, 2019
Regina, Saskatchewan	December 31, 2019
Regina, Saskatchewan	December 31, 2019
Rocanville, Saskatchewan	May 31, 2018 (1)
Vanscoy, Saskatchewan	April 30, 2018 (1)
Florence, Alabama	July 14, 2023
Mulberry, Florida	May 31, 2021
White Springs, Florida	December 10, 2021
Americus, Georgia	June 30, 2023
Greenville, Mississippi	August 26, 2019
Cincinnati, Ohio	November 1, 2019
Lima, Ohio	October 31, 2022

(1) The terms of this collective bargaining agreement, including new expiry date, remain under renegotiation as of the date hereof.

We believe we have an effective working relationship with our employees, and the unions representing them.

j) SOCIAL OR ENVIRONMENTAL POLICIES

Code of Ethics

Nutrien's most important assets are our employees, customers, shareholders, suppliers and the communities in which we operate. It is critical that we maintain the trust of each of these stakeholders. Our Code of Ethics ("Code") helps us fulfill our responsibilities by: committing to the public and our stakeholders our uncompromising integrity in every aspect of our business; describing our values and principles of business conduct, including our own high standards and fundamental respect for the rule of law; guiding employees how to engage in ethical decision making in all of our operations around the world; and outlining our approach to interacting ethically with stakeholders and acting in the best interest of shareholders. The Code also outlines our commitment to the safety of people and protection of the environment.

Nutrien actively promotes ethical behavior through the Code and numerous supporting policies, which are reinforced by due diligence procedures, training, and our compliance hotline. In 2018, all Nutrien employees received formal training on the Code and other compliance related topics. Our confidential 24-hour, 365 days a year, externally administered compliance hotline allows employees to report any violations or suspected violations of the Code, other Nutrien policies or any other illegal or unethical behavior. The Code also clearly sets out the Company's non-retaliation policy which is designed to enable employees to raise good faith issues in a safe environment without fear of retaliation.

Anti-Corruption Policy

Nutrien operates in a wide range of jurisdictions and is vigilant and proactive in preventing and detecting corruption. In 2018, we launched a global Anti-Corruption Policy. This policy requires those who work on behalf of Nutrien to ensure that their own conduct fulfils the corporate commitment to compliance with the laws in each applicable jurisdiction. It applies to Nutrien's directors, officers, employees, representatives, consultants, and other agents of Nutrien and each of its subsidiaries and in every country where we do business.

Nutrien maintains an anti-corruption due diligence program that includes:

- identifying high risk third parties, including acquisition targets and potential joint venture partners, and conducting diligence;
- incorporating anti-corruption clauses in contracts or obtaining certifications that include anti-corruption language for high risk third parties; and
- requiring anti-corruption training and other risk mitigation steps where appropriate, such as annual certification or continued monitoring to identify and address any potential issues.

Workplace Policies

In 2018, we established a robust diversity and inclusion strategy that focuses on increasing gender diversity and match-to-market representation of visible minorities, including Indigenous peoples in Canada. Within the strategy, Nutrien is committed to increasing diversity of its workforce while increasing inclusive practices and a sense of belonging for our employees. We implemented a Respect in the Workplace Policy, an Inclusive Workplace Commitment Statement and an Equal Employment and Affirmative Action Policy. Implementation of our workplace diversity and inclusion initiatives is supported by training and workshops, employee resource groups, and ongoing monitoring of internal employment trends (new hires, promotion and turnover) for diverse employee groups. In 2018, we made the decision to benchmark our inclusion maturity using a comparison of our practices to the Global Diversity and Inclusion Benchmark model as a basis for continuous improvement.

Supplier Code of Ethics and Procurement Procedure

In 2018, we launched a Supplier Code of Ethics ("Supplier Code"), aligned with our commitment to the ten principles of the United Nations Global Compact and international standards. The Supplier Code identifies the values that Nutrien expects its suppliers to embrace and applies to those suppliers that provide products or services to Nutrien around the world.

Commitment by our suppliers to the principles of the Supplier Code is significant in Nutrien's decision making process. Our legal and compliance teams support the due diligence process for high-risk suppliers, which includes ensuring that appropriate language is included in contracts with various suppliers and a requirement that the supplier adhere to our Supplier Code. Where suppliers refuse to follow the principles of the Supplier Code or show signs that they are not committed to improving their practices to comply with its principles, Nutrien will review its relationship with the supplier. Where contractual commitments and local law permit, this review may include termination of our relationship with the non-compliant supplier.

Nutrien is also committed to supporting diversity and inclusion throughout the procurement process. Our procurement policies and procedures – including our Procurement Diversity and Inclusion Procedure – are designed to ensure that fair consideration is given to all potential suppliers. We have developed an Aboriginal

Content Playbook to assist suppliers develop local Aboriginal content in their own organizations and supply chains. In addition, Nutrien works with Aboriginal opportunity partner companies to provide contracting opportunities at our worksites. We believe in building and maintaining relationships of mutual respect with Aboriginal communities through our procurement practices, and extend this further by providing employment and training opportunities and community investments.

Safety, Health, Environment and Security Policy

Nutrien is committed to the care and protection of our people, environment, community, and customers. We honor that commitment by making safety a core value of our organization, as we grow our world from the ground up.

In 2018, Nutrien implemented a Safety, Health, Environment and Security ("SHE&S") Policy. Our goals are to:

- Protect our people, assets, facilities, communities and environment;
- Proactively prevent incidents and minimize risk by continuously improving our safety, health and environmental performance;
- Promote employee physical and mental health and well-being; and
- Drive excellence in safety, health and environment (SH&E) across our operations and supply chain.

We strive to accomplish these goals through our SH&E strategy of home safe, every day, which brings our safety vision, principles and priorities to life and guides our daily actions and behaviors. Nutrien will ensure leaders and their teams are well-supported with SH&E expertise and resources to help everyone go home safe, every day.

Nutrien has well-defined SHE&S policies, programs and processes, committed leadership, and a responsible workforce. In addition to a Corporate SHE&S Department, it has established a SHE&S organization in each business unit with clear lines of reporting and accountability. This has enabled Nutrien to focus on both oversight and governance as well as increasing management involvement in its operations and activities. Nutrien stewards to an integrated SHE&S management system, which includes a policy and system of documenting SHE&S management and performance expectations applicable to Nutrien's facilities. Nutrien's business units and, where appropriate, individual facilities augment these requirements with system controls necessary to manage the risks unique to those operations.

Continuous improvement and performance monitoring of Nutrien's operations occur in part through the Board SHE&S Committee ("BSC"), and also through various business unit initiatives and work teams. The development of environmental management systems standards, guidance documents and continuous improvement occurs at the business unit level SHE&S leaders' committee ("Operational Committee") and the Corporate SHE&S Department. The Corporate SHE&S Department reports through the Operational Committee, where performance and risk management issues are addressed. The SHE&S leaders' committee reports through the Corporate SHE&S Committee ("CSC"), which in turn reports to the BSC. Policy and strategy are reviewed annually at the CSC level for relevance and modified as appropriate. The BSC is responsible for the general oversight of SHE&S governance. These committees meet on a recurring basis to monitor performance against annual and longer-term performance goals, to discuss plans and strategies relating to our processes, and to evaluate opportunities for improving our systems.

Technical support and compliance assurance for Nutrien's operations are managed at three levels within the organization: the facilities level, business unit level and corporate level. At the corporate level, Corporate SHE&S staff are responsible for maintaining integrated systems, performance monitoring, providing technical expertise and conducting business unit SHE&S audits. The use of a structured compliance assurance program enables Nutrien to achieve continuous improvement and consistent management practices at its facilities and in its operations.

Nutrien maintains ongoing, close working relationships with industry associations and regulatory agencies. These relationships ensure that new or changing regulations are known, understood, and communicated so risk management strategies can be developed to maintain compliance.

5.2 RISK FACTORS

Our performance and our future operations are and may be affected by a wide range of risks. The following section describes our key risks and uncertainties. Any or all of these risks, or other risks not presently known to us or that we do not deem material, could have a material adverse effect on our business, financial condition, results of operations, cash flows, value of our debt securities and, in certain cases, our reputation.

1. Significant long-term changes in the agriculture space could adversely impact our business

The agricultural landscape is evolving at an increasingly fast pace as a result of factors including farm and industry consolidation, agricultural productivity and development and climate change.

Farm consolidation in the US and other developed markets has been ongoing for decades and is expected to continue as grower demographics shift and advancements in innovative technology and equipment enables farmers to manage larger operations to create economies of scale in a lower-margin, more capital-intensive environment. Increased consolidation in the crop nutrient industry has resulted in greater resources dedicated to expansion, research and development opportunities, leading to increased competition in advanced product offerings and innovative technologies. Some of these competitors have greater total resources or are state-supported, which make them less vulnerable to industry downturns and better positioned to pursue new expansion and development opportunities.

The advancement and adoption of technology and digital innovations in agriculture and across the value chain has increased and is expected to further accelerate as grower demographics shift and pressures from consumer preference and governments evolve. The development of seeds that require less crop nutrients, development of full or partial substitutes for our products or developments in the application of crop nutrients such as improved nutrient use or efficiency through use of precision agriculture could also emerge, all of which have the potential to adversely affect the demand for our products and results of operations.

The prospective impact of potential climate change on our operations and those of our customers and farmers remains uncertain. Some scientists have suggested that the impacts of climate change could include changing rainfall patterns, water shortages, changing sea levels, changing storm patterns and intensities, and changing temperature levels, and that these changes could be severe. These impacts could vary by geographic location.

These factors as well as other factors affecting long-term demand for our products and services (such as population growth and changes in dietary habits) could adversely impact our strategy, demand for our products and financial performance.

2. Shifting global dynamics may result in a prolonged agriculture downturn

Global macro-economic conditions and shifting dynamics, including trade tariffs and restrictions and increased price competition, or a significant change in agriculture production or consumption trends, could lead to a sustained environment of reduced demand for our products, and/or low commodity prices.

We are subject to intense price competition from both domestic and foreign sources, including state-owned and government-subsidized entities. Crop nutrients, including potash, nitrogen and phosphate, are global commodities with little or no product differentiation, and customers make their purchasing decisions principally on the basis of delivered price and, to a lesser extent, on customer service and product quality. Historically, selling prices for our products have fluctuated in response to periodic changes in supply and demand conditions. Supply is affected by available capacity and operating rates, raw material costs and availability, government policies and global trade.

Periods of high demand, high capacity utilization and increasing operating margins tend to result in investment in production capacity, which may cause supply to exceed demand and capacity utilization and realized selling prices for our products to decline, resulting in possible reduced profit margins. Such conditions could also include write-downs in the value of our inventory and production assets, and

temporary or permanent curtailments of production. Competitors and potential new entrants in the markets for potash, nitrogen and phosphate have in recent years expanded capacity, begun construction of new capacity, or announced plans to expand capacity or build new facilities. The extent to which current global or local economic and financial conditions, changes in such conditions or other factors may cause delays or cancellation of some of these ongoing or planned projects, or result in the acceleration of existing or new projects, is uncertain. Future growth in demand for our products may not be sufficient to absorb excess industry capacity.

We are impacted by global market and economic conditions that could adversely affect demand for crop nutrients or increase prices for, or decrease availability of, raw materials and energy necessary to produce our products. This includes rising incomes in developing countries, the relative value of the US dollar and its impact on the importation of fertilizers, foreign agricultural policies, the existence of, or changes in, import or foreign currency exchange barriers in certain foreign markets and other regulatory policies of foreign governments, as well as the laws and policies affecting foreign trade and investment. Furthermore, some of our customers require access to credit to purchase our products and a lack of available credit to customers in one or more countries, due to this deterioration, could adversely affect demand for crop nutrients as there may a reluctance to replenish inventories in such conditions.

3. Our operations may be affected by political, economic and social instability in the areas in which we operate

We are a global business with significant operations in Canada and the US as well as operations outside of North America, including Australia, South America, European countries and Trinidad with a focus on expanding our international presence in Brazil. We also hold business investments in Egypt and China.

We are subject to numerous risks and uncertainties relating to international sales and operations, including: difficulties and costs associated with complying with a wide variety of complex laws, treaties and regulations; abrupt or unexpected changes in regulatory environments; increased government regulation of the economy and/or state ownership of enterprises; forced divestures or changes to or nullification of existing agreements, mining permits or leases; political and economic instability, including the possibility for civil unrest, inflation and adverse economic conditions resulting from governmental attempts to reduce inflation, such as imposition of higher interest rates and wage and price controls; nationalization of properties or assets by foreign governments; the imposition of tariffs, exchange controls, trade barriers or other restrictions; restrictions on monetary distributions; and currency exchange rate fluctuations between the US dollar and foreign currencies.

The occurrence of any of the above in the countries in which we operate or elsewhere could jeopardize or limit our ability to transact business and could adversely affect our revenue and operating results and the value of our assets located in such countries.

Our governance and compliance processes, which include the review of internal controls over financial reporting and specific internal controls in relation to offers of things of value to government officials and representatives of state-owned enterprises, may not prevent potential violations of law, accounting or governance practice. Our Code, together with our mandatory policies, such as our anti-corruption and anti-fraud policies, may not prevent instances of fraudulent behavior and dishonesty nor guarantee compliance with legal or regulatory requirements. This may lead to regulatory fines, disgorgement of profits, litigation, loss of operating licenses or reputational damage.

4. Our business may be adversely affected by changing regulations

We are subject to numerous federal, state, provincial and local environmental, health and safety laws and regulations, including laws and regulations relating to land, water and raw material use and management; the emission of contaminants to the air or water; land reclamation; the generation, treatment, storage, transportation, disposal and handling of hazardous substances and wastes; the clean-up of hazardous substance releases; and the demolition of existing plant sites upon permanent closure. Specifically, our mining and manufacturing processes release carbon dioxide and other GHGs and consume energy generated by processes that result in GHG emissions.

We incur significant costs and associated liabilities in connection with these laws and regulations. There are substantial uncertainties as to the nature and timing of any future regulations with many of the laws and regulations becoming increasingly stringent, and the cost of compliance can be expected to increase over time. New or revised laws or regulations may result from pressure on law makers and regulators to address climate change, transition to a low-carbon economy or to address concerns related to fertilizer and food prices, accidents, terrorism or transportation of potentially hazardous substances. Increased or more stringent regulations, if enacted, could impact our ability to produce or transport certain products, increase our raw material, energy, transportation, and compliance costs, reduce our efficiency, require us to make capital improvements to our facilities and have a negative effect on our customer satisfaction, reputation and financial performance.

We hold numerous environmental, mining and other governmental permits and approvals authorizing operations at each of our facilities. Continuation and/or expansion of our operations is dependent upon renewing or securing the necessary environmental or other permits or approvals. A decision by a government agency to deny or delay issuing a new or renewed material permit or approval, or to revoke or substantially modify an existing permit or approval, could materially adversely affect our ability to continue operations at the affected facility.

We are subject to antitrust laws in various countries throughout the world. A significant portion of our business activities are conducted in countries under existing trade agreements and regulations. Changes in antitrust laws, trade agreements or regulations may limit our operations or the operations of Canpotex, and could negatively impact opportunities for future acquisitions or organic growth.

5. Our information technology systems, infrastructure and data may become the target of cyber security attacks

Information technology systems are embedded in our business and operational control systems and, as we grow our digital platform, we may become more exposed to cyber-attacks, which continue to become increasingly sophisticated. Cyber security risks include attacks on information technology and infrastructure by hackers, damage or loss of information due to viruses, the unintended disclosure of confidential information, the misuse or loss of control over computer control systems, and breaches (intentional or otherwise). Targeted attacks on our systems (or on systems of third parties that we rely on), failure or non-availability of a key information or operations technology system or a breach in security measures designed to protect our technology systems could result in property damage, theft, misuse, modification and destruction of information, including trade secrets and confidential business information, and cause business disruptions, reputational damage, extensive personal injury and third-party claims, which could negatively impact our operations and our financial performance.

6. We may fail to effectively allocate capital to achieve sustained growth

Challenges may arise in the capital allocation process due to changing market conditions, including the unavailability, due to geopolitical, market or other reasons, of appropriate capital deployment opportunities, and our ability to anticipate and incorporate such changes in our decision-making process. Inefficiencies in the capital allocation process or decisions that are not consistent with strategic priorities or that do not properly assess risk may also lead to inefficient deployment of capital. Failure to allocate capital in an effective manner may lead to reduced returns on capital invested, operational inefficiencies, damage to our reputation or limitations on our access to capital.

When we undertake any strategic initiatives, our ability to achieve the expected returns and other benefits will be affected by our degree of preparedness and ability to execute.

- We have undertaken and continue to undertake various projects including capital and business process improvement /transformation projects. These projects involve risks, including (but not limited to) difficult environmental conditions, poor project prioritization and capital allocation, factors negatively impacting costs (such as escalating costs of labor and materials, unavailability and underperformance of skilled personnel, suppliers of materials or technology and other third parties we retain, design flaws or

operational issues, poor project management oversight) or poor transition through project stages. Any of the foregoing risks could impair our ability to realize the benefits we had anticipated from the projects and negatively impact our financial performance.

- With respect to any completed and future acquisitions, including the Merger, we are dependent upon our ability to successfully consolidate functions and integrate operations, technology, systems, procedures and personnel in a timely and efficient manner. The integration of assets and operations requires the dedication of management effort, time and resources, which may divert management's focus and resources from other strategic opportunities or operational matters during the process. The integration process with respect to any completed or future acquisitions, including the Merger, may result in the disruption of our existing business and customer relationships, which may adversely affect our ability to achieve the anticipated synergies and other benefits and may, in turn, negatively affect our financial performance.
- We also continue to evaluate the potential disposition of assets and operations that may no longer help us meet our objectives. When we decide to sell assets or operations, we may encounter difficulty in finding buyers or executing alternative exit strategies on acceptable terms or in a timely manner, which could delay the accomplishment of our strategic objectives.

7. We may fail to develop the right organizational structure, talent and resources

Our ability to attract and retain qualified top talent and provide the necessary organizational structure, programs and culture to engage and develop our employees is crucial to our growth and achieving our business results.

Although we strive to be an employer of choice, competition for skilled employees in certain geographical areas can be significant and we may not be successful in attracting, developing or retaining such skilled employees. In addition, we invest significant time and expense in training our employees, which increases their value to competitors who may seek to recruit them. Failure to develop the right organizational structure or culture could result in decreased productivity, reliability, efficiency and safety performance, higher costs or reputational harm. It could also negatively impact our ability to take on new projects or acquisitions and sustain operations, which might negatively affect our operations or our ability to grow.

8. New digital technologies or innovations could adversely impact our Retail business model

Digital innovations, increased research and development activities and use of new technology in the agriculture market by new or existing competitors could alter the competitive environment, resulting in existing business models being disrupted, which may adversely impact our Retail operations and financial performance.

9. We may fail to maintain high levels of safety and health or to protect the environment

Our operations are subject to hazardous safety and environmental risks inherent in mining, manufacturing, transportation, storage and distribution of chemical fertilizers, including ammonia, which is highly toxic and corrosive. These risks can include: underground water inflows at our potash mines; explosions; fires; severe weather and natural disasters; train derailments, collisions, vessel groundings and other transportation and maritime incidents; leaks and ruptures involving storage tanks, pipelines and railcars; spills, discharges and releases of toxic or hazardous substances or gases; uncontrolled tailings, gypsum stack or other containment breaches, significant subsidence from mining activities, deliberate sabotage and terrorist incidents. We also have personnel who work or travel in higher risk countries and are subject to increased safety and security risks as a result.

The potash mining process is complex and subject to certain geological conditions and hazards, including the presence of water-bearing strata above and below many underground mines, which pose the risk of water inflows. It is not uncommon for water inflows of varying degrees to occur in potash mines; however, it is difficult to predict if, when, or to what degree, such inflows could occur. At our Saskatchewan potash

mines we have minor water inflows that we actively monitor and manage, as appropriate. Significant inflows at our potash mines could result in increased operational costs, increased risk of personal injury, production delays or stoppages, or the abandonment and closure of a mine. The risk of underground water inflows, as with most other underground risks, is currently not insured.

Failure to prevent or appropriately respond to a safety, health or security incident could result in injuries or fatalities among our employees, contractors or residents in communities near our operations. Such incidents may lead to liabilities arising out of personal injuries or death, operational interruptions and shutdown or abandonment of affected facilities. Preventing or responding to accidents could require us to expend significant managerial time and effort, and financial resources to remediate safety issues, compensate injured parties or repair damaged facilities. Any of the foregoing could have an adverse impact on our ability to produce or distribute product, financial results and our reputation. Failure to prevent a significant environmental incident could be harmful to our employees, contractors, and communities in which we operate and impact the biodiversity, water resources and related ecosystems near our operations. Such incidents could also adversely impact our operations, financial performance or reputation.

10. Our business and operations are subject to general and ongoing risks, most of which are outside our control

We may fail to maintain the support of our stakeholders for our business plans

Our stakeholders may place an increasing importance on the structure of our business, our ability to execute on our strategy and our core sustainability and social responsibilities. Underperformance due to weak market fundamentals or business issues, inadequate communication, engagement and/or collaboration with our stakeholders, or dissatisfaction with our practices or strategic direction may lead to a lack of support for our business plans. Loss of stakeholder confidence impairs our ability to execute on our business plans, negatively impacts our ability to produce or sell our products and may also lead to reputational and financial losses, or shareholder action.

Canpotex may be dissolved or its ability to operate impaired

Canpotex is the offshore marketing, transportation and distribution company we rely on to deliver our potash to customers outside Canada and the US. Unexpected changes in laws or regulations, market or economic conditions, our (or our venture partner's) business, or otherwise could threaten the existence or effectiveness of Canpotex. A trusted potash brand could be lost and our access to key offshore markets negatively impacted resulting in a less efficient logistics system, decreased sales, higher costs or lower net earnings from offshore sales.

We are exposed to various market risks that may impact our operating results

We are exposed to various market factors that may impact our operating results including changes in the price of, or ability to source, raw materials and energy, which could, among other things, impact our gross margins and profitability; commodity price volatility, including the possibility of asset impairment as a result thereof; currency volatility and risk, including as a result of the translation of foreign subsidiary income statements to US dollars for consolidation at the Nutrien level; and fluctuations in interest rates which could negatively impact our financial results given our use of floating rate debt, floating rate credit facilities and commercial paper, as well as the refinancing of long-term debt and anticipated future financing needs. We seek to manage a portion of the risks relating to changes in commodity prices and foreign currency exchange rates by using derivative instruments; however, such instruments may be ineffective in fully mitigating such risks.

Changes in the price of raw materials and energy required to produce our products, including natural gas, which is the principal raw material used to manufacture our nitrogen products and a significant energy source in the potash milling and mining process, could have a material impact on our business. The price of raw materials and energy can fluctuate widely for a variety of reasons, including changes in availability because of additional capacity or limited availability due to curtailments, regulatory changes, including

changes related to production of certain raw materials or energy sources, or other operating problems. Other external factors beyond our control can also cause volatility in raw materials prices, including, without limitation, general economic conditions, the level of business activity in the industries that use our products, weather conditions and forecasts, competitors' actions, international events and circumstances and governmental regulation in the US and abroad. Because most of our products are commodities or derived from commodities, there can be no assurance that we will be able to recover increases in the price of such raw materials through an increase in the price of our related crop nutrient products. Conversely, when the market prices for these raw materials rapidly decrease, the selling prices for related crop nutrients can fall more rapidly than we are able to consume our raw material inventory that we purchased or committed to purchase at higher prices. As a result, our costs may not fall as rapidly as the selling prices of our products. Until we are able to consume the higher priced raw materials, our gross margins and profitability may be adversely affected.

We have benefited from relatively low North American natural gas prices in recent years; however, the price for natural gas in North America can vary significantly compared to the price for natural gas in Europe and Asia. Significantly lower natural gas prices in Europe and/or Asia may give our competitors in Europe and Asia a competitive advantage, which could, in turn, decrease international and domestic product prices and reduce our margins. In addition, higher natural gas prices, particularly in North America, during a period of low crop input selling prices could adversely affect our results of operations.

There is also a risk to production at various of our facilities due to concerns over the availability of natural gas supplies. Nitrogen facilities in Argentina, Egypt and Trinidad have all experienced supply strains or curtailments. Continued or increased natural gas shortages may result in reduced production available for sale and higher production costs per tonne.

We may be unable to access sufficient, cost-effective and timely transportation, distribution and storage of our products

We rely on railroad, trucking, pipeline and other transportation service providers to transport raw materials to our manufacturing facilities, to coordinate and deliver finished products to our storage and distribution system and our Retail centers and to ship finished products to our customers.

Our (or the third parties upon which we rely) ability to provide sufficient, cost-effective and timely transportation and storage of product may be challenged due to a number of factors, including labor disputes, system failures, accidents (such as spills or derailments), delays, adverse weather or other environmental events, adverse operating conditions (including aging transportation infrastructure, railroad capacity constraints, changes to rail or ocean freight systems), swings in demand for our products, increased shipping demand for other products, adverse economic conditions, a change in our export, sales or marketing company relationships, or otherwise. This could result in delays and increased costs, lost revenue and reputational damage with our customers.

Adverse weather conditions may decrease demand for our products or delay grower purchases

Our business and our customers are also impacted by weather patterns and conditions. Adverse conditions that can delay or intermittently disrupt fieldwork during the planting and growing seasons may cause agricultural customers to use different forms of crop nutrients and crop protection products, which may adversely affect demand for the forms that we sell or may impede farmers from applying our crop nutrients and crop protection products until the following growing season, or in some cases not at all, resulting in lower demand for our products and reduced revenues. In addition, we face the significant risk and cost of continuing to carry inventory should our customers' activities be curtailed during their normal seasons. We must manufacture and distribute product throughout the year in order to meet peak season demand, as well as react quickly to unexpected changes in weather patterns that affect demand. Weather can also have an adverse effect on crop yields, which could lower the income of growers and impair their ability to purchase our crop nutrients, crop protection and seed products and services. As a result, our quarterly financial results may vary significantly from one year to the next due to weather-related shifts in planting schedules and purchasing patterns, and losses due to adverse weather conditions in one quarter may not be recovered in the following season.

We may be unable to access capital on a cost-effective or timely basis

We rely on access to debt capital markets to finance our day-to-day and long-term operations. Access to and cost of capital may be affected by factors not specific to our company, such as adverse conditions in the credit markets, general and industry-specific market and economic conditions and interest rate fluctuations. Our access to capital will also be dependent on our credit ratings, which are determined by, among other things, the level and quality of our earnings, our ability to generate cash flows and restrictions on our ability to repatriate cash offshore. A credit rating downgrade could potentially limit our access to private and public credit markets and increase the costs of borrowing under our existing credit facilities. A downgrade could also limit our access to short-term debt markets and increase the cost of borrowing in the short-term and long-term debt markets. Inability to access capital on a cost-effective or timely basis may result in a loss of liquidity, an increase in the cost of capital or inability to execute on value-added transactions requiring significant capital.

Our operations are exposed to counterparty risk

We are exposed to the risks associated with counterparty performance, including credit risk and performance risk. We may experience material financial losses in the event of customer payment default for our products and/or financial derivative transactions.

We are subject to legal proceedings, the outcome of which may affect our business

We are, and may in the future be, involved in legal and regulatory proceedings, including matters arising from our activities or activities of predecessor companies. The outcome of these matters may be difficult to assess or quantify, and such matters may not be resolved in our favor. Such matters could result in unfavorable outcomes, including fines, sanctions and monetary damages against us or our directors, officers or employees. The defense of such matters may also be costly and time consuming, and could divert the attention of management and key personnel from our operations. We may also be subject to adverse publicity associated with such matters, regardless of whether such allegations are valid or whether we are ultimately found liable.

Our insurance coverage may not adequately cover our losses

We maintain property, business interruption, casualty and liability insurance policies, but we are not fully insured against all potential hazards and risks pertaining to our business. As a result, we may incur significant liability for which we are not fully insured. We are subject to various self-retentions, deductibles and limits under these insurance policies. The policies also contain exclusions and conditions that could have a material adverse impact on our ability to receive indemnification thereunder. Our policies are generally renewed annually. As a result of market conditions, our premiums, self-retentions and deductibles for certain insurance policies can increase substantially and, in some instances, certain insurance may become unavailable or available only for reduced amounts of coverage. In addition, significantly increased costs could lead us to decide to reduce, or possibly eliminate, coverage for certain hazards and risks.

We may be subject to labor disruptions or disputes

A significant portion of our workforce is unionized or otherwise governed by collective bargaining or similar agreements. We are therefore subject to the possibility of organized labor disruptions. Adverse labor relations or contract negotiations that do not result in an agreement could result in strikes, slowdowns or impose additional costs to resolve these disputes. These disruptions may negatively impact our ability to produce or sell our products. These disruptions may also impact our ability to recruit and retain personnel and could negatively affect our financial performance.

Our reported mineral reserves and mineral resources are only estimates

Our reported mineral reserves and mineral resources are only estimates. The estimated mineral reserves and mineral resources may not be recovered or may not be recovered at the rates estimated. Mineral reserves and mineral resources estimates are based on limited sampling, and, consequently, are uncertain because the samples may not be representative of the actual resources. Mineral reserves and mineral resources estimates may require revision (either up or down) based on actual production experience. Further, market fluctuations in the price of potash, as well as increased production costs or reduced recovery rates, may render certain mineral reserves and mineral resources uneconomic and may ultimately result in a restatement of estimated resources and/or reserves.

5.3 MINERAL PROJECTS

See “Schedule B – Mineral Projects” for information regarding our Allan, Cory, Lanigan, Rocanville and Vanscoy Potash operations.

ITEM 6 – DIVIDENDS

The declaration, amount and payment date of any dividend by Nutrien is at the discretion of the Board and will depend on numerous factors, including compliance with applicable laws and the financial performance, debt obligations, working capital requirements and future capital requirements of Nutrien and its subsidiaries. See “Item 5 – Description of the Business – 5.2 Risk Factors”.

In 2018, Nutrien declared a cash dividend of $0.40 per Common Share in the first, second and third quarters, and two cash dividends of $0.43 per Common Share were declared in the fourth quarter, for a total of $2.06 per Common Share for the year. The first cash dividend of $0.43 per Common Share declared in the fourth quarter was payable on January 17, 2019 to shareholders of record December 31, 2018, and the second cash dividend of $0.43 per Common Share is payable on April 18, 2019 to shareholders of record on March 29, 2019.

In 2017, PotashCorp declared aggregate cash dividends of $0.40 per PotashCorp Share and Agrium declared aggregate cash dividends of $3.50 per Agrium Share.

In 2016, PotashCorp declared aggregate cash dividends of $0.70 per PotashCorp Share and Agrium declared aggregate cash dividends of $3.50 per Agrium Share.

ITEM 7 – DESCRIPTION OF CAPITAL STRUCTURE

7.1 GENERAL DESCRIPTION OF CAPITAL STRUCTURE

Authorized Capital

The authorized share capital of Nutrien consists of an unlimited number of Common Shares and an unlimited number of preferred shares issuable in series.

As of the date hereof, 602,630,027 Common Shares were issued and outstanding and no preferred shares were outstanding. The following is a general description of the material rights, privileges, restrictions and conditions attached to the Common Shares and the preferred shares.

Common Shares

Each Common Share entitles the holder to: (i) vote at all meetings of holders of Common Shares (except meetings at which only holders of a specified class or series of shares of Nutrien are entitled to vote as provided in the CBCA) and to one vote for each Common Share held on all polls taken at such meetings; (ii) receive, subject to the rights of the holders of another class of shares of Nutrien, any dividend declared by the Board from time to time, in their absolute discretion, in accordance with applicable law; and (iii) receive, subject to the rights of holders of another class or series of shares of Nutrien, the remaining property of Nutrien on the liquidation, dissolution or winding up of Nutrien or any other distribution of the assets of Nutrien for the purposes of winding

up its affairs, whether voluntary or involuntary. There are no preemptive or conversion rights attaching to the Common Shares and the Common Shares are not subject to redemption. All Common Shares currently outstanding and to be outstanding upon exercise of outstanding options and other securities, as applicable, are, or will be, fully paid and non-assessable.

Our by-laws provide for certain rights of holders of our Common Shares in accordance with the provisions of the CBCA. Such by-laws may be amended either by a majority vote of the holders of Common Shares or by a majority vote of the Board. Any amendment of the by-laws by action of the Board must be submitted to the next meeting of our shareholders whereupon the by-law amendment must be confirmed, confirmed as amended or rejected by a majority vote of the shareholders voting on such matter. The Common Shares are not redeemable or convertible.

Preferred Shares

The preferred shares may at any time and from time to time be issued in one or more series with the designation, rights, privileges, restrictions and conditions attaching to each series of the preferred shares to be determined by the Board.

The preferred shares of each series rank on a parity with the preferred shares of every other series, and are entitled to preference over the Common Shares and any other shares of the Company ranking junior to the preferred shares, with respect to (i) the payment of dividends; (ii) the distribution of property in the event of the liquidation, dissolution or winding-up of Nutrien; and (iii) such other preferences as may be determined by the Board.

Except as specifically provided in the rights, privileges, restrictions and conditions attaching to any series of preferred shares and except as provided by the CBCA, the holders of preferred shares are not entitled to receive notice of or attend any meeting of the shareholders of the Company or to vote at any such meeting for any purpose.

The provisions attaching to the preferred shares as a class may be added to, changed or removed, and the Board may create shares ranking prior to the preferred shares, only with the approval of the holders of the preferred shares as a class, any such approval to be given by the holders of not less than 66 2/3 percent of the preferred shares in writing by the registered holders of the preferred shares or by resolution at a meeting of such holders.

7.2 CONSTRAINTS

There are no constraints imposed on the ownership of Nutrien's securities to ensure that the Company has a required level of Canadian ownership.

7.3 DEBT RATINGS

The following information relating to Nutrien's credit ratings is provided as it relates to Nutrien's financing costs, liquidity and operations and to satisfy disclosure requirements under applicable Canadian securities rules. Our ability to access reasonably priced debt in the capital markets is dependent, in part, on the quality of our credit ratings. We continue to maintain investment-grade credit ratings for our long-term debt. A downgrade of the credit rating of our long-term debt could increase the interest rates applicable to borrowings under our credit facilities.

Commercial paper markets are normally a source of same-day cash for the Company. Our access to the US commercial paper market primarily depends on maintaining our current short-term credit ratings as well as general conditions in the money markets.

A credit rating is not a recommendation to buy, sell or hold securities. Such ratings may be subject to revision or withdrawal at any time by the respective credit rating agency and each rating should be evaluated independently of any other rating.

The following table sets out ratings the Company has received in respect of its outstanding debt securities from the ratings agencies as at the date of this AIF. The Company has paid each of Standard & Poor's Rating Services

("S&P") and Moody's Investors Service ("Moody's") their customary fees in connection with the provision of the below ratings. The Company has not made any payments to S&P or Moody's in the past two years for services unrelated to the provision of such ratings.

	S&P Rating	Moody's Rating
Nutrien Notes	BBB	Baa2
US$ Commercial Paper	A-2	P-2
Ratings Outlook	Stable	Stable

S&P

On March 7, 2018, S&P assigned a BBB long-term corporate credit rating on Nutrien. The BBB rating assigned by S&P is the fourth highest rating of S&P's eleven rating categories for long-term debt which range from AAA to D. Issues of debt securities rated BBB are judged by S&P to exhibit adequate protection parameters. However, adverse economic conditions or changing circumstances are more likely to lead to a weakened capacity of the obligor to meet its financial commitment on the obligation. The ratings from AA to CCC may be modified by the addition of a plus (+) or minus (-) sign to show relative standing within the major rating categories.

On April 4, 2018, S&P assigned an A-2 global short-term rating to Nutrien and A-2 commercial paper rating to the Company's US$4.5 billion commercial paper program. The A-2 rating assigned by S&P is the second highest rating of S&P's rating categories for short-term debt which range from A-1 to D. Short-term debt rated A-2 means the obligor has satisfactory capacity to meet its financial commitments. However, it is somewhat more susceptible to the adverse effects of changes in circumstances and economic conditions than obligors in the highest rating category.

S&P's stable outlook on Nutrien's credit ratings means that the ratings are not likely to change.

Moody's

On February 8, 2018, Moody's assigned a Baa2 issuer rating to Nutrien. The Baa2 rating assigned by Moody's is the fourth highest rating of Moody's nine rating categories for long-term debt, which range from Aaa to C. Moody's appends numerical modifiers from one to three on its long-term debt ratings from Aa to Caa to indicate where the obligation ranks within a particular ranking category, with the two modifier indicating a mid-range ranking. Obligations rated Baa are defined by Moody's as being subject to moderate credit risk. They are considered medium-grade and as such may possess certain speculative characteristics. On April 5, 2018, Moody's also affirmed Nutrien's issuer rating at Baa2.

On April 5, 2018, Moody's also assigned a P-2 commercial paper rating to Nutrien. The P-2 rating assigned by Moody's is the second highest rating of Moody's four rating categories for short-term debt, which range from P-1 to NP. Issuers rated P-2 are defined by Moody's as having a strong ability to repay short-term debt obligations.

Moody's stable outlook on Nutrien's credit ratings indicates a low likelihood of a rating change over the medium term.

ITEM 8 – MARKET FOR SECURITIES

8.1 TRADING PRICE AND VOLUME

During 2018, the Company's common shares traded on the Toronto Stock Exchange ("TSX") and the New York Stock Exchange ("NYSE") under the symbol "NTR".

The following table sets out the high, low and closing prices and trading volume of the common shares on the TSX for 2018 on a monthly basis:

Month (2018)	High Price (CA$)	Low Price (CA$)	Closing Price (CA$)	Volume
January	$ 70.05	$ 64.27	$ 64.35	19,011,611
February	$ 64.99	$ 55.27	$ 63.05	22,111,836
March	$ 68.93	$ 59.13	$ 60.89	25,777,818
April	$ 61.15	$ 56.55	$ 58.45	14,507,687
May	$ 66.68	$ 57.86	$ 65.61	24,629,797
June	$ 73.43	$ 64.91	$ 71.52	27,769,955
July	$ 71.99	$ 68.11	$ 70.65	13,922,334
August	$ 76.12	$ 69.91	$ 73.34	19,940,217
September	$ 76.17	$ 70.80	$ 74.58	20,233,188
October	$ 75.78	$ 66.01	$ 69.69	32,119,502
November	$ 75.78	$ 66.51	$ 68.44	29,136,676
December	$ 70.52	$ 59.97	$ 64.12	34,059,895

The following table sets out the high, low and closing prices and trading volume of the common shares on the NYSE for 2018 on a monthly basis:

Month (2018)	High Price (US$)	Low Price (US$)	Closing Price (US$)	Volume
January	$ 56.18	$ 51.51	$ 52.34	36,163,883
February	$ 52.24	$ 40.41	$ 49.25	47,402,780
March	$ 53.75	$ 45.77	$ 47.26	39,963,990
April	$ 48.43	$ 44.04	$ 45.53	23,189,066
May	$ 52.73	$ 44.94	$ 50.65	33,235,477
June	$ 55.18	$ 50.20	$ 54.38	43,225,420
July	$ 54.72	$ 51.50	$ 54.21	28,643,313
August	$ 58.70	$ 53.77	$ 56.63	36,315,582
September	$ 58.81	$ 53.81	$ 57.70	33,870,094
October	$ 58.99	$ 50.49	$ 52.93	40,059,250
November	$ 57.97	$ 49.85	$ 51.56	32,109,287
December	$ 52.92	$ 43.96	$ 47.00	38,361,313

8.2 PRIOR SALES

During the year ended December 31, 2018, Nutrien issued Common Shares pursuant to the exercise and settlement of outstanding share-based compensation award plans of PotashCorp and Agrium assumed in connection with the Merger. In addition, during the year ended December 31, 2018, Nutrien granted stock options under its stock option plan. See note 29 of the 2018 Financial Statements for additional information.

In addition, in the second quarter of 2018, substantially all of the outstanding senior notes of PotashCorp and debentures of Agrium (other than Agrium's debentures due 2027) were exchanged for Nutrien Notes having interest rates and maturities identical to those of the applicable exchanged series of PotashCorp senior notes and Agrium debentures. See note 23 of the 2018 Financial Statements for additional information.

ITEM 9 – ESCROWED SECURITIES AND SECURITIES SUBJECT TO CONTRACTUAL RESTRICTION ON TRANSFER

To the knowledge of the Company, none of the securities of the Company are subject to escrow or contractual restriction on transfer.

ITEM 10 – DIRECTORS AND OFFICERS

10.1 NAME, OCCUPATION AND SECURITY HOLDING

Information is given below with respect to each of the current directors and executive officers, including names, municipality and country of residence, all current positions held with the Company, present principal occupation and principal occupations held during the last five years. The current directors will hold office until the earlier of their resignation and our next annual meeting of shareholders at which directors are elected or until such directors cease to hold office pursuant to the provisions of the CBCA.

Directors (Name and Municipality of Residence)	**Director Since**	**Present principal occupation or employment**	**Prior principal occupation or employment within the preceding five years**
Derek G. Pannell [(1)(2)] Saint John, New Brunswick, Canada	2018 (Agrium from 2008 – 2017)	Corporate Director Board Chair of Nutrien	Corporate Director Board Chair of Agrium
Charles (Chuck) V. Magro Heritage Pointe, Alberta, Canada	2018 (Agrium from 2013 – 2017)	President & Chief Executive Officer of Nutrien	President & Chief Executive Officer of Agrium
Christopher M. Burley [(1)(3)] Calgary, Alberta, Canada	2018 (PotashCorp from 2009 – 2017)	Corporate Director	Corporate Director
Maura J. Clark [(1)(2)] New York, New York, US	2018 (Agrium from 2016 – 2017)	Corporate Director	President of Direct Energy Business, a subsidiary of Centrica plc, a North American energy and energy-related services provider
John W. Estey [(2)(4)] Glenview, Illinois, US	2018 (PotashCorp from 2003 – 2017)	Corporate Director	Current Chairman and former President & CEO of S&C Electric Company, a global provider of equipment and services for electric power systems Board Chair of PotashCorp
David C. Everitt [(1)(2)] Marco Island, Florida, US	2018 (Agrium from 2013 – 2017)	Corporate Director	Current Board Chair and former Interim President & CEO of Harsco Corporation, a global industrial company
Russell K. Girling [(1)(3)] Calgary, Alberta, Canada	2018 (Agrium from 2006 – 2017)	President & Chief Executive Officer and Director of TransCanada Corporation, a diversified energy and pipeline company	Same as present
Gerald W. Grandey [(2)(4)] Saskatoon, Saskatchewan, Canada	2018 (PotashCorp from 2011 – 2017)	Corporate Director	Corporate Director
Miranda C. Hubbs [(3)(4)] Toronto, Ontario, Canada	2018 (Agrium from 2016 – 2017)	Corporate Director	Corporate Director

Directors (Name and Municipality of Residence)	Director Since	Present principal occupation or employment	Prior principal occupation or employment within the preceding five years
Alice D. Laberge (1)(3) Vancouver, British Columbia, Canada	2018 (PotashCorp from 2003 – 2017)	Corporate Director	Corporate Director
Consuelo E. Madere (3)(4) Destin, Florida, US	2018 (PotashCorp from 2014 – 2017)	President and Founder of Proven Leader Advisory, LLC, a management consulting and executive coaching firm	Same as present
Keith G. Martell (1)(2) Eagle Ridge, Saskatchewan, Canada	2018 (PotashCorp from 2007 – 2017)	President & Chief Executive Officer and Director of First Nations Bank of Canada, a Canadian charted bank independently controlled by Aboriginal shareholders	Same as present
A. Anne McLellan (2)(4) Edmonton, Alberta, Canada	2018 (Agrium from 2006 – 2017)	Senior advisor at Bennett Jones LLP	Corporate Director
Aaron W. Regent (1)(2) Toronto, Ontario, Canada	2018 (PotashCorp from 2015 – 2017)	Founding Partner and Managing Partner of Magris Resources Inc., a private equity investment firm specializing in the mining sector Chairman and Chief Executive Officer of Niobec Inc., a company that owns and operates the Niobec mine which comprises niobium deposit	Same as present
Mayo M. Schmidt (3)(4) Las Vegas, Nevada, US	2018 (Agrium from 2013 – 2017)	Corporate Director	President & Chief Executive Officer and Director of Hydro One Inc., an electricity transmission and distribution company

(1) Member of the Audit Committee of the Board.

(2) Member of the Human Resources & Compensation Committee of the Board.

(3) Member of the Corporate Governance & Nominating Committee of the Board.

(4) Member of the Safety, Health, Environment & Security Committee of the Board.

Executive Officers (Name and Municipality of Residence)	Present position with the Company and Principal Occupation	Prior principal occupation or employment within the preceding five years
Charles (Chuck) V. Magro Heritage Pointe, Alberta, Canada	President & Chief Executive Officer of Nutrien	President & Chief Executive Officer, Agrium
Pedro Farah (1) Calgary, Alberta, Canada	Executive Vice President & Chief Financial Officer of Nutrien	Executive Vice President and Treasurer, Walmart; Executive Vice President and Chief Financial Officer, Walmex (Walmart Mexico)
Fred Thun (1) Calgary, Alberta, Canada	Senior Vice President, Finance	Interim Chief Financial Officer of Nutrien; Vice President Finance & Accounting of Nutrien; Vice President, Finance, Agrium; Vice President & Corporate Controller, Agrium
Steve J. Douglas (2) De Winton, Alberta, Canada	Executive Vice President & Chief Integration Officer of Nutrien	Senior Vice President & Chief Financial Officer, Agrium
Michael J. Frank Timnath, Colorado, US	Executive Vice President & Chief Executive Officer of Retail Nutrien	Executive Vice President and President, Retail, Agrium; Senior Vice President & Chief Commercial Officer, Monsanto Company, an agrochemical and agricultural biotechnology company
Susan C. Jones Saskatoon, Saskatchewan, Canada	Executive Vice President & Chief Executive Officer of Potash Nutrien	Senior Vice President & Chief Legal Officer, Agrium; Former Vice President, Marketing & Distribution, Agrium
Leslie A. O'Donoghue Calgary, Alberta, Canada	Executive Vice President, Chief Strategy & Corporate Development Officer of Nutrien	Executive Vice President, Corporate Development & Strategy & Chief Risk Officer, Agrium
Joseph Podwika Timnath, Colorado, US	Executive Vice President & Chief Legal Officer of Nutrien	Senior Vice President, General Counsel and Secretary, PotashCorp
Brent Poohkay Canmore, Alberta, Canada	Executive Vice President & Chief Information Officer of Nutrien	Senior Vice President, Information Technology, Former PotashCorp; Vice President, Chief Information Officer and Chief Privacy Officer, Enbridge Inc., a multinational energy transportation company
Raef Sully Glenview, Illinois, US	Executive Vice President & Chief Executive Officer of Phosphate & Nitrogen Nutrien	President, Nitrogen and Phosphate, PotashCorp; Vice President, Project Management and Capital, PotashCorp
Michael R. Webb Calgary, Alberta, Canada	Executive Vice President & Chief Human Resources and Administrative Officer of Nutrien	Senior Vice President, Human Resources, Agrium; Senior Vice President, Head of Human Resources, HSBC Bank Canada, a Canadian international bank

(1) Mr. Farah was appointed as the Executive Vice President & Chief Financial Officer of Nutrien effective February 1, 2019. Prior thereto, Mr. Thun served as the Interim Chief Financial Officer of Nutrien from November 6, 2018 to January 31, 2019.

(2) Mr. Douglas' employment with Nutrien as the Executive Vice President & Chief Integration Officer ended effective January 31, 2019.

As at the date hereof, the directors and executive officers of the Company as a group beneficially own, or control or direct, directly or indirectly, Common Shares representing less than 1 percent of the outstanding Common Shares.

10.2 CEASE TRADE ORDERS, BANKRUPTCIES, PENALTIES OR SANCTIONS

Except as set out below, no director or executive officer of the Company was, as at the date hereof, or has been within the ten years prior to the date hereof, a director, chief executive officer or chief financial officer of any company (including the Company), that:

- was subject to an order that was issued while the director or executive officer was acting in the capacity as director, chief executive officer or chief financial officer; or
- was subject to an order that was issued after the director or executive officer ceased to be a director, chief executive officer or chief financial officer and which resulted from an event that occurred while that person was acting in the capacity as director, chief executive officer or chief financial officer.

For the purposes of the above, "order" means any of the following that was in effect for a period of more than 30 consecutive days:

- a cease trade order;
- an order similar to a cease trade order; or
- an order that denied the relevant company access to an exemption under securities legislation.

Except as set out below, no director or executive officer of the Company, or a shareholder holding a sufficient number of securities of the Company to affect materially the control of the Company:

- was, as at the date hereof, or has been within the ten years prior to the date hereof, a director or executive officer of any company (including the Company) that, while that person was acting in that capacity, or within a year of that person ceasing to act in that capacity, became bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency or was subject to or instituted any proceedings, arrangement or compromise with creditors or had a receiver manager or trustee appointed to hold its assets; or
- has, within the ten years before the date hereof, become bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency, or become subject to or instituted any proceedings, arrangement or compromise with creditors, or had a receiver, receiver manager or trustee appointed to hold the assets of the director, executive officer or shareholder.

Mr. Burley was a director of Parallel Energy Inc., administrator of Parallel Energy Trust ("Parallel Energy"). On or about November 9, 2015, Parallel Energy and its affiliates filed applications for protection under the *Companies' Creditors Arrangement Act* (Canada) and voluntary petitions for relief under Chapter 11 of the *United States Bankruptcy Code*. Mr. Burley resigned from the board of directors of Parallel Energy Inc. on March 1, 2016. The Canadian entities of Parallel Energy each filed an assignment in bankruptcy under the *Bankruptcy and Insolvency Act* (Canada) on March 3, 2016. In 2015, securities regulators for the Provinces of Alberta, British Columbia, Manitoba, Ontario, Quebec, Saskatchewan and New Brunswick issued cease trade orders in relation to the securities of Parallel Energy for the failure by Parallel Energy to timely file financial statements as well as related continuous disclosure documents. Such cease trade orders continue to be in effect. The TSX delisted the trust units and debentures of Parallel Energy at the close of business on December 11, 2015.

In May 2004, Saskatchewan Wheat Pool Inc. ("SWP"), the predecessor of Viterra, disposed of its hog operations, which had been carried on through certain of its subsidiaries, through a court-supervised process under the *Companies' Creditors Arrangement Act* (Canada). On April 12, 2005, the Saskatchewan Financial Services Commission issued a cease trade order against four of these subsidiaries of SWP for failing to file the required annual continuous disclosure documents. The cease trade order was revoked on October 18, 2010 pursuant to Viterra's application to effect a reorganization of the entities in question. Mr. Schmidt served as an officer and/or director of these entities.

10.3 CONFLICTS OF INTEREST

To the knowledge of the Company, no director or officer of the Company has an existing or potential material conflict of interest with the Company or any of its subsidiaries, joint ventures or partnerships.

ITEM 11 – PROMOTERS

During the two most recently completed financial years, no person or company has been a promoter of the Company.

ITEM 12 – LEGAL PROCEEDINGS AND REGULATORY ACTIONS

The information under "Legal and Other Matters" of note 31 to the 2018 Financial Statements is incorporated by reference herein. For further discussion of certain environmental proceedings in which we are involved, see "Environmental Matters" above.

In the normal course of business, we are also, and expect to continue to be, subject to various other legal proceedings being brought against us. While it is not possible to determine the ultimate outcome of such actions at this time, and inherent uncertainties exist in predicting such outcomes, it is the Company's belief that the ultimate resolution of any such known actions is not reasonably likely to have a material adverse effect on its consolidated financial statements.

ITEM 13 – INTEREST OF MANAGEMENT AND OTHERS IN MATERIAL TRANSACTIONS

To the knowledge of the Company, as of the date hereof, there were no directors or executive officers of the Company or any associate or affiliate of a director or executive officer of the Company with any material interest, direct or indirect, in any transaction within the three most recently completed financial years or during the current financial year that has materially affected or is reasonably expected to materially affect the Company.

ITEM 14 – TRANSFER AGENT, REGISTRAR AND TRUSTEES

During the year ended December 31, 2018, the registrar and transfer agent for the Common Shares was AST Trust Company (Canada), at its principal offices in Saskatoon, Saskatchewan; Calgary, Alberta and Toronto, Ontario.

The trustee for the Nutrien Notes is the Bank of New York Mellon at its principal offices in New York, New York.

ITEM 15 – MATERIAL CONTRACTS

To the knowledge of the Company, no material contracts require disclosure under this Item.

ITEM 16 – INTERESTS OF EXPERTS

16.1 NAMES OF EXPERTS

The Company's 2018 Financial Statements have been audited by KPMG LLP. The consolidated financial statements of the Company as at December 31, 2017 and for the period from the date of incorporation (June 2, 2017) to December 31, 2017 have been jointly audited by KPMG LLP and Deloitte LLP.

The PotashCorp 2017 Financial Statements have been audited by Deloitte LLP.

The Agrium 2017 Financial Statements have been audited by KPMG LLP.

Craig Funk, B.Sc., M.Sc., P.Eng., P.Geo., an employee of the Company, prepared the Allan Technical Report, the Cory Technical Report, the Lanigan Technical Report and the Rocanville Technical Report (each, as defined herein). Mr. Funk is a qualified person under NI 43-101 and has reviewed and approved the scientific and technical information in this AIF relating to the Company's Allan, Cory, Lanigan and Rocanville potash operations.

A. Dave Mackintosh, P.Geo., of ADM Consulting Limited, and Michael Ryan Bartsch, P.Eng. and Dennis William Aldo Grimm, P.Eng., both employees of the Company as of the date of the Vanscoy Technical Report (as defined herein), each prepared certain sections of the Vanscoy Technical Report in accordance with NI 43-101 on behalf of the Company. Mr. Mackintosh, of ADM Consulting Limited, Messrs. Bartsch and Grimm are qualified persons under NI 43-101 and have reviewed and approved the scientific and technical information within this AIF relating to the Company's Vanscoy potash operations.

16.2 INTERESTS OF EXPERTS

As of February 20, 2019, KPMG LLP, the auditors of the Company, have confirmed that they are independent with respect to the Company (and its associates or affiliates) within the meaning of the relevant rules and related interpretations prescribed by the relevant professional bodies in Canada and any applicable legislation or regulations. KPMG LLP are independent accountants with respect to the Company under all relevant US professional and regulatory standards.

Deloitte LLP, the former auditors of the Company and PotashCorp, have confirmed that they were, with respect to the Company, throughout the period from the date of incorporation of the Company (June 2, 2017) to December 31, 2017 and as of February 20, 2018, and, with respect to PotashCorp, throughout the period covered by the PotashCorp 2017 Financial Statements and as of February 20, 2018, independent with respect to the Company and PotashCorp (and their associates or affiliates) within the meaning of the United States *Securities Act of 1933*, as amended, and the applicable rules and regulations thereunder adopted by the US Securities and Exchange Commission and the Public Company Accounting Oversight Board (United States) and within the meaning of the rules of professional conduct of the Chartered Professional Accountants of Saskatchewan.

Craig Funk is an employee of the Company and holds beneficially, directly or indirectly, less than one percent of any class of the securities of the Company or of any of the Company's associates or affiliates.

A. Dave Mackintosh, P.Geo., ADM Consulting Limited and the partners, employees and consultants of ADM Consulting Limited, did not hold any registered or beneficial interests, directly or indirectly, in the securities of the Company or its associates or affiliates.

Dennis William Aldo Grimm, P.Eng., is a retired employee of the Company and holds beneficially, directly or indirectly, less than one percent of any class of the Company's securities.

Michael Ryan Bartsch, P.Eng., is an employee of the Company and holds beneficially, directly or indirectly, less than one percent of any class of the Company's securities.

ITEM 17 – AUDIT COMMITTEE

17.1 AUDIT COMMITTEE CHARTER

Attached, as Schedule A, is the charter for the Company's Audit Committee.

17.2 COMPOSITION OF THE AUDIT COMMITTEE

Members of the Audit Committee are Christopher M. Burley, Maura J. Clark, David C. Everitt, Russell K. Girling, Alice D. Laberge, Keith G. Martell, Derek G. Pannell and Aaron W. Regent. Each member of the Audit Committee is independent and financially literate.

17.3 RELEVANT EDUCATION AND EXPERIENCE OF MEMBERS OF THE AUDIT COMMITTEE

Name (Director Since)	Principal Occupation and Full Biography
Ms. Maura J. Clark (2018) (Audit Committee Chair) B.A. (Economics), CPA, CA New York, New York, US **Other Public Directorships** • Fortis Inc., a North American electric and gas utility holding company, (TSX) • Garrett Motion Inc., a turbocharger and electric-boosting technology manufacturer, (NYSE)	Ms. Clark is a Corporate Director and the former President of Direct Energy Business, a subsidiary of Centrica plc, a North American energy and energy-related services provider from 2007 to 2014. Previously, Ms. Clark was Executive Vice President of North American Strategy and Mergers and Acquisitions for Direct Energy. She also served as a managing director at Goldman Sachs & Co., an investment-banking firm, and as Executive Vice President, Corporate Development and Chief Financial Officer of Premcor, Inc. (formerly known as Clark Refining & Marketing, Inc.), a petroleum refiner and marketer. Ms. Clark holds a Bachelor of Arts degree from Queen's University and a Chartered Professional Accountant designation.
Mr. Christopher Burley (2018) B.Sc., M.B.A. Calgary, Alberta, Canada **Other Public Directorships** • WestJet Airlines Ltd., a Canadian airline, (TSX)	Mr. Burley is a Corporate Director and former Managing Director and Vice Chairman of Energy for Merrill Lynch Canada Inc., an investment banking firm. He has over two decades of experience in the investment banking industry. He is the Vice Chairman and a director of WestJet Airlines Ltd. and a former non-executive Chairman of the board of directors of Parallel Energy Inc. Mr. Burley is a graduate of the Institute of Corporate Directors' Education Program and holds the ICD.D designation.
Mr. David C. Everitt (2018) B.Sc. (Engineering) Marco Island, Florida, US **Other Public Directorships** • Harsco Corporation, a worldwide industrial company, (NYSE) • Brunswick Corporation, a worldwide manufacturing company, (NYSE) • Allison Transmission Holdings, Inc., a worldwide manufacturing company, (NYSE)	Mr. Everitt is a Corporate Director and the Chair of the Board and former Interim Chief Executive Officer of Harsco Corporation, a worldwide industrial company. Since joining Deere & Company, an agricultural equipment manufacturer, in 1975, Mr. Everitt held a variety of management positions, including former Co-Leader of the Agriculture and Turf Division of Deere & Company, President – North America, Asia, Australia, and Sub-Saharan and South Africa, and Global Tractor and Turf Products (from 2009 until his retirement in 2012) and as President of Deere's Agricultural Division – North America, Australia, Asia and Global Tractor and Implement Sourcing. During that time, he led significant growth in overseas markets as well as streamlined the North American and European distribution footprint. Mr. Everitt also serves on the Board of the National Business Aviation Association located in Washington, D.C. and the board of directors of the Kansas State University Foundation.

Name (Director Since)	Principal Occupation and Full Biography
Mr. Russell K. Girling (2018) B. Comm., M.B.A. (Finance) Calgary, Alberta, Canada **Other Public Directorships** • TransCanada Corporation, a diversified energy and pipeline company, (TSX, NYSE)	Mr. Girling has been the President and Chief Executive Officer of TransCanada and TransCanada PipeLines Limited since July 1, 2010. Prior to his appointment, he served as Chief Operating Officer from July 17, 2009 to June 30, 2010 and President, Pipelines from June 1, 2006 until June 30, 2010. Previously, Mr. Girling served as Chief Financial Officer and Executive Vice-President, Corporate Development of TransCanada until May 31, 2006, and as Executive Vice-President, Power from 1995 until his appointment as Chief Financial Officer in 1999. Mr. Girling has held various other leadership positions since joining TransCanada in 1994. Prior to his employment with TransCanada, he held several marketing and management positions at Suncor Inc., Northridge Petroleum Marketing and Dome Petroleum. Mr. Girling is a member of the Canadian Council of Chief Executives, US National Petroleum Council, the US Business Roundtable and a member of the board of directors of the American Petroleum Institute and the Business Council of Canada. Mr. Girling also holds the ICD.D designation.
Ms. Alice D. Laberge (2018) B.Sc., M.B.A. Vancouver, British Columbia **Other Public Directorships** • Royal Bank of Canada, a global financial services provider, (TSX, NYSE) • Russell Metals Inc., a North American metal distribution company, (TSX)	Ms. Laberge is a Corporate Director and the former President and Chief Executive Officer of Fincentric Corporation, a global provider of software solutions to financial institutions. She was previously Senior Vice President and Chief Financial Officer of MacMillan Bloedel Ltd. She is a director of the Royal Bank of Canada, Russel Metals Inc, the Canadian Public Accountability Board and the B.C. Cancer Foundation and has served as a director of SilverBirch Holdings Inc., Delta Hotels Ltd. and Catalyst Paper Corporation. She was recognized as a Fellow of the Institute of Corporate Directors in 2015.
Mr. Keith G. Martell (2018) B. Comm, CPA, CA Eagle Ridge, Saskatchewan, Canada **Other Public Directorships** • None	Mr. Martell is President & Chief Executive Officer and a director of First Nations Bank of Canada, a Canadian chartered bank primarily focused on providing financial services to the First Nations marketplace. He is a Chartered Professional Accountant, formerly with KPMG LLP. He is a director of River Cree Enterprises Ltd., is a trustee of the National Indian Brotherhood Trust, serves on the Dean's Advisory Council of the University of Saskatchewan's Edwards School of Business and is a trustee of Primrose Lake Trust. Mr. Martell is a former director of the Canadian Chamber of Commerce, Public Sector Pension Investment Board of Canada and The North West Company Inc., and a former trustee of the North West Company Fund.

Name (Director Since)	Principal Occupation and Full Biography
Mr. Derek G. Pannell (2018) B.Sc. (Engineering) Saint John, New Brunswick, Canada **Other Public Directorships** • Brookfield Infrastructure Partners Limited, the general partner of Brookfield Infrastructure Partners L.P., an infrastructure asset operating company, (TSX, NYSE)	Mr. Pannell is a Corporate Director and the Board Chair of Brookfield Infrastructure Partners Limited (an asset management company). He was President, Chief Executive Officer and Director of Noranda Inc. and Falconbridge Limited from 2001 to 2006 and Vice President, Operations of Compania Minera Antamina from 1998 to 2001. Mr. Pannell is a graduate of Imperial College in London, England and the Royal School of Mines, London, England ("ARSM") and an engineer registered in Québec and Peru. He also serves as a Commissioner on the Board of Commissioners of Saint John Energy in Saint John, New Brunswick.
Mr. Aaron W. Regent (2018) B.A., FCPA, FCA Toronto, Ontario, Canada **Other Public Directorships** • The Bank of Nova Scotia, a global financial services provider, (TSX, NYSE)	Mr. Regent serves on the board of and is a former member of the audit committee of The Bank of Nova Scotia, and is also the Founding Partner of Magris Resources Inc. and Chairman and Chief Executive Officer of Niobec Inc. Mr. Regent has acquired significant financial experience during his time as President and Chief Executive Officer of Barrick Gold Corporation, Senior Managing Partner of Brookfield Asset Management and Co-Chief Executive Officer of the Brookfield Infrastructure Group, and as President and Chief Executive Officer of Falconbridge Limited. Mr. Regent is a member of the Chartered Professional Accountants of Ontario.

17.4 PRE-APPROVAL POLICIES AND PROCEDURES

Subject to applicable law, the Audit Committee is directly responsible for the compensation and oversight of the work of the independent auditors. The Audit Committee has implemented a Pre-Approval Policy for Audit and Non-Audit Services for the pre-approval of services performed by our auditors. The objective of the Policy is to specify the scope of services permitted to be performed by our auditors and to ensure that the independence of our auditors is not compromised through engaging them for other services. Our Audit Committee pre-approves all audit services and all permitted non-audit services provided by our external auditors and reviews on a quarterly basis whether these services affect our external auditors' independence. All services provided by our auditors in 2018 complied with the Pre-Approval Policy for Audit and Non-Audit Services, and professional standards and securities regulations governing auditor independence.

17.5 EXTERNAL AUDITOR SERVICE FEES (BY CATEGORY)

KPMG LLP and Deloitte LLP were appointed by the Board as external auditors of Nutrien in January 2018 in connection with the joint audit of the Company's consolidated financial statements for the period from the date of incorporation (June 2, 2017) to December 31, 2017. In July 2018, KPMG LLP was appointed by the Board as the sole external auditor of Nutrien and Deloitte LLP ceased to be an external auditor of the Company.

The following table sets out the fees billed to us by KPMG LLP and its affiliates for professional services rendered during the year ended December 31, 2018.

Category	Year Ended December 31, 2018
	US$
Audit Fees (1)	5,942,200
Audit-Related Fees (2)	325,900
Tax Fees (3)	362,400
Total	6,630,500

(1) For professional services rendered by KPMG LLP for the audit and review of the Company's financial statements or services that are normally provided by KPMG LLP in connection with statutory and regulatory filings or engagements.
(2) For professional services rendered by KPMG LLP for specified audit procedures regarding financial assurances issued to certain government agencies, and services which are reasonably related to the performance of the audit of the Company's financial statements and are not included in Audit Fees.
(3) For professional services rendered by KPMG LLP for tax compliance, tax advice and tax planning with respect to the Canadian, US and key international jurisdictions; review of tax filings; assistance with the preparation of tax filings; tax advice relating to asset dispositions; and other tax planning, compliance, and transaction services. These amounts include fees paid to KPMG LLP specifically for tax compliance and preparation services rendered in 2018 in the amount of $289,200.

The following table sets out the fees billed to us by Deloitte LLP and its affiliates for professional services rendered while serving as an external auditor of the Company during the year ended December 31, 2018.

Category	Year Ended December 31, 2018
	US$
Audit Fees (1)	958,200
Audit-Related Fees (2)	488,000
Tax Fees (3)	182,000
All Other Fees (4)	24,400
Total	1,652,600

(1) For professional services rendered by Deloitte LLP for the review of the Company's interim financial statements, the provision of consent letters and the provision of comfort letters.
(2) For professional services rendered by Deloitte LLP for employee benefit plan audits, audits of individual statutory financial statements, verification letters issued for certain of the Company's environmental liabilities, and specified procedure engagements.
(3) For professional services rendered by Deloitte LLP for general tax compliance and advice.
(4) For professional services rendered by Deloitte LLP for subscription-based services for human resource related literature.

ITEM 18 – ADDITIONAL INFORMATION

Additional financial information is provided in the 2018 Financial Statements and the 2018 MD&A. Further, additional information, including historical information concerning directors' and officers' remuneration and indebtedness, principal holders of the Company's securities, and securities authorized for issuance under equity compensation plans is contained in the Company's management proxy circular dated June 6, 2018 for the annual meeting of the Company's shareholders that took place on July 19, 2018.

Additional information related to Nutrien may be found on the Company's website at www.nutrien.com, on the Canadian Securities Administrators' website at www.sedar.com and on the EDGAR section of the US SEC's website at www.sec.gov.

SCHEDULE A

NUTRIEN LTD.

AUDIT COMMITTEE CHARTER

Introduction

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The Audit Committee (the "**Committee**") is established to assist the Board of Directors (the "**Board**") of Nutrien Ltd. (the "**Corporation**") in fulfilling its oversight responsibilities with respect to the accounting and financial reporting processes and the reviews and audits of the financial statements of the Corporation by monitoring: (i) the quality and integrity of the Corporation's financial statements and related disclosures; (ii) the Corporation's internal control systems, including internal control over financial reporting; (iii) specific elements of risk management (including all financial risk management) delegated to the Committee by the Board; (iv) the qualifications and independence of the external auditors of the Corporation and the recommendation of the Board to shareholders for the appointment thereof; (v) the performance of the Corporation's Internal Audit function and external auditors; and (vi) the Corporation's compliance with legal and regulatory requirements with respect to matters within the Committee's mandate and the Code of Ethics.

Management is responsible for preparing the consolidated financial statements of the Corporation and the external auditors are responsible for auditing those financial statements. Nothing in this Charter is intended, or may be construed, to impose on any member of the Committee a standard of care or diligence that is in any way more onerous or extensive than the standard to which all directors are subject under applicable laws or regulatory requirements.

In this Charter, "**Committee Chair**" means the Chair of the Committee; "**Chair**" means the Board Chair; and "**CEO**" means the Chief Executive Officer of the Corporation.

Composition

The members of the Committee shall be appointed by the Board, on the recommendation of the Corporate Governance & Nominating Committee. Any member of the Committee may be removed or replaced at any time by the Board and shall cease to be a member of the Committee on ceasing to be a director. Subject to the above, each member of the Committee shall serve as a member of the Committee until the next annual meeting of shareholders after his or her appointment.

The Committee shall consist of not less than three and not more than eight members. Each Committee member shall be independent according to the independence standards set out in the Corporate Governance Framework, including applicable independence requirements of stock exchanges on which the Corporation is listed and securities laws, rules and regulations.

Each member of the Committee shall be "financially literate", and at least one member of the Committee shall be designated as the "audit committee financial expert" and shall have "accounting or related financial management expertise", in each case, as such qualification is interpreted by the Board in its business judgment and as defined by applicable requirements of stock exchanges on which the Corporation is listed and securities laws, rules and regulations.

No member of the Committee shall serve on the audit committees of more than two other publicly listed companies, unless the Board determines that such simultaneous service would not impair the ability of such member to effectively serve on the Committee and discloses such determination in the Corporation's annual management proxy circular.

The Board may fill vacancies on the Committee from among its members, on the recommendation of the Corporate Governance & Nominating Committee. If and whenever a vacancy shall exist on the Committee, the remaining members may exercise all its powers so long as a quorum remains in place.

The members of the Committee shall be entitled to receive such remuneration for acting as members of the Committee as the Board may from time to time determine.

The Corporate Secretary or such other person acceptable to the members shall act as Secretary to the Committee.

Committee Chair

The Board, upon recommendation of the Corporate Governance & Nominating Committee, shall appoint a Committee Chair. The Committee Chair may be removed and replaced by the Board.

If the Committee Chair is not present at any meeting of the Committee, one of the other members of the Committee present at the meeting shall be chosen by the Committee to chair the meeting.

The Committee Chair shall have the duties and responsibilities set forth in **Annex 1** which is incorporated by reference herein.

Quorum

Fifty percent of the members of the Committee shall constitute a quorum. All determinations of the Committee shall be made by a majority of its members present at a meeting duly called and held.

Meetings

All Committee members are expected to attend, in person or via teleconference, video conference, or other electronic communications facilities that permits all participants to communicate adequately, all meetings of the Committee, to come prepared for the meeting, and to remain in attendance for the duration of the meeting. The powers of the Committee may be exercised by resolution in writing signed by all members of the Committee who would have been entitled to vote on that resolution at a meeting of the Committee.

The Committee may invite such directors, officers, employees and external advisors of the Corporation as it may see fit from time to time to attend meetings of the Committee and assist in the discussion and consideration of the duties of the Committee.

The time at which and place where the meetings of the Committee shall be held, and the calling of meetings and the procedure at such meetings, shall be determined by the Committee in accordance with the Corporation's articles, by-laws, and applicable laws.

The Committee shall meet at each regularly scheduled Committee meeting alone without Management present, and shall meet separately with applicable senior Management, the external auditors, and the Chief Audit Executive.

Responsibilities

The Committee, to the extent required by applicable laws or rules, or otherwise considered by the Committee to be necessary or appropriate, is responsible for the oversight in respect of the Corporation's financial disclosure and accounting practices, internal control systems (including internal control over financial reporting), specific elements of risk management (including all financial risk management) delegated to the Committee by the Board, the external auditors, the Internal Audit function, and legal and regulatory compliance with respect to matters within the Committee's mandate and the Code of Ethics.

To fulfill its duties and responsibilities, the Committee shall:

Financial Disclosure and Accounting

- meet with Management and the external auditors to review and discuss, and to recommend to the Board for approval prior to public disclosure, the annual audited financial statements and the specific disclosures in "Management's Discussion and Analysis of Financial Condition and Results of Operations" ("**MD&A**");

- meet with Management and the external auditors to review and discuss, and to approve prior to public disclosure, the unaudited quarterly financial statements, including the specific disclosures in the MD&A and quarterly interim reports (including annual guidance);
- review and discuss with Management and the external auditors prior to public disclosure each press release that contains significant financial information respecting the Corporation or contains estimates or information regarding the Corporation's future financial performance or prospects; and the type and presentation of information to be included in such press releases (in particular, the use of "pro forma" or "adjusted" information that is not in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board ("**IFRS**"));
- review and discuss with Management and the external auditors, and recommend to the Board for approval prior to public disclosure:
    - the portions of the Annual Information Form containing significant information within the Committee's mandate;
    - the portions of the Corporation's annual management proxy circular containing significant information within the Committee's mandate;
    - all financial statements included in prospectuses or other offering documents;
    - all prospectuses and all documents which may be incorporated by reference in a prospectus, other than any pricing supplement issued pursuant to a shelf prospectus; and
    - significant financial information, including "pro forma" or "adjusted" non-IFRS information respecting the Corporation contained in a publicly disclosed document (other than routine investor relations or similar communications);
- review and discuss with Management and the external auditors (including those of the following that are contained in any report of the external auditors): (1) any analyses prepared by Management and/or the external auditors setting forth significant financial reporting issues and judgments made in connection with the preparation of the financial statements, including analyses of the effects of alternative accounting principles in accordance with IFRS; (2) all critical accounting policies and practices to be used by the Corporation in preparing its financial statements; (3) all material alternative treatments of financial information within IFRS that have been discussed with Management, ramifications of the use of these alternative treatments, and the treatment preferred by the external auditors; and (4) other material communications between the external auditors and Management, such as any Management Representation Letter or Schedule of Unadjusted Differences;
- review and discuss with Management and the external auditors significant accounting and reporting issues and understand their impact on the financial statements, including complex or unusual transactions and areas involving significant assumptions; major issues regarding accounting principles and financial statement presentation, including any significant changes in the Corporation's selection or application of accounting principles, and the effect of regulatory and accounting initiatives, as well as off balance sheet structures, on the financial statements of the Corporation, any significant issues as to the adequacy of the Corporation's internal controls and any special audit steps adopted in light of significant control deficiencies;
- review and discuss with Management and the external auditors non-IFRS financial measures, as well as financial information and earnings guidance provided externally, including to analysts and rating agencies;
- review with Management and the external auditors the results of the annual audit, including any restrictions on the scope of the external auditors' activities or on access to requested information, and the resolution of any significant disagreements with Management;
- review Management's Internal Control Report and the related attestation by the external auditors of the Corporation's internal controls over financial reporting; and

- review with Management and the external auditors and, if necessary, legal counsel, any litigation, claim or contingency, including tax assessments, or material reports or inquiries from regulators or governmental agencies, that could have a material effect upon the financial position of the Corporation, and the manner in which these matters have been disclosed in the financial statements.

Internal Controls

- assess the effectiveness of the Corporation's internal control systems, including internal control over financial reporting and information technology strategy, risks and, in consultation with the Safety, Health, Environment + Security Committee, cyber security controls and related matters;
- understand the scope of Internal Audit's and the external auditors' review of internal controls over financial reporting, and obtain reports on significant findings and recommendations, together with Management's responses;
- annually review the Corporation's disclosure controls and procedures, including any significant deficiencies in or material non-compliance with such controls and procedures;
- receive and review reports from the Corporation's Disclosure Committee and periodically review the Corporation's Disclosure Policy;
- review and discuss with the CEO and Chief Financial Officer their disclosures made during their annual and quarterly certification processes about significant deficiencies or material weaknesses in the design or operation of internal controls or any fraud that involves Management or other employees who have a significant role in the Corporation's internal controls;
- discuss with Management the Corporation's material financial risk exposures and the steps Management has taken to monitor and control such exposures; and
- review executive officers' expenses and aircraft usage reports and periodically report to the Corporate Governance & Nominating Committee thereon, as appropriate.

Risk Management

- regularly review with Management the Corporation's material risks within the Committee's scope (i.e. the principal financial risks facing the Corporation and any other risks specifically delegated to the Committee by the Board), the assessment of those risks, and how they are being managed or mitigated; and
- monitor and review at least annually Management processes and controls designed to identify, assess, monitor and manage the risks referred to above.

Internal Audit

- review with Management, the external auditors, and Internal Audit (and if appropriate, approve) the Charter, plans, activities, and organizational structure of the Internal Audit function;
- review the significant findings prepared by Internal Audit and recommendations issued by any external party relating to Internal Audit issues, together with Management's response thereto;
- take reasonable steps to ensure there are no unjustified or inappropriate restrictions or limitations on the functioning of the Internal Audit function, or on access to requested information;
- review the adequacy of the resources of Internal Audit to satisfy itself as to the effectiveness, objectivity and independence of the Internal Audit function;
- review and concur on the appointment, replacement, or dismissal of the Chief Audit Executive (or such individual in a similar capacity or position who performs a substantially similar function); and
- review the performance and effectiveness of the Internal Audit function.

External Audit

- meet with the external auditors prior to the annual audit to review (and if appropriate, approve) the proposed audit scope, approach and staffing (including coordination of audit efforts with Internal Audit) and budget;
- monitor the progress of the annual audit;
- obtain feedback about the conduct of the external audit from key employees engaged in the process;
- when applicable, review the annual post-audit letter from the external auditors and Management's response thereto and follow-up in respect of any identified weakness;
- at least annually, obtain and review a report by the external auditors describing: (i) the external auditors' internal quality control procedures, and (ii) any material issues raised by the most recent internal quality control review, or peer review, of the external auditors, or by any inquiry or investigation by governmental or professional authorities, within the preceding five years, respecting one or more independent audits carried out by the external auditors, and any steps taken to deal with any such issues;
- annually receive from the external auditors, and review, a report on items required to be communicated to the Committee by applicable rules and regulations;
- annually review the independence of the external auditors, including their formal written statement of independence delineating all relationships between the external auditors and the Corporation, review all such relationships, and consider applicable auditor independence standards and take any decisions and actions that are necessary and appropriate where the Committee becomes aware of the potential for a conflict (or the reasonable perception of a conflict) between the interests of the external auditors and the interests of the Corporation;
- annually evaluate the performance of the external auditors, including the lead audit partner, and report to the Board on its conclusions regarding the external auditors and recommendation to shareholders for appointment of the external auditors;
- investigate and consider whether any action is required if the external auditors resign;
- ensure the rotation of the lead audit partner having primary responsibility for the audit as required by applicable law; and
- set clear hiring policies for partners, employees and former partners and employees of the present and former external auditors.

Oversight in Respect of Audit and Non-Audit Services

- subject to confirmation by the external auditors of their compliance with Canadian and U.S. regulatory requirements, be directly responsible (subject to Board confirmation) for the appointment of the external auditors for the purpose of preparing or issuing any audit report or performing other audit, review or attest services for the Corporation, such appointment to be confirmed by the Corporation's shareholders at each annual meeting;
- be directly responsible (subject to Board confirmation) for the approval of fees to be paid to the external auditors for audit services, and shall pre-approve the retention of the external auditors for any permitted non-audit service to the Corporation;
- be directly responsible for the retention and oversight of the services of the external auditors (including resolution of disagreements between Management and the external auditors regarding financial reporting) for the purpose of preparing or issuing an audit report or performing other audit, review or attest services for the Corporation (with the external auditors reporting directly to, and being accountable to, the Committee);

- have the sole authority to pre-approve all audit services and all permitted non-audit services to the Corporation, provided that the Committee need not approve in advance non-audit services where:
    - the aggregate amount of all such non-audit services provided to the Corporation constitutes not more than 5% of the total amount of fees paid by the Corporation to the external auditors during the fiscal year in which the non-audit services are provided; and
    - such services were not recognized by the Corporation at the time of the engagement to be non-audit services; and
    - such services are promptly brought to the attention of the Committee and approved prior to the completion of the audit by the Committee or by one or more members of the Committee to whom authority to grant such approvals has been delegated by the Committee.
- have the sole authority to delegate to one or more designated members of the Committee the authority to grant pre-approvals required by this section, provided that the decision of any member to whom authority is delegated to pre-approve a service shall be presented to the Committee at its next scheduled meeting. If the Committee approves an audit service within the scope of the engagement of the external auditors, such audit service shall be deemed to have been pre-approved for purposes of this section.

Compliance

- establish procedures for: (i) the receipt, retention and treatment of complaints received by the Corporation regarding accounting, internal accounting controls or auditing matters; and (ii) the confidential, anonymous submission by employees of the Corporation of concerns regarding questionable accounting or auditing matters, and institute and oversee any special investigations as needed;
- review with the Chief Legal Officer (or such individual in a similar capacity or position who performs a substantially similar function) the Corporation's significant compliance policies and any legal matters or reports or inquiries received from regulators or governmental agencies that could have a material effect upon the financial position of the Corporation and that are not subject to the oversight of another committee of the Board;
- review the effectiveness of the system for monitoring compliance with laws and regulations (including those with respect to anti-fraud and anti-bribery) and the results of Management's investigations and follow-up of any instances of non-compliance that could have a material effect upon the financial position of the Corporation and that are not subject to the oversight of another committee of the Board;
- review the process for communicating the Corporation's Code of Ethics to the Corporation's personnel and monitoring compliance therewith; and
- report annually to shareholders describing the Committee's composition, responsibilities and how they were discharged, and any other information required by applicable legislation or regulation, including approval of non-audit services.

The Committee may perform such other functions as the Committee deems necessary or appropriate for the performance of its responsibilities and duties.

Delegation

The Committee may from time to time delegate any of its responsibilities to a subcommittee comprised of one or more members of the Committee and shall also carry out such other duties that may be delegated to it by the Board from time to time.

Other Matters

At the Corporation's expense, the Committee may retain, when it considers it necessary or desirable, outside consultants and advisors to advise the Committee independently on any matter. The Committee shall have the

sole authority to retain and terminate any such consultants or advisors, including sole authority to establish or review a consultant's or advisor's fees and other retention terms, and to direct the payment thereof.

The Corporation will provide appropriate funding, as determined by the Committee, for payment of ordinary administrative expenses of the Committee that are necessary or appropriate in carrying out its duties.

Authority to make minor technical amendments to this Charter is hereby delegated to the Corporate Secretary, who will report any amendments to the Committee at its next meeting.

The Committee's performance and effectiveness shall be evaluated annually, in accordance with a process developed by the Corporate Governance & Nominating Committee and approved by the Board. The results of that evaluation, including progress on adopted recommendations, shall be reported to the Corporate Governance & Nominating Committee and to the Board.

On an annual basis, this Committee Charter shall be reviewed and assessed, and any proposed changes shall be submitted to the Corporate Governance & Nominating Committee for review and recommendation, and then to the Board for approval.

Date of Last Revision: February 19, 2019

ANNEX 1

AUDIT COMMITTEE CHAIR
POSITION DESCRIPTION

The Committee Chair shall provide overall leadership to enhance the effectiveness of the Committee and be responsible to:

- set the “tone” for the Committee and its members to foster ethical and responsible decision making, appropriate oversight of Management and appropriate corporate governance practices;
- encourage free and open discussion at meetings of the Committee;
- schedule and set the agenda for Committee meetings with input from other Committee members, the Chair and Management as appropriate;
- facilitate the timely, accurate and proper flow of information to and from the Committee, and arrange sufficient time during Committee meetings to fully discuss agenda items;
- report to the Board following each meeting of the Committee on the activities, findings and any recommendations of the Committee;
- provide advice and counsel to the senior members of Management in the areas covered by the Committee’s mandate;
- proactively encourage training and education of the Committee and its members in areas falling within the Committee’s mandate;
- take reasonable steps to ensure that Committee members understand the boundaries between the Committee and Management responsibilities;
- organize the Committee to function independently of Management and take reasonable steps to ensure that the Committee has an opportunity to meet in separate regularly scheduled closed sessions without Management present, and with or without internal personnel or external advisors as needed or appropriate;
- lead the Committee in monitoring and evaluating, in consultation with the Corporate Governance & Nominating Committee, the performance and effectiveness of the Committee as a whole and the contributions to the Committee of individual directors; and
- take all other reasonable steps to ensure that the responsibilities and duties of the Committee, as outlined in its Charter, are well understood by the Committee members and executed as effectively as possible.

SCHEDULE B
MINERAL PROJECTS

For the purposes of National Instrument 43-101 – Standards of Disclosure for Mineral Projects ("NI 43-101"), our Allan, Cory, Lanigan, Rocanville and Vanscoy Potash operations are the properties material to Nutrien.

a) Allan Potash Operations

Certain scientific and technical information regarding our Allan potash operations is based on the technical report titled "National Instrument 43-101 Technical Report on Allan Potash Deposit (KL 112R A), Saskatchewan, Canada" dated effective December 31, 2018 ("Allan Technical Report") prepared by Craig Funk, B.Sc., M.Sc., P.Eng., P.Geo., who is a "qualified person" as defined in NI 43-101. The Allan Technical Report has been filed with the securities regulatory authorities in each of the provinces of Canada and furnished to the SEC. Portions of the following information are based on assumptions, qualifications and procedures that are not fully described herein. References should be made to the full text of the Allan Technical Report.

i) Project Description, Location and Access

General

The Allan mine is located in central Saskatchewan, approximately 45 kilometers east of the city of Saskatoon, Saskatchewan. More precisely, the Allan Shaft #2 collar is located at:

- Latitude: 51 degrees 55 minutes 55.56 seconds North
- Longitude: 106 degrees 04 minutes 18.84 seconds West
- Elevation: 524.26 meters above mean sea level ("SL")
- Northing: 5,754,028.978 m
- Easting: 426,303.225 m
- Projection: UTM
- Datum: NAD83
- Zone: 13

The Legal Description (Saskatchewan Township/Range) of the Allan surface plant is Section 22 Township 34 Range 01 West of 3 rd Meridian.

The Company owns approximately 3,212 hectares (7,938 acres) of surface rights required for current Allan mine operations, including all areas covered by the existing surface plant and Tailings Management Area ("TMA"), and all surface lands required for anticipated future Allan mine and expanded milling operations.

The Allan 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 Allan mine is served by a number of villages within 50 kilometers of the mine site. The nearest city is Saskatoon (45 km distant).

Mineral Rights

Mineral rights at Allan are mined pursuant to mining leases with the Province of Saskatchewan, Canada ("Crown"), and with non-Crown ("Freehold") mineral rights owners. Crown mineral rights are governed by *The Subsurface Mineral Tenure Regulations, 2015* (Saskatchewan), and Crown leases are approved and issued by Saskatchewan's Ministry of the Economy. The original Allan Crown Subsurface Mineral Lease, numbered KL 112, was signed and executed in September 1962. In the following years, minor amendments were made to the lease, resulting in Crown Subsurface Mineral Lease KL 112R. In October 2017, a large area of land totaling 20,784 hectares (51,359 acres) was added to the lease resulting in Crown Subsurface Mineral Lease KL 112R A ("Allan Crown Lease").

The Allan Crown Lease covers an area of approximately 75,112 hectares (185,605 acres). At Allan, the Company has leased potash mineral rights for 45,484 hectares (112,393 acres) of Crown land and owns or has leased approximately 17,932 hectares (44,311 acres) of Freehold land within the lease boundary. The Allan 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 Allan Crown Lease.

Within the Allan Crown Lease area, 19,183 hectares (47,403 acres) are mined pursuant to unitization agreements with mineral rights holders (Crown and Freehold) within two unitized areas. Allan Unit Area #1 includes 9,888 hectares (24,343 acres), while Allan Unit Area #2 includes 9,295 hectares (22,969 acres).

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.

ii) 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 Allan area was carried out in the 1950s and 1960s. The Allan mine was built by a consortium of companies (U. S. Borax, Homestake Potash Company, and Swift Canadian Company) in the 1960s. Potash production began at Allan in April 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 a 60% ownership of the Allan mine in 1978 (through purchase of the U. S. Borax and Swift Canadian interests), and became the operator of the mine in 1981. In 1990, PotashCorp purchased the remaining 40% interest.

Both flotation and crystallization methods are used at Allan to produce granular, standard and suspension-grade potash products. Debottlenecking and compaction expansion projects were completed at Allan during two phases of construction in 2005 and 2007. A major refurbishment and expansion of the Allan mine was completed in 2013, increasing nameplate capacity to 4.0 million tonnes of finished potash products per year.

iii) Geological Setting, Mineralization and Deposit Types

Geological Setting and Mineralization

Much of southern Saskatchewan is underlain by the Prairie Evaporite Formation, a layered sequence of salts and anhydrite which contains the Western world's largest deposits of potash. The potash extracted from the predominantly sylvinite ore has its main use as a fertilizer.

The 100 m–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. The Phanerozoic stratigraphy of Saskatchewan is remarkable in that units are flat-lying and relatively undisturbed over very large areas.

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 (“$KMgCl_3$ $6H_2O$”) 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 (2016, 2017, 2018), the average, measured potash ore grade of the mill feed at Allan was 25.3% K_20 equivalent. The average ore grade reported from 18 historic surface drillhole intersections, all within the Allan Crown Lease, is 26.65% K_20 equivalent. The average ore grade observed from 6,738 in-mine samples collected to the end of December 2017 is 24.8% K_20 equivalent.

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.

The Allan 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 Allan. 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 Allan area. The Belle Plaine Potash Member is not well-developed, and therefore is not mined.

Allan potash mineralization occurs at about 1000 meters depth below surface. The A Zone is approximately 3.35 meters thick and occurs near the top of the Prairie Evaporite Formation salts. Salt cover from the ore zone to overlying units is approximately 14 m. The Allan mine operates as a conventional, underground potash mine.

iv) Exploration

Before the Allan mine was established in 1968, all exploration consisted of drilling from surface and analysis of core from these drillholes. Since mining began in 1968, there has been just one exploration drillhole; this drillhole was completed in 1969.

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 is effectively mitigated. A total of 248 linear kilometers of 2D seismic lines have been acquired at Allan. Between 1988 and 2015, 3D seismic has been acquired over an area covering 363 square kilometers. The most recent seismic survey was conducted in 2015 and accounted for 49.5 square kilometers of the total square kilometers stated above.

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.

v) Drilling

For the original Allan 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 analyzed 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 Allan. 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 kilometers across the central Saskatchewan potash mining district.

At Allan, a particular sequence of three clay seams marks the top of the A Zone. 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, seven older mining machines cut at a height of 3.35 m (11’) and four 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.

The original exploration area was explored with a number of test holes spaced at intervals of 1.6 km to 6.4 km (1–4 miles). Assays from most of these original test holes were studied by independent consultant David S. Robertson and Associates (1978) and are found in Table A. An additional six historical test holes were studied by Nutrien staff in 2018, which are also listed in Table A below. In each case, the best 3.35 m (11’) mining interval intersected in each drillhole was determined from the assay values, using clay marker seams as a guide. Note that one of the above-mentioned test holes was omitted from the assay calculation due to a section of missing core in the ore zone, one was omitted due to erroneous assay data which could not be resolved and another two were omitted due to an ore grade of less than 15% K_2O. With nearly 50 years of mining experience at Allan, it is the opinion of the authors that areas of low grade (i.e., <15% K_2O) are localized with a relatively small lateral extent.

Drillhole assay data for the A Zone at Allan gives an estimated mean grade of 26.65% K_2O with 4.96% water insolubles.

B Zone mineralization is indicated by gamma ray geophysical log response in each of the exploration drillholes listed in Table A 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 A: Assay results for all potash test holes within Allan Crown Lease

Average in 3.35 m (11 feet) mining interval (undiluted)			
Drillhole	**Year Drilled**	**% K_2O**	**% Water Insolubles**
04-10-033-01 W3	1954	*	*
12-32-034-02 W3	1956	28.74	5.76
16-11-033-01W3	1956	*	*
04-29-034-01 W3	1957	25.79	4.74
01-25-034-01 W3	1957	28.05	4.74
16-11-034-02 W3	1957	29.05	3.40
13-11-034-01 W3	1957	28.75	4.54
13-11-034-03 W3	1957	21.97	1.74
16-09-035-01 W3	1957	25.04	5.11
05-26-035-01 W3	1957	16.78	*
09-29-033-02 W3	1957	*	*
09-28-034-01 W3	1961	29.53	5.26
09-27-034-01 W3	1961	30.63	4.52
09-26-034-01 W3	1961	27.71	6.33
09-33-034-01 W3	1961	23.95	5.89
08-34-034-01 W3	1961	26.31	5.76
09-35-034-01 W3	1961	25.89	8.64
05-22A-034-01 W3	1961	26.47	3.19
16-14-034-01 W3	1962	26.78	5.25
01-17-034-01 W3	1962	28.63	5.29
01-12-034-01 W3	1962	*	*
14-23-034-03 W3	1969	29.56	4.18
Average (from 18 usable values):		**26.65**	**4.96**

Due to the remarkably consistent mineralogy and continuity of the resource, as experienced through 50 years of mine production, no potash exploration drilling has been done at Allan since 1969. 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 and are typically minimized. Anomalies associated with possible water inflow problems, which are mapped in the seismic data, are avoided.

vi) Sampling, Analysis and Data Verification

Basic Approach

Exploration in the Allan 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 1 foot (0.3 m) 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.

A total of 6,738 in-mine ore grade samples were collected at Allan to the end of December 2017. All in-mine samples were analyzed in the Allan 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 of the Allan Technical Report, the sampling methods are acceptable, are consistent with industry-standard practices and are adequate for mineral resource and reserve estimation purposes.

Mean Potash Mineral-Grade In-Mine Samples

At Allan, in-mine grade samples are taken from the floor approximately once per week per active mining face. This is roughly equivalent to a sample taken every 68 m to 74 m in production panels, and a sample taken every 85 m to 128 m in development panels. Since start-up in 1968 through to the end of December 2017, a total of 6,738 in-mine potash mineral grade samples have been collected from the Allan A Zone, the main potash horizon at Allan. In-mine samples collected and analyzed in 2018 contributed no meaningful change to the overall grade. All samples were analyzed in the Allan mill laboratory using analysis techniques that were up-to-date for the era in which the sample was collected.

The median ore grade for this family of in-mine samples is 25.5% K_2O equivalent and the mean ore grade is 24.8%.

For the B Zone at Allan, 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 Allan 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. 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.

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. This is the methodology that was used to determine an estimate of bulk-rock density for the Allan ore zone. An obvious benefit of this approach is that a mean value computed on the distribution (6,738 sample points) has a much greater confidence interval than a mean value computed from 18 drillhole assays.

The main mineralogical components of the ore zones of Saskatchewan's Prairie Evaporite Formation are:

- Halite – NaCl
- Sylvite – KCl
- Carnallite – $KMgCl_3 \cdot 6(H_2O)$
- Insolubles – dolomite, muscovite, clinochlore, potassium feldspar, illite, quartz, anhydrite and other minor mineral components

All Nutrien divisions measure and record the in-mine % K_2O grade and insoluble content of the mined rock. The magnesium content is not measured at Allan, since carnallite is not a significant component of the ore here. From this set of measurements, the density of the ore can be calculated. The required composition and mineral density information for each mineral component is given below (sourced from Webmineral Mineralogy Database, 2018):

Halite – NaCl

- Na 39.34%
- Cl 60.66%
- Oxide form Na_2O 53.03%
- Mineral density 2170 kg/m^3

Sylvite – KCl

- K 52.45%
- Cl 47.55%
- Oxide form K_2O 63.18%
- Mineral density 1990 kg/m^3

Insolubles (Allan A Zone)

- Component minerals: dolomite, muscovite, clinochlore, potassium feldspar, illite, quartz, anhydrite and other minor mineral components
- Average density – 2510 kg/m^3 (Nutrien Pilot Plant, 2018)

The value for insoluble density is based on known densities of the constituent parts of the insoluble components of the mineralization and the average occurrence of these insoluble components, which is known from the nearly 50 years of mining experience at Allan. Assuming the lowest plausible density of insolubles known for Saskatchewan potash deposits of this nature, the effect upon overall bulk-rock ore density and Mineral Resource and Reserve calculations would be negligible.

The mineral composition of potash ore is halite, sylvite and insolubles. From 6,738 Allan A Zone in-mine grade samples, raw ore composition is:

% Sylvite	=	39.3 (converted from % K_2O)
% Insolubles	=	2.7
% Carnallite	=	0.0

The percent of halite is assumed to be:

% Halite	=	(100 - % Sylvite - % Insol. - % Carnallite)
	=	(100 - 39.3 - 2.7 - 0.0)
	=	58.1

Applying this methodology, and using these mean grade data gives a mean bulk-rock density for Allan A Zone potash of:

$RHO_{bulk\text{-}rock}$	=	(Halite density * % Halite) + (Sylvite density * % Sylvite) + (Insol. density * % Insol.)
	=	(2170 * % Halite) + (1990 * % Sylvite) + (2510 * % Insol.)
	=	2110

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

This method is as accurate as the ore grade measurements and mineral density estimates.

To date, not enough B Zone mining has been carried out at Allan to permit a bulk density calculation based on Allan in-mine grade samples. The mining of 3.537 million tonnes of the B Zone represents a relatively small amount of material for a potash mine. The historic mining that was conducted in the B Zone at Allan was localized in only one geographic area, so data from this mining are not considered representative of what will be seen once mining proceeds in this layer. Although it is possible that once enough mining has occurred in the B Zone to give enough samples with all constituent minerals measured, the reported proportions of the various mineral constituents could change from what is reported. It is expected that any such change would have only a minimal effect on bulk-rock density used in tonnage calculations.

Instead, we use the potash bulk-rock density calculated using 20,230 in-mine grade samples from Lanigan B Zone:

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

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

Assay Data Verification

Most of the original drillhole assays were studied by independent consultant David S. Robertson and Associates (1978). In 2018, six historical drillhole assay results were studied by Nutrien technical staff, Jodi Derkach (GIS Cert., P.Geo.) and Tanner Soroka (P.Geo.).

The original assay results for core samples from historical drillholes were taken as accurate in these studies, as there is no way to reliably reanalyze 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 in-house at the Allan 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 does occur.

It should be noted that assay results from historical drillholes match mine sample results closely – within approximately 0.9% – even though sample spacing is obviously much greater in the case of wells. This fact is a validation of the methodology. Based on 50 years of in-mine experience at Allan, historical assay results are

considered to be acceptable and provide a good basis for estimating ore grade in areas of future mining at Allan. However, the mean mineral grade of 24.8% K_2O equivalent determined from 6,738 in-mine grade samples is thought to provide the most accurate measurement of potash grade for the Allan mine.

Exploration Data Verification

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 drillhole 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 Allan in recent years.

Initial sampling and assaying of cores was done during potash exploration at Allan in the 1950s and 1960s. Methods were consistent with standard procedures for that era. The mine began production in 1968 and, with the exception of a single potash test hole in 1969, 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 Allan have been collected, analyzed, 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 Allan mine 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 mine site 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.

vii) Mineral Processing and Metallurgical Testing

At Allan, potash ore has been mined and concentrated using flotation and crystallization methods to produce saleable quantities of high-grade finished potash products since 1968.

Over the 50-year mine life, 150.239 million tonnes of potash ore have been mined and hoisted at Allan to produce 52.949 million tonnes of finished potash product (from startup in 1968 to December 31, 2018). Given this level of sustained production over 50 years, basic mineralogical processing and prospective metallurgical testing of Allan potash is not considered relevant.

viii) Mineral Resource and Mineral Reserve Estimates

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:

> **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.

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.

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 the Company as follows:

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 the applicable Crown lease.

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 the applicable Crown lease.

Measured Mineral Resource: Areas of detailed, physical exploration through actual drilling or mine sampling, near existing underground workings, and within the applicable Crown lease.

The Allan mine began production in 1968 and, with the exception of a single test hole in 1969, 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 us with an observation-based understanding of the potash mineralized zone at Allan that is far superior to the level of understanding provided by any surface drilling based exploration program. We believe that our approach provides a body of information that guides and constrains our exploration inferences in a much better way than could be achieved from any conventional exploration investigation in areas immediately surrounding, and contiguous to, the Allan potash mine.

Potash Resource Estimate

Exploration information used to calculate reported Mineral Resource tonnages at Allan consist of both physical sampling (drillhole and in-mine) and surface seismic (2D and 3D). Based on the definitions and guidelines above, all mineral rights leased or owned by the Company, and within Allan Crown Lease, 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: 3.353 meters (11 feet)
Ore Density: 2.110 tonnes/cubic meter (A Zone)
Ore Density: 2.120 tonnes/cubic meter (B Zone)

The mineral resources for Allan, as of December 31, 2018 are as follows:

Allan A Zone:		
Inferred Resource	2,678	millions of tonnes
Indicated Resource	366	millions of tonnes
Measured Resource	1,006	millions of tonnes
Total A Zone Resource	4,050	millions of tonnes
Allan B Zone:		
Inferred Resource	2,691	millions of tonnes
Indicated Resource	367	millions of tonnes
Measured Resource	1,506	millions of tonnes
Total B Zone Resource	4,564	millions of tonnes
Total for Allan (A Zone + B Zone):		
Inferred Resource	5,369	millions of tonnes
Indicated Resource	733	millions of tonnes
Measured Resource	2,512	millions of tonnes
Total A Zone + B Zone Resource	8,614	millions of tonnes

The average mineral grade of the Allan A Zone Mineral Resource is 24.8% K_20 equivalent, and was determined from 6,738 in-mine samples at Allan collected over the life of the mine. The average mineral grade of the Allan 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.

The tonnage reported in the Allan A Zone Measured Resource is comprised of the potash that is within 1.6 km (1 mile) of 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 Allan 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 Allan, in-place pillar mineralization remains as a mineral resource rather than a mineral reserve at this time.

Definitions of Mineral Reserve

CIM defined mineral reserve in *The CIM Definition Standards for Mineral Resources and Reserves* (2014) as:

> **Probable Mineral Reserve**: The economically mineable part of an indicated, and in some circumstance, 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.
>
> **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.

For Saskatchewan, in regions adjacent and contiguous to an operating potash mine, mineral reserve categories are characterized by the Company as follows:

> **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 exploration drillhole, and within the applicable Crown lease.
>
> **Proven Mineral Reserve**: identified recoverable potash mineralization classified as a measured resource, delineated on at least two sides by sampled mined entries or exploration drillholes to a maximum of 3.2 km (2 miles) apart, and within the applicable Crown lease.

Along with this approach, analysis of in-mine samples for potash grade has provided us with an observation-based understanding of the potash mineralized zone at Allan 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 50 years of potash mining experience at Allan.

Mineral Reserve Estimates

Using the definitions outlined above, part of the Allan 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 above.

The overall extraction rate at the Allan mine is 33%. 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.

The mineral reserves for Allan as of December 31, 2018 are as follows:

Allan A Zone:		
Probable Reserve	250	millions of tonnes
Proven Reserve	99	millions of tonnes
Total A Zone Reserve =	349	millions of tonnes
Allan B Zone:		
Probable Reserve	nil	
Proven Reserve	nil	
Total B Zone Reserve =	nil	
Total for Allan (A Zone + B Zone):		
Probable Reserve	250	millions of tonnes
Proven Reserve	99	millions of tonnes
Total A Zone and B Zone Reserve =	349	millions of tonnes

The average mineral grade of the Allan A Zone mineral reserve is 24.8% K_2O equivalent, and was determined from 6,738 in-mine samples at Allan over the life of the mine.

ix) 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 Allan, 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 early 1968, and the first potash ore was hoisted by Allan in April of that year. The Allan 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 Allan mine underwent a major expansion which brought the nameplate capacity up to 4.0 million tonnes of finished potash products per year. As of December 31, 2018, the operational capability of the Allan facility is 2.6 million tonnes per year.

Virtually all Allan 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. At Allan, mine elevations range from approximately 980 m to 1120 m, averaging approximately 1010 m. These depths to A Zone potash mineralization are anticipated over most of the Allan 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 Allan 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. The highest mineral grade section of the Allan potash seam is approximately 3.35 m (11 feet) thick, with gradations to lower grade salts immediately above and below the mining horizon. The actual mining thickness at Allan is dictated by the height of continuous boring machines used to cut the ore. Seven older borers are designed to cut at a thickness of 3.35 m (11 feet) and four new borers are designed to cut 3.65 m (12 feet).

Allan 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.

Conservative local extraction rates (never exceeding 45% in any mining block) are employed at all Saskatchewan mines, including Allan, 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 also provides fresh air ventilation to the mine and serves as a secondary egress. The Service Shaft is used for service access, and exhaust ventilation from the mine.

Over the 50-year mine life, 150.239 million tonnes of potash ore have been mined and hoisted at Allan to produce 52.949 million tonnes of finished potash products (from startup in 1968 to December 31, 2018). The life-of-mine average concentration ratio (raw-ore/finished potash products) is 2.84 and the overall extraction rate over this time period is 33%.

x) Processing and Recovery Operations

At Allan, potash ore has been mined and concentrated to produce saleable quantities of high grade finished potash products since 1968. Products include granular, standard, and industrial grade potash used for agricultural applications and industrial purposes.

Both flotation methods and crystallization methods are used to concentrate potash ore into finished potash products at the Allan mill. Raw potash ore is processed on surface and concentrated finished potash products (near-pure KCl) are sold and shipped to markets in North America and offshore.

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

- 2016: 2.380 million tonnes finished potash products at 61.16% K_2O (average grade)
- 2017: 1.832 million tonnes finished potash products at 61.39% K_2O (average grade)
- 2018: 2.410 million tonnes finished potash products at 61.17% K_2O (average grade)

Over the past decade actual mill recovery rates have been between 81.5% and 87.0%, averaging 84.6%. Given the long-term experience with potash geology and actual mill recovery at Allan 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 mine sites and at Nutrien research facilities. At Allan, this is no exception; test work to optimize circuit performance and ensure product quality is carried out on an ongoing basis.

xi) Infrastructure, Permitting and Compliance Activities

Project Infrastructure

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

The Allan mine is served by a number of villages within 50 kilometers of the mine site. The nearest city is Saskatoon (approximately 45 km distant).

The Allan 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 Allan is 32 MVA. The ten-year projection of power utilization indicates that the utility can meet all foreseeable future demand.

The Allan operation requires a sustained fresh water supply for the milling process which is provided from a local reservoir called the Bradwell Reservoir operated by SaskWater (approximately 6 km distant). This water supply provides a sustainable source of process water for Allan milling operations without having any impact on other users of water in the area.

Environmental Studies, Permitting and Compliance Activities

The tailings management strategy at all Nutrien potash mines in Saskatchewan, including Allan, is one of sequestering solid mine tailings in an engineered and provincially licensed TMA near the surface plant site. The Allan TMA currently covers an area of approximately 600 hectares (1,483 acres) of land owned by the Company. Solid potash mine tailings typically consist of 85% to 95% rock salt (NaCl) and 5% to 15% insoluble (carbonate mud = $CaCO_3$, anhydrite mud = $CaSO_4$, and clays like chlorite, illite and so on). An engineered slurry-wall (in some portions, a compacted earth trench barrier) has been constructed where required around approximately half of the Allan TMA. In future years this wall can be expanded if required for operational needs. The slurry-wall provides secondary containment for any saline mine waters, minimizing brine impacts from the TMA to surrounding surface water bodies and 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.

Allan currently operates two brine disposal wells near the surface plant of the Allan mine 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 the surface. 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 Allan operation requires a sustained fresh water supply for the milling process which is provided by a waterline from the Bradwell Reservoir (approximately 6 km distant). This water supply is provincially licensed and provides a sustainable source of process water for Allan 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 Allan mine is in compliance in all material respects with all regulations stipulated by the Environmental Protection Branch of the MOE. The current Allan Approval to Operate has been granted to July 1, 2028.

In terms of long-term decommissioning, environmental regulations of 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. The Company has conducted numerous studies of this topic, and the most recent decommissioning and reclamation plan for Allan was approved by MOE technical staff in October 2016. Because the current expected mine life for Allan 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 Allan, 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., Allan, Cory, Lanigan, Patience Lake, Rocanville and Vanscoy).

xii) Capital and Operating Costs

The Allan 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 Allan mine was completed in 2013, increasing nameplate capacity to 4.0 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. All construction was carried out without significant disruption to existing potash production from the site.

xiii) Exploration, Development and Production

Potash production in any given year at the Allan potash 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 (6.198 million tonnes of potash ore mined and hoisted per year) is sustained, and if mineral reserves remain unchanged, then the Allan mine life is 56 years from December 31, 2018.

b) Cory Potash Operations

Certain scientific and technical information regarding our Cory potash operations is based on the technical report titled “National Instrument 43-101 Technical Report on Cory Potash Deposit (KL 103 B), Saskatchewan, Canada” dated effective December 31, 2018 (“Cory Technical Report”) prepared by Craig Funk, B.Sc., M.Sc., P.Eng., P.Geo., who is a “qualified person” as defined in NI 43-101. The Cory Technical Report has been filed with the securities regulatory authorities in each of the provinces of Canada and furnished to the SEC. Portions of the following information are based on assumptions, qualifications and procedures that are not fully described herein. References should be made to the full text of the Cory Technical Report.

i) Project Description, Location and Access

General

The Cory mine is located in central Saskatchewan, approximately 7 kilometers west of the city of Saskatoon, Saskatchewan. 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 meters above mean 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.

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 Cory mine is served by a number of villages within 50 kilometers of the mine site. 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 northwest of the South Saskatchewan River, a major continental drainage channel.

Mineral Rights

Mineral rights at Cory are mined pursuant to mining leases with the Crown, and with Freehold mineral rights owners. Crown mineral rights are governed by *The Subsurface Mineral Tenure Regulations, 2015* (Saskatchewan) 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 103 B (“Cory Crown Lease”).

The Cory Crown Lease covers an area of approximately 46,902 hectares (115,897 acres). 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 Cory 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.

ii) History

See “Mineral Projects – a) Allan Potash Operations – ii) History” above for a general overview of the history of potash mines in Saskatchewan.

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.

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.

iii) Geological Setting, Mineralization and Deposit Types

Geological Setting and Mineralization

See "Mineral Projects – a) Allan Potash Operations – iii) Geological Setting, Mineralization and Deposit Types – Geological Setting and Mineralization" above for a general overview of geological setting and mineralization for potash mines in Saskatchewan.

Over the past three years (2016, 2017, 2018), the average, measured potash ore grade of the mill feed at Cory was 23.9% K_20 equivalent. The average ore grade reported from 10 historic surface drillhole intersections, all within Cory Subsurface Mineral Lease KL 103 B, is 25.6% K_20 equivalent. The average ore grade observed from 4,590 in-mine samples taken over 50 years of mining (to the end of December 2017) at Cory is 22.5% K_20 equivalent.

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.

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 meters thick and occurs near the top of the Prairie Evaporite Formation salts. Salt cover from the ore zone to overlying units is approximately 14 meters. The Cory mine operates as a conventional, underground potash mine.

iv) Exploration

Before the Cory mine was established in 1968, all exploration consisted of drilling from surface and analysis of core from these drillholes. 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.

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 is effectively mitigated.

A total of 99 linear kilometers of 2D seismic lines have been acquired at Cory. A total of 222 square kilometers 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 kilometers of the total square kilometers stated above.

v) 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 analyzed 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. 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 kilometers across the central Saskatchewan potash mining district.

At Cory, a particular sequence of three clay seams marks the top of the A Zone. 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.

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 feet) was applied to mineral resource and reserve calculations.

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

Zone mineralization is indicated by gamma ray geophysical log response in each of the exploration holes listed in Table B below 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 B: Assay results for all potash test holes within Cory Lease KL 103 B.

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 50 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.

vi) Sampling, Analysis and Data Verification

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. Short segments of core usually about 0.3 m (1 foot) 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.

Regarding quality assurance for analytical results of in-mine samples, the Company participates in the 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 of the Cory Technical Report, the sampling methods are acceptable, are consistent with industry-standard practices, and are adequate for Mineral Resource and Reserve estimation purposes.

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, 4,590 in-mine potash mineral grade samples have been collected from the Cory A Zone, the main potash horizon at Cory. In-mine samples collected and analyzed in 2018 contributed no meaningful change to the overall grade. All samples were analyzed in the Cory mill laboratory using analysis techniques that were up-to-date for the era in which the sample was collected. 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%.

For the B Zone at Cory, mineral grade is reported to be 20.3% K_2O equivalent, which is 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. 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.

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, we use the potash bulk-rock density calculated using 6,738 in-mine samples from Allan A Zone:

$RHO_{bulk\text{-}rock}$ (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, we use the potash bulk rock density calculated using 20,230 in-mine samples from Lanigan B Zone:

$RHO_{bulk\text{-}rock}$ (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.

Assay Data Verification

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 reanalyze 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 in-house 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 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 50 years of in-mine experience at Cory, we consider these historical assay results to be acceptable and to 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 site.

Exploration Data Verification

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 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. Due to small number of drillholes, mineral grade information from in-mine grab samples provided better sampling of potash grade at Cory. This approach to potash sampling is in accordance with generally 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, analyzed, 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 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 mine site 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.

vii) 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 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. 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 50-year mine life, 115.455 million tonnes of potash ore have been mined and hoisted to produce 36.296 million tonnes of finished potash product (from startup in 1968 to December 31, 2018). Given this level of sustained production over 50 years, basic mineralogical processing and prospective metallurgical testing of Cory potash is not considered relevant**.**

viii) Mineral Resource and Mineral Reserve Estimates

Definitions of Mineral Resource

See "Mineral Projects – a) Allan Potash Operations – viii) Mineral Resource and Mineral Reserve Estimates – Definitions of Mineral Resource" for an overview of CIM's mineral resource categories and the Company's general characterization of mineral resources categories for its potash mines.

The Cory 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 us with 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. We believe that our approach provides a body of information that guides and constrains our 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.

Mineral Resource Estimates

Based on the definitions and guidelines described above, all mineral rights leased or owned by the Company, and within the Cory Crown lease, are assigned to one of the three mineral resource categories.

The potash resources for Cory division, as of December 31, 2018 are as follows:

Cory A Zone:		
Inferred Resource	1,310	millions of tonnes
Indicated Resource	437	millions of tonnes
Measured Resource	983	millions of tonnes
Total A Zone Resource	2,730	millions of tonnes
Cory B Zone:		
Inferred Resource	1,316	millions of tonnes
Indicated Resource	439	millions of tonnes
Measured Resource	1,353	millions of tonnes
Total B Zone Resource	3,108	millions of tonnes
Total for Cory (A Zone + B Zone):		
Inferred Resource	2,626	millions of tonnes
Indicated Resource	876	millions of tonnes
Measured Resource	2,336	millions of tonnes
Total A Zone + B Zone Resource	5,838	millions of tonnes

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.

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.

Definitions of Mineral Reserve

See “Mineral Projects – a) Allan Potash Operations – viii) Mineral Resource and Mineral Reserve Estimates – Definitions of Mineral Reserve” for an overview of CIM’s mineral reserve categories and the Company’s general characterization of mineral reserve categories for its potash mines.

Along with this approach, analysis of in-mine samples for potash grade has provided us with 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.

Mineral Reserve Estimates

Using the definitions outlined above, 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 above. An overall extraction rate for the Cory mine has been applied to the area outlined as measured resource.

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 potash reserves for Cory as of December 31, 2018 are as follows:

Cory A Zone:		
Probable Reserve	171	millions of tonnes
Proven Reserve	77	millions of tonnes
Total A Zone Reserve =	248	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	171	millions of tonnes
Proven Reserve	77	millions of tonnes
Total A Zone and B Zone Reserve =	248	millions of tonnes

The average mineral grade of the Cory A Zone Mineral Reserve is 22.5% K_2O equivalent and was determined from 4,590 in-mine samples at Cory.

ix) 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. 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. The highest mineral grade section of the Cory potash seam is approximately 3.35 m (11 feet) 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 feet) and five new borers are designed to cut 3.65 m (12 feet).

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.

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 50-year mine life, 115.455 million tonnes of potash ore have been mined and hoisted at Cory to produce 36.296 million tonnes of finished potash products (from startup in 1968 to December 31, 2018). The life-of-mine average concentration ratio (raw-ore/MOP-product) is 3.18 and the overall extraction rate over this time period is 27%.

x) Processing and Recovery Operations

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. Raw potash ore is processed on surface and concentrated white potash products are sold and shipped to markets in North America and offshore.

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

- 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)
- 2018: 0.810 million tonnes finished potash products at 62.63% K_2O (average grade)

Over the past decade, actual mill recovery rates have been between 66.4% and 75.6%, averaging 72.5%. 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 mine sites 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.

xi) Infrastructure, Permitting and Compliance Activities

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.

The Cory mine is served by a number of villages within 50 kilometers of the mine site. 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.

Environmental Studies, Permitting and Compliance Activities

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 licensed TMA near the surface plant site. The Cory TMA currently covers an area of approximately 416 hectares (1,027 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 Cory 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 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. 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 MOE, the provincial regulator. The Cory mine is in compliance with all regulations stipulated by the Environmental Protection Branch of the MOE. The current Cory Approval to Operate has been granted to July 1, 2028, 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. The Company 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., Allan, Cory, Lanigan, Patience Lake, Rocanville, and Vanscoy).

xii) 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. 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.

xiii) Exploration, Development and Production

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.

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 (3.548 million tonnes of potash ore mined and hoisted per year is sustained), and if Mineral Reserves remain unchanged, then the Cory mine life is 70 years from December 31, 2018.

c) Lanigan Potash Operations

Certain scientific and technical information regarding our Lanigan potash operations is based on the technical report titled "National Instrument 43-101 Technical Report on Lanigan Potash Deposit (KLSA 001 C), Saskatchewan, Canada" dated effective December 31, 2018 ("Lanigan Technical Report") prepared by Craig Funk, B.Sc., M.Sc., P.Eng., P.Geo., who is a "qualified person" as defined in NI 43-101. The Lanigan Technical Report has been filed with the securities regulatory authorities in each of the provinces of Canada and furnished to the SEC. Portions of the following information are based on assumptions, qualifications and procedures that are not fully described herein. References should be made to the full text of the Lanigan Technical Report.

i) Project Description, Location and Access

The Lanigan mine is located in central Saskatchewan, approximately 100 kilometers east of the city of Saskatoon, Saskatchewan. The Legal Description (Saskatchewan Township/Range) of the Lanigan surface operation is Section 28 Township 33 Range 23 West of 2nd Meridian. More precisely, the Lanigan Shaft #2 collar is located at:

- Latitude: 51 degrees 51 minutes 20.48 seconds North
- Longitude: 105 degrees 12 minutes 34.79 seconds West
- Elevation: 535.34 meters above mean SL
- Easting: 485560.306 m
- Northing: 5745008.726 m
- Projection: UTM
- Datum: NAD83
- Zone: 13

The Company owns approximately 3,700 hectares (9,140 acres) of surface rights required for current Lanigan mine operations, including all areas covered by the existing surface plant and tailings management area, and all surface lands required for anticipated future Lanigan mine and expanded milling operations.

Mineral rights at Lanigan are mined pursuant to mining leases with the Crown, and with 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 Saskatchewan Ministry of the Economy.

The original Lanigan Crown subsurface mineral lease, numbered KL 100, was entered into in March 1964. A minor amendment to this lease in September 1989 resulted in KL 100R. In November 2009, a large area of land was added to the lease resulting in KLSA 001. Shortly after that, in June 2011, a minor amendment to the lease resulted in KLSA 001 A. KLSA 001 B was issued in September 2014 when portions of the adjacent exploration permits, granted in September 2011, were added to the lease. Finally, in November 2015, a minor change to the lease resulted in KLSA 001 C.

KLSA 001 C covers an area of approximately 56,328 hectares (139,190 acres), At Lanigan, the Company has leased potash mineral rights for 38,188 hectares (94,365 acres) of Crown land and owns or has leased approximately 17,913 hectares (44,265 acres) of Freehold land within the lease boundary. The Lanigan Crown lease term is for a period of 21 years from March 2006, 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 Lanigan Crown lease area, 55,950 hectares (138,256 acres) are mined pursuant to unitization agreements with mineral rights holders (Crown and Freehold) within two unitized areas. Lanigan Unit Area #1 includes 19,990 hectares (49,395 acres) while Lanigan Unit Area #2 includes 35,961 hectares (88,861 acres).

The Lanigan 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 Lanigan mine is served by a number of villages within 50 kilometers of the mine site. The nearest cities are Humboldt (approximately 45 km north of Lanigan) and Saskatoon (approximately 100 km west of Lanigan). The topography is relatively flat, with gently rolling hills and occasional valleys. There are no rivers or other major watercourse channels near the Lanigan mine site.

ii) History

See "Mineral Projects – a) Allan Potash Operations – iii) Geological Setting, Mineralization and Deposit Types – Geological Setting and Mineralization" above for a general overview of geological setting and mineralization for potash mines in Saskatchewan.

Exploration drilling for potash in the Lanigan area was carried out in the 1950s and 1960s. The Lanigan mine was built by a company named Alwinsal Potash of Canada Ltd., a consortium of German and French mining and fertilizer companies. Potash production began at Lanigan 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 Lanigan mine in 1976.

Mill rehabilitation, mine expansion and hoist improvement projects were completed at Lanigan between 2005 and 2010. The expansion construction was carried out without significant disruption to existing potash production from the site.

Both flotation and crystallization methods are used at Lanigan to produce granular, standard and suspension grade potash for agricultural use. As of December 31, 2018, the annual nameplate capacity at Lanigan is 3.8 million tonnes and the annual operational capability is 2.0 million tonnes of concentrated finished potash products.

iii) Geological Setting, Mineralization and Deposit Types

Geological Setting and Mineralization

See “Mineral Projects – a) Allan Potash Operations – iii) Geological Setting, Mineralization and Deposit Types – Geological Setting and Mineralization” above for a general overview of geological setting and mineralization for potash mines in Saskatchewan.

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.

The Lanigan 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; both the A Zone and B Zone are being mined at Lanigan. The Belle Plaine potash member is present at Lanigan but is not economically mineable, while the Esterhazy Member is poorly developed and not economically mineable.

Lanigan potash mineralization occurs at an average of about 990 m below surface. Salt cover from the top of the A Zone mining horizon to overlying units is approximately 7 m thick and salt cover from the top of the B Zone mining horizon to overlying units is approximately 14 m thick. The Lanigan mine operates as a conventional, underground potash mine.

iv) Exploration

Before the Lanigan mine was established in 1968, all exploration consisted of drilling from surface and analysis of core from these drillholes. Since mining began in 1968, there have been just six potash test holes; two of which targeted seismic (geological) anomalies as part of a seismic data verification process. A map showing potash exploration coverage at Lanigan Potash (drillholes, 2D and 3D seismic coverage) can be found in the Lanigan Technical Report.

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 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 is effectively mitigated.

A total of 621 linear kilometers of 2D seismic lines have been acquired at Lanigan. A total of 520 square kilometers of 3D seismic have been acquired at Lanigan between 1988 and 2018. The most recent seismic survey was conducted in 2017 and accounted for 10 square kilometers of the total square kilometers stated above.

Experience has shown that the potash mining zone is continuous when seismic data are undisturbed and flat-lying. 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.

v) Drilling

For the original Lanigan 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 analyzed to establish potash grades.

Drilling activity was limited at Lanigan during the 1970s. In 1973, a single exploration drillhole was completed, although assay results proved to be unusable. Subsequently, in 1975, a second salt water disposal well, from which assay data were taken, was constructed.

In 1981, further exploration drilling was carried out at Lanigan as part of a mine expansion project. Five additional drillholes were completed, following similar drilling and sampling methodologies as the original 1950s and 1960s drillholes. Geophysical well-logging technology had improved and therefore the log suites collected in the 1981 drill program were of better quality than those collected previously. A 2D seismic survey had been carried out prior to the 1981 drilling program. Two of the five drillholes completed in 1981 targeted seismic (geological) anomalies as part of a seismic data verification process. The anomalies were confirmed and areas around these drillholes were excluded from mine development.

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 Lanigan. 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 kilometers across the central Saskatchewan potash mining district.

At Lanigan, a particular sequence of two clay seams marks the top of the A Zone. A distinct clay seam marks the top of the B Zone; this clay seam is immediately overlain by a much less consistent clay seam referred to as Shadowband at Lanigan. In 2013, Lanigan modified its cutting practices in the B Zone to improve mine roof stability. This modification involved cutting a slightly higher horizon, just above Shadowband, thus removing the risk associated with the seam. The goal of improved mine roof stability was achieved; however, less potash and more salt is now being mined resulting in a slightly lower reported ore grade for B Zone.

The clay 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 lower grade material 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 is fixed at 3.66 m (12 feet). B Zone mining machines have a fixed mining height of 2.74 m (9 feet). In a normal B Zone production room, ore is extracted in two lifts resulting in a mining height of approximately 4.88 m (16 feet). These mining heights allow for comfortable working headroom and efficient extraction of potash ore.

Drill core assay results were studied by independent consultant David S. Robertson and Associates (1976) and by Nutrien technical staff. Results are found in Table C below. The best 3.66 m (12 feet) mining interval in A Zone, and the best approximately 4.88 m (16 feet) mining interval in B Zone was determined from the assay values in each potash test well, using clay marker seams as a guide. Note that while B Zone drillhole assays were derived using intervals of between 4.07 m and 7.30 m averaging 5.08 m, a more conservative mining height of 4.88 m is used for mineral resource and reserve estimates.

The original Lanigan exploration area was explored with 12 test holes spaced at intervals of 1.6 km to 3.4 km (1–3 miles). In total, 27 potash test holes have been drilled within Lanigan lease KLSA 001 C, but only 19 are used in the average ore grade calculation for A Zone in Table C, and only 19 are used in the average ore grade calculation for B Zone in Table C. Certain drillholes within KLSA 001 C were not assayed, while others intersected abnormal geology whereby a normal potash zone could not be picked given the limited data available and, therefore, the resulting % K_2O and % water insoluble content could not be evaluated with confidence.

Drillhole assay data for the A Zone at Lanigan give an estimated mean grade of 25.29% K_2O with 5.78% water insolubles. Drillhole assay data for B Zone at Lanigan give an estimated mean grade of 23.21% K_2O with 5.59% water insolubles.

Table C: Assay results for all potash test holes within Lanigan Lease KLSA 001 C.

Location	Year Drilled	A Zone			B Zone		
		Interval (m)	% K_2O Equiv.	% Water Insol.	Interval (m)	% K_2O Equiv.	% Water Insol.
01-29-033-22 W2	1955	3.66	27.68	6	*5.49*	*	*
13-34-033-23 W2	1956	–	*	*	–	*	*
16-12-034-24 W2	1956	–	*	*	*4.51*	*25.77*	*
12-24-034-23 W2	1957	3.66	25.61	2.78	*5.12*	*18.51*	*2.37*
04-28-033-23 W2	1958	3.66	25.87	2.13	*4.85*	*25.75*	*6.3*
04-29-032-22 W2	1959	–	*	*	–	*	*
13-11-033-23 W2	1959	3.66	21.17	9.65	*4.16*	*26.85*	*5.5*
09-26-033-23 W2	1959	3.66	27.33	2.24	*4.51*	*25.18*	*6.6*
03-10-034-23 W2	1959	3.66	22.06	*	*4.07*	*23.97*	*5.7*
01-10-033-24 W2	1959	3.66	27.32	*	*4.92*	*24.58*	*4.2*
04-24-033-24 W2	1959	3.66	25.68	1.91	*5.19*	*24.02*	*5*
13-18-033-22 W2	1960	3.66	26.29	7.1	*4.72*	*22.84*	*8.15*
08-02-033-23 W2	1960	3.66	26.93	7.1	*7.59*	*15.73*	*5.25*
12-04-033-23 W2	1960	3.66	26.53	6.54	*4.76*	*24.61*	*5.8*
12-16-033-23 W2	1960	3.66	23.87	8.4	*4.31*	*25.89*	*4.2*
09-22-033-23 W2	1960	3.66	29.45	5.69	*5.04*	*25.15*	*6.8*
02-30-033-23 W2	1960	–	*	*	–	*	*
13A-30-033-23 W2	1960	3.66	25.36	8.88	*7.3*	*14.79*	*3.51*
01-12-033-24 W2	1960	3.66	24.72	7.33	*5.02*	*26.62*	*4.8*
12-04-033-23 W2	1961	–	*	*	–	*	*
08-03-033-23 W2	1973	–	*	*	–	*	*
01-20-033-23 W2	1975	–	*	*	*5.96*	*22.4*	*5.6*
04-07-033-22 W2	1981	3.66	22.8	4.15	–	*	*
03-26-032-23 W2	1981	3.66	20.59	6.21	4.57	18.8	7.17
04-28-032-23 W2	1981	3.66	25.67	*	4.94	25.59	6.88
16-25-033-23 W2	1981	–	*	*	–	*	*
13-25-032-24 W2	1981	3.66	25.57	6.4	4.88	24.01	6.8
Average (of usable values):		**3.66**	**25.29**	**5.78**	**5.10**	**23.21**	**5.59**

Italicized numbers from Robertson Associates 1976

* Assay sampling incomplete. In drillholes that intersected abnormal potash geology, a normal potash zone could not be picked given the limited data available and, therefore, the resulting % K_2O and % water insoluble content could not be evaluated with confidence.

Due to the remarkably consistent mineralogy and continuity of the resource, as experienced through 50 years of mine production, very little potash exploration drilling has been done at Lanigan since 1961. Instead of exploration drillholes, seismic surveying has been relied upon more and more 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.

vi) Sampling, Analysis and Data Verification

Analysis of Exploration Data

Exploration in the Lanigan area was conducted in the 1950s and 1960s. A second phase of drilling associated with a mine expansion project occurred in 1981. 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 foot) 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.

Regarding quality assurance for analytical results of in-mine samples, the Company participates in the 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.

Mean Potash Mineral-Grade From In-Mine Samples

In the Lanigan A Zone, in-mine grade samples are taken from the floor at the start of every cutting sequence. This is equivalent to a sample taken every approximately 23 m (76 feet) in production panels, and a sample taken every approximately 47 m (155 feet) in development panels. Since mining began in the A Zone in 2007 through to the end of December 2017, a total of 1,485 in-mine potash mineral grade samples have been collected from the Lanigan A Zone. In-mine samples collected and analyzed in 2018 contributed no meaningful change to the overall grade. All samples were analyzed in the Lanigan mill laboratory using up-to-date analysis techniques. The median ore grade for this family of in-mine samples is 24.5% K_2O equivalent and the mean ore grade is 23.5%.

In the Lanigan B Zone, in-mine grade samples are taken from the floor every 60 m (200 feet) in newly mined rooms. In-mine grade data is available from 1999 through to the end of December 2017. A total of 20,230 in-mine potash mineral grade samples have been collected from the Lanigan B Zone. In-mine samples collected and analyzed in 2018 contributed no meaningful change to the overall grade. All samples were analyzed in the Lanigan mill laboratory using analysis techniques that were up-to-date for the era in which the sample was collected. The median ore grade for this family of in-mine samples is 20.8% K_2O equivalent and the mean ore grade is 20.3%.

In 2013, Lanigan modified its cutting practices in the B Zone to improve mine roof stability. This modification involved cutting in a slightly higher, but more stable horizon. The goal of improved mine roof stability was achieved, however, less potash and more salt is now being mined resulting in a slightly lower reported ore grade for B Zone.

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. This is the methodology that was used to determine an estimate of bulk-rock density for the Lanigan B Zone. An obvious benefit of this approach is that a mean value computed on the distribution (20,230 sample points) has a much greater confidence interval than a mean value computed from 19 drillhole assays.

The main mineralogical components of the ore zones of Saskatchewan's Prairie Evaporite Formation are:

- Halite – NaCl
- Sylvite – KCl
- Carnallite – $KMgCl_3\ 6(H_2O)$
- Insolubles – dolomite, muscovite, clinochlore, potassium feldspar, illite, quartz, anhydrite and other minor mineral components

All Nutrien potash facilities measure and record the in-mine % K_2O grade and insoluble content of the mined rock. In addition, carnallite content is also measured at Lanigan since it can be a component of the lower portion of the B Zone. Selective mining is generally employed when carnallite is encountered in B Zone production mining. This is performed by taking only a single lift with the mining machine through the upper portion of the B Zone mining horizon, leaving much of the carnallite mineralization in the floor unmined. The B Zone carnallite that does remain in the ore stream is accounted for during analysis. From this set of measurements, the density of the ore can be estimated. The required composition and mineral density information for each mineral component is given below (sourced from Webmineral Mineralogy Database, 2018):

Halite – NaCl

- Na 39.34%
- CL 60.66%
- Oxide form Na_2O 53.03%
- Mineral density 2170 kg/m^3

Sylvite – KCl

- K 52.45%
- CL 47.55%
- Oxide form K_2O 63.18%
- Mineral density 1990 kg/m^3

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Carnallite – $KMgCl_3 \cdot 6H_2O$

- K 14.07%
- Mg 8.75%
- H 4.35%
- Cl 38.28%
- O 34.55%
- Oxide form K_2O 16.95%
- Oxide form MgO 14.51%
- Oxide form H_2O 38.90%
- Mineral density 1600 kg/m^3

Insolubles (Lanigan B Zone)

- Component minerals: dolomite, muscovite, clinochlore, potassium feldspar, illite, quartz, anhydrite and other minor mineral components
- Average density 2870 kg/m^3 (Nutrien Pilot Plant, 2018)

Note that the estimate of the value for insoluble density is based on known densities of the constituent parts of the insoluble components of B Zone mineralization and the average occurrence of these insoluble components, which is known from the nearly 50 years of mining experience at Lanigan. Assuming the lowest plausible density of insolubles known for Saskatchewan potash deposits of this nature, the effect upon overall bulk-rock ore density and reserve calculations would be negligible.

The mineral composition of B Zone potash ore is halite, sylvite, carnallite and insolubles. The effect of % K_2O as carnallite is removed from the total % K_2O measurements leaving % K_2O values that are only due to sylvite. From 20,230 Lanigan B Zone in-mine grade samples, raw ore composition is:

% Sylvite	=	30.8 (converted from % K_2O)
% Insolubles	=	4.8
% Carnallite	=	4.9

The percent of halite is assumed to be:

% Halite	=	(100-% Sylvite-% Insol.-% Carnallite)
	=	(100–30.8-4.8–4.9)
	=	59.5

Applying this methodology and using these mean grade data give a mean bulk-rock density for Lanigan B Zone potash of:

$\mathbf{RHO_{bulk\text{-}rock}}$ = (Halite density * % Halite) +
(Sylvite density * % Sylvite) +
(Carnallite density * % Carnallite) +
(Insol. density * % Insol.)
= (2170 * % Halite) +
(1990 * % Sylvite) +
(1600 * % Carnallite) +
(2870 * % Insol.)
= 2120

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

This method is as accurate as the B Zone ore grade measurements and mineral density estimates are.

To date, not enough A Zone mining has been carried out at Lanigan to permit the calculation of a proper in-situ bulk-rock potash density based solely on in-mine grade samples. A Zone mining has proven successful at Lanigan and takes place in several different geographic locations within the Mineral Lease. Therefore, it is likely that, in the future, enough in-mine samples will be available to support the calculation of an accurate in-situ bulk-rock density for A Zone potash ore. However, in the interim, Allan Potash's in-situ bulk-rock density for A Zone potash is used; this has been calculated using 6,738 in-mine samples from the Allan A Zone:

$RHO_{bulk\text{-}rock}$ (Lanigan A Zone) = $RHO_{bulk\text{-}rock}$ (Allan A Zone) = 2110 kg/m^3

This estimate is considered acceptable since both Allan A Zone and Lanigan A Zone are the same potash seam.

Assay Data Verification

Original drill core assays were studied by independent consultant David S. Robertson and Associates (1976). The original assay results for core samples from historical drillholes were taken as accurate in these studies, as there is no way to reliably reanalyze these samples. Most of the remaining samples in storage have long since deteriorated to the point where they are not usable. Nutrien technical staff Jennifer Scott (P.Geo) and Tanner Soroka (P.Geo) reanalyzed assay results from the A Zone using a 3.66 m (12') mining interval, the mining height currently used in the Lanigan A Zone. Former Company staff evaluated assay results from potash test holes drilled in 1981.

Ore grades of in-mine samples are measured in-house at the Lanigan 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 does occur.

It should be noted that assay results from historical drillholes match mine sample results closely – within approximately 0.9% for A Zone and 1.4% for B Zone – even though sample spacing is obviously much greater in the case of drillholes. This fact is a validation of the methodology. Based on 50 years of in-mine experience at Lanigan, we consider these historical assay results to be acceptable and to provide a good basis for estimating ore grade in areas of future mining at Lanigan. However, the A Zone mean mineral grade of 23.5% K_2O equivalent determined from 1,485 in-mine grade samples, and the B Zone mean mineral grade of 20.3% K_2O equivalent determined from 20,230 in-mine grade samples is thought to provide the most accurate measurement of potash grade for the Lanigan mine.

Exploration Data Verification

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 minimal exploration drilling has been carried out at Lanigan in recent years.

Initial sampling and assaying of cores was done during potash exploration at Lanigan in the 1950s and 1960s. Methods were consistent with standard procedures for that era. The mine began production in 1968 and, with the exception of a potash test hole in 1975 and four potash test holes in 1981 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 Lanigan have been collected, analyzed 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 reserve and mineral resource estimates for Lanigan mine 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 mine site 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.

vii) Mineral Processing and Metallurgical Testing

At Lanigan, potash ore has been mined and concentrated to produce saleable quantities of high-grade finished potash products since 1968. Products include granular, standard and suspension grade potash for agricultural use.

Over the 50-year mine life, 207.762 million tonnes of potash ore have been mined and hoisted to produce 60.276 million tonnes of finished potash product (from startup in 1968 to December 31, 2018). Given this level of sustained production over 50 years, basic mineralogical processing and prospective metallurgical testing of Lanigan potash is not considered relevant.

viii) Mineral Resource and Mineral Reserve Estimates

Definitions of Mineral Resources

See “Mineral Projects – a) Allan Potash Operations – viii) Mineral Resource and Mineral Reserve Estimates – Definitions of Mineral Resource” for an overview of CIM’s mineral resource categories and the Company’s general characterization of mineral resource categories for its potash mines.

The Lanigan mine began production in 1968, and since then just seven potash exploration drillholes have been drilled in the Lanigan lease area; three of which are unusable for assay analysis. 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 us with an observation-based understanding of the potash mineralized zones at Lanigan that is far superior to the level of understanding provided by any surface drilling based exploration program. We believe that our approach provides a body of information that guides and constrains our exploration inferences in a much better way than could be achieved from any conventional exploration investigation in areas immediately surrounding, and contiguous to, the Lanigan potash mine.

Mineral Resource Estimates

Exploration information used to calculate reported mineral resource tonnages at Lanigan 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 described above, all mineral rights leased or owned by the Company, and within Crown Subsurface Mineral Lease KLSA 001 C, 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 (A Zone):	3.66 meters (12’)
Mining Height (B Zone):	4.88 meters (16’)
Ore Density (A Zone):	2.110 tonnes/cubic meter
Ore Density (B Zone):	2.120 tonnes/cubic meter

The mineral resources for Lanigan as of December 31, 2018 are as follows:

Lanigan A Zone Resource:		
Inferred Resource	671	million tonnes
Indicated Resource	1,325	million tonnes
Measured Resource	2,142	million tonnes
Total A Zone Resource	4,138	million tonnes
Lanigan B Zone Resource:		
Inferred Resource	899	million tonnes
Indicated Resource	1,775	million tonnes
Measured Resource	2,578	million tonnes
Total B Zone Resource	5,252	million tonnes
Total Resource for Lanigan (A Zone + B Zone):		
Inferred Resource	1,570	million tonnes
Indicated Resource	3,100	million tonnes
Measured Resource	4,720	million tonnes
Total A Zone + B Zone Resource	9,390	million tonnes

The average mineral grade of the Lanigan A Zone Mineral Resource is 23.5% K_20 equivalent, and was determined from 1,485 in-mine samples at Lanigan. The average mineral grade of the Lanigan B Zone Mineral Resource is 20.3% K_20 equivalent, and was determined from 20,230 in-mine samples at Lanigan.

The tonnage reported as Lanigan A Zone Measured Resource is comprised of both potash ore that is within 1.6 km (1 mile) of A Zone mine workings, and potash ore that is left behind as pillars in mined-out areas of the A Zone at Lanigan. Also included as Lanigan A Zone Measured Resource is the potash ore within 1.6 km (1 mile) of drillholes for which A Zone assay results are available.

Similarly, the tonnage reported as Lanigan B Zone Measured Resource is comprised of both potash ore that is within 1.6 km (1 mile) of B Zone mine workings, and potash ore that is left behind as pillars in mined-out areas of the B Zone at Lanigan. Also included as Lanigan B Zone Measured Resource is the potash ore within 1.6 km (1 mile) of drillholes for which B Zone assay results are available.

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 Lanigan, in-place pillar mineralization remains as a mineral resource rather than a mineral reserve at this time.

Definitions of Mineral Reserve

See “Mineral Projects – a) Allan Potash Operations – viii) Mineral Resource and Mineral Reserve Estimates – Definitions of Mineral Reserve” for an overview of CIM’s mineral reserve categories and the Company’s general characterization of mineral reserve categories for its potash mines.

Along with this approach, analysis of in-mine samples for potash grade has provided us with an observation-based understanding of the potash mineralized zone at Lanigan 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 Lanigan.

Mineral Reserve Estimates

Using the definitions outlined above, part of the Lanigan A Zone and B Zone Measured Resource has been converted to Mineral Reserve. The assigned mineral reserve category is dependent on proximity to sampled mined entries also described above. An overall extraction rate for the Lanigan mine has been applied to the qualifying area outlined as measured resource.

The overall extraction rate at the Lanigan mine is 26%. 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). Since an extraction rate has been applied, mineral reserves are considered recoverable ore and are reported as such.

Currently, in any specific mining block at Lanigan, only one zone is mined (i.e., bi-level mining is not in practice). As such, mineral reserve has been split by ore zone that will be mined in the future; A Zone Mineral Reserve and B Zone Mineral Reserve do not overlap. Unmined B Zone potash mineralization directly underlying the defined A Zone Mineral Reserve is classified as B Zone Measured Resource. In the same way, unmined A Zone potash mineralization directly overlying the defined B Zone Mineral Reserve is classified as A Zone Measured Resource.

The mineral reserves for Lanigan as of December 31, 2018 are as follows:

Lanigan A Zone:		
Probable Reserve	142	million tonnes
Proven Reserve	19	million tonnes
Total A Zone Reserve =	161	million tonnes
Lanigan B Zone:		
Probable Reserve	287	million tonnes
Proven Reserve	92	million tonnes
Total B Zone Reserve =	379	million tonnes
Total for Lanigan (A Zone + B Zone):		
Probable Reserve	429	million tonnes
Proven Reserve	111	million tonnes
Total A Zone and B Zone Reserve =	540	million tonnes

The average mineral grade of the Lanigan A Zone Mineral Resource is 23.5% K_20 equivalent, and was determined from 1,485 in-mine samples at Lanigan. The average mineral grade of the Lanigan B Zone Mineral Resource is 20.3% K_20 equivalent, and was determined from 20,230 in-mine samples at Lanigan.

ix) 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 Lanigan, 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.

Potash ore was first hoisted at Lanigan in the fall of 1968. The Lanigan 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.

Most recently, mill rehabilitation, mine expansion and hoist improvement projects were completed at Lanigan between 2005 and 2010. The expansion construction was carried out without significant disruption to existing potash production from the site. As of December 31, 2018, annual nameplate capacity for Lanigan was 3.8 million tonnes and annual operational capability is 2.0 million tonnes of finished potash products (concentrated KCl).

Virtually all Lanigan underground mining rooms are in one of two potash mineralized zones within the Patience Lake Member of the Prairie Evaporite Formation (the host evaporite salt). In this Member, there are two potash seams named A Zone (the upper seam) and B Zone (the lower seam); at present, both the A Zone and B Zone are being mined at Lanigan. The A Zone and B Zone are separated by approximately 4 m to 6 m of tabular salt. In contrast, some potash mines further east in Saskatchewan mine in a different potash layer, the Esterhazy Member of the Prairie Evaporite Formation. At Lanigan, mine elevations range from approximately 940 m to 1030 m, averaging approximately 990 m. These depths to potash mineralization are anticipated over most of the Lanigan lease area. Mine workings are protected from aquifers in overlying formations by approximately 7 m (A Zone) to 14 m (B Zone) 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 Lanigan mine is a conventional underground mining operation where continuous mining machines are used to excavate potash ore by the stress-relief method in the A Zone and the long-room and pillar mining method in the B Zone. Currently, in any specific mining block, only one zone is mined (i.e., bi-level mining is not in practice). 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 actual mining thickness at Lanigan is dictated by the height of continuous boring machines used to cut the ore. The A Zone mining interval is fixed at 3.66 m (12’). The 3.66 m (12’) mining height also allows for comfortable working headroom and efficient extraction of potash ore. The thickness of the B Zone mining horizon varies somewhat and there is some flexibility in the thickness of the potash ore that is extracted there. Production mining machines have a fixed mining height of 2.74 m (9’). In a normal production room ore is extracted in two lifts resulting in a mining height of approximately 4.88 m (16’).

Carnallite sometimes occurs in minor amounts in the basal part of the B Zone. Carnallite is an undesirable mill feed material. If more than minor amounts of carnallite are detected in the floor after the first lift of a production room in the B Zone, it is left in the floor (i.e., a second lift is not cut). In these instances the B Zone mining height is just 2.74 m (9’). Carnallite is found in trace amounts in the A Zone; however, due to its low occurrence, mining practices remain unchanged when it is encountered.

Mining systems used in both A Zone and B Zone cut to a marker (clay) seam that is slightly above the high-grade mineralized zone to establish a safe and stable mine roof. In both zones, 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.

In 2013, Lanigan modified its cutting practices in the B Zone to improve mine roof stability. This modification involved cutting in a slightly higher, but more stable horizon. The goal of improved mine roof stability was achieved; however, less potash and more salt is now being mined resulting in a slightly lower reported ore grade for B Zone.

Conservative local extraction rates (never exceeding 45% in any mining block) are employed at all Saskatchewan mines, including Lanigan, 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 secondary egress. The Service Shaft is used for service access, and exhausting ventilation from the mine.

Over the 50-year mine life, 207.762 million tonnes of potash ore have been mined and hoisted at Lanigan to produce 60.276 million tonnes of finished potash products (from startup in 1968 to December 31, 2018). The life-of-mine average concentration ratio (raw ore/finished potash products) is 3.45 and the overall extraction rate over this time period is 26%.

x) Processing and Recovery Operations

At Lanigan, potash ore has been mined and concentrated to produce saleable quantities of high-grade finished potash products since 1968. Products include granular, standard and suspension grade potash for agricultural use.

Both floatation methods and crystallization methods are used to concentrate potash ore into finished potash products at the Lanigan mill. Raw potash ore is processed on surface and concentrated red potash products are sold and shipped to markets in North America and offshore.

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

- 2016: 2.030 million tonnes finished potash products at 60.72% K_2O (average grade)
- 2017: 1.817 million tonnes finished potash products at 60.92% K_2O (average grade)
- 2018: 1.962 million tonnes finished potash products at 60.97% K_2O (average grade)

Over the past decade, actual mill recovery rates have been between 75.6% and 85.9%, averaging 82.7%.

Given the long-term experience with potash geology and actual mill recovery at Lanigan, 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 mine sites and at Nutrien research facilities. At Lanigan, this is no exception; test work to optimize circuit performance and ensure product quality is carried out on an ongoing basis.

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

At present, high voltage power capacity at Lanigan is 52 MVA. The ten-year projection of power utilization indicates that the utility can meet all foreseeable future demand. The Lanigan operation requires a sustained fresh water supply for the milling process which is provided by a waterline from the Bradwell Reservoir (approximately 10 km distant) and from a regional aquifer called the Hatfield Valley Aquifer. This water supply provides a sustainable source of process water for Lanigan milling operations without having any impact on other users of water in the area.

xi) Infrastructure, Permitting and Compliance Activities

The tailings management strategy at all Nutrien potash mines in Saskatchewan, including Lanigan, is one of sequestering solid mine tailings in an engineered and provincially licensed TMA near the surface plant site. The Lanigan TMA currently covers an area of approximately 708 hectares (1,750 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 south and south-west sides of the Lanigan TMA in the areas where near-surface aquifers could be impacted by mine waters. Near-surface geology on all other sides 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.

In Saskatchewan, all potash tailings management activities are carried out under an “Approval to Operate” granted by the MOE. The Lanigan mine is in compliance in all material respects with all regulations stipulated by the Environmental Protection Branch of the MOE. The current Lanigan Approval to Operate has been granted to July 1, 2028, 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. The Company has conducted numerous studies of this topic, and the most recent decommissioning and reclamation plan for Lanigan was approved by MOE technical staff in October 2016. Because the current expected mine life for Lanigan 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 Lanigan, 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., Allan, Cory, Lanigan, Patience Lake, Rocanville and Vanscoy).

xii) Capital and Operating Costs

The Lanigan 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.

Most recently, mill rehabilitation, mine expansion and hoist improvement projects were completed at Lanigan between 2005 and 2010. The expansion construction was carried out without significant disruption to existing potash production from the site.

xiii) Exploration, Development and Production

Potash production in any given year at the Lanigan 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 (6.795 million tonnes of potash ore mined and hoisted per year) is sustained, and if mineral reserves remain unchanged, then Lanigan A Zone mine life is 24 years from December 31, 2018 and Lanigan B Zone mine life is 56 years from December 31, 2018.

d) Rocanville Potash Operations

Certain scientific and technical information regarding our Rocanville potash operations is based on the technical report titled “National Instrument 43-101 Technical Report on Rocanville Potash Deposit (KL 305) Saskatchewan, Canada” dated effective December 31, 2018 (the “Rocanville Technical Report”) prepared by Craig Funk, B.Sc., M.Sc., P.Eng., P.Geo., who is a “qualified person” as defined in NI 43-101. The Rocanville Technical Report has been filed with the securities regulatory authorities in each of the provinces of Canada and furnished to the SEC. Portions of the following information are based on assumptions, qualifications and procedures that are not fully described herein. References should be made to the full text of the Rocanville Technical Report.

i) Project Description, Location and Access

General

The Rocanville mine is located in southeastern Saskatchewan near the Saskatchewan-Manitoba Provincial Boundary, approximately 15 kilometers northeast of the town of Rocanville, Saskatchewan.

The legal description (Saskatchewan Township/Range) of the Rocanville surface plant is Section 22 Township 17 Range 30 West of the 1st Meridian. More precisely, the Rocanville #2 Shaft collar is located at:

- Latitude: 50 degrees 28 minutes 19.54 seconds North
- Longitude: 101 degrees 32 minutes 42.58 seconds West
- Elevation: 480.36 meters above mean SL
- Northing: 5,596,826.122 m
- Easting: 745,137.307 m
- Projection: UTM
- Datum: NAD83
- Zone: 13

The Company owns approximately 3,061 hectares (7,564 acres) of surface rights required for current Rocanville mine operations, including all areas covered by the existing surface plant and TMA, and all surface lands required for anticipated future Rocanville mine and expanded milling operations.

The Rocanville mine surface facilities are accessed by an existing paved road that is part of the Saskatchewan Provincial Highway System. Most finished potash products are shipped by rail over existing track, with some product shipped by truck over the North American highway system.

The Rocanville mine is served by a number of towns and villages within 50 kilometers of the mine site. The nearest towns are Rocanville (15 km distant), Moosomin and Esterhazy (both 50 km distant). The nearest city is Yorkton (100 km distant). Rocanville is situated near the north extent of the Great Plains of North America. Topography is relatively flat, with gently rolling hills and occasional valleys.

Mineral Rights

Mineral rights at Rocanville are mined pursuant to subsurface mineral leases with the Crown and with Freehold mineral rights owners.

The original Rocanville Crown subsurface mineral lease KL 111 was entered into in June 1966. In the following years various minor amendments were made to this Crown lease, resulting in Crown subsurface mineral lease KL 111R. KL 111R covered approximately 24,146 hectares (59,668 acres) of Crown mineral rights.

In May 2007, application was made for a Permit to Prospect for Subsurface Minerals (Potash Exploration Permit) covering approximately 26,184 hectares (64,702 acres) of Crown mineral rights in the area just west of and adjoining the existing Rocanville Crown Lease KL 111R. In late 2007, a major expansion of the Rocanville mine was announced. Shortly after this, in May 2008, Potash Exploration Permit KP 338A was issued. A potash exploration program was initiated in 2007 and completed in 2008 to determine the extent of potash mineralization to the west of the mine workings.

A new Crown Subsurface Mineral Lease numbered KLSA 002 was issued in February 2010 incorporating all Crown mineral rights within the existing Crown Lease KL 111R and approximately two-thirds of Crown mineral rights covered in KP 338A. The portion of the lands that were not part of the Lease amalgamation remained as Crown Exploration Permit KP 338B until December 2016 when they were converted to a Crown Subsurface Mineral Lease numbered KL 249.

In October 2017, KL 305 was formed by the amalgamation of Crown Subsurface Leases KLSA 002 (KLSA 002 B, following minor amendments) and KL 249. KL 305 covers an area of approximately 113,975 hectares (281,639 acres). At Rocanville, the Company has leased potash mineral rights for 54,184 hectares (133,892 acres) of Crown land and owns or has leased approximately 45,612 hectares (112,710 acres) of Freehold land within the lease boundary. The Rocanville Crown lease term is for a period of 21 years from October 2017, 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 current Rocanville Crown lease area, 80,181 hectares (198,132 acres) are mined pursuant to Unitization Agreements with mineral rights holders (Crown and Freehold) within two Unitized Areas. Rocanville Unit Area #1 has been in place since 1970 when mining began, was amended in 2006 and includes 35,234 hectares (87,065 acres) of mineral rights. Rocanville Unit Area #2 has been in place since 2011 and includes 44,947 hectares (111,067 acres) of mineral rights.

ii) History

See “Mineral Projects – a) Allan Potash Operations – ii) History” above for a general overview of the history of potash mines in Saskatchewan.

Exploration drilling for potash in the Rocanville, Saskatchewan area was carried out in the 1960s. Thirty-four potash test holes were drilled during this early exploration phase: 25 in Saskatchewan and nine in Manitoba. The Rocanville mine was built by a company called Sylvite of Canada Ltd. (a division of Hudson’s Bay Mining and Smelting Ltd.) in the late 1960s, and potash production began at Rocanville in 1970. The mine has run on a continuous basis since then (other than during short-term shutdowns taken for inventory management purposes). Potash Corporation of Saskatchewan Inc. acquired the Rocanville mine in 1977.

A major expansion to increase the nameplate capacity of Rocanville from 3.0 million tonnes to approximately 6.0 million tonnes of finished potash products per year was announced in 2007. Expansion work was substantially completed by the end of 2016 and production was ramped up through 2017 when a nameplate capacity of 6.5 million tonnes of finished potash product was announced. The operational capability at Rocanville to December 31, 2018 is 5.2 million tonnes of finished potash product.

iii) Geological Setting, Mineralization and Deposit Types

See “Mineral Projects – a) Allan Potash Operations – iii) Geological Setting, Mineralization and Deposit Types – Geological Setting and Mineralization” above for a general overview of geological setting and mineralization for potash mines in Saskatchewan.

Over the past three years (2016, 2017, 2018), the average, measured potash ore grade of the mill feed at Rocanville was 23.2% K_20 equivalent. The average ore grade reported from 31 surface drillhole intersections, all within Rocanville Lease KL 305, is 22.4% K_20 equivalent. The average ore grade observed from 39,245 in-mine chip samples taken over 48 years of mining is 23.4% K_20 equivalent.

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.

The Rocanville potash deposit lies within the Esterhazy Member of the Prairie Evaporite Formation. The Patience Lake Member potash beds are not present in the Rocanville Area. The Belle Plaine and White Bear Members are present, but not conventionally mineable in the Rocanville area. The potash zone at Rocanville is approximately 2.4 meters thick and occurs near the top of the Prairie Evaporite Formation. Potash mineralization in this area is flat-lying and continuous. Mine elevations range from approximately 895 m to 1040 m, averaging approximately 955 m. Within the Rocanville Lease, depths to the top of the ore zone can reach up 1250 m (the deepest potash exploration drillhole), but are expected to be shallower than 1200 m over most of the lease area. Salt cover from the ore zone to overlying units is approximately 30 m. The Rocanville mine operates as a conventional underground potash mine.

iv) Exploration

Before the Rocanville mine was established in 1970, all exploration consisted of drilling test holes from surface and analysis of core from these drillholes. The Company did not conduct any exploration drilling after start-up until 2008 when a potash exploration program was initiated under the direction of Company staff to determine the extent of potash mineralization in the western portion of the current Lease. Between 2007 and 2008 exploration work consisted of:

- Analysis of data from five existing exploration drillholes (well-logs from surface casing to total depth within or below the Prairie Evaporite Formation)
- Analysis of 377 km of existing 2D surface seismic data
- Acquisition and analysis of 124 km^2 (48 $miles^2$) of 3D surface seismic data,
- Drilling of four potash exploration drillholes from surface to the base of the Prairie Evaporite Formation (all with a complete suite of modern well-logs plus coring of the potash mineralized zone)
- Drilling of one shaft pilot drillhole (with a complete suite of modern well-logs plus coring of the entire rock column from surface to below the potash mineralized zone)

In most of southern Saskatchewan, potash mineralization is in place wherever Prairie Evaporite Formation salts exist; they 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 is effectively mitigated.

A total of 1,111 linear kilometers of 2D seismic lines have now been acquired at Rocanville. Between 1988 and 2017, 3D seismic has been acquired over an area covering 627 square kilometers. The most recent seismic survey was conducted in 2017 and accounted for 96 square kilometers of the total square kilometers stated above.

Experience has shown that the potash mining zone is continuous when seismic data are undisturbed and flat-lying. 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.

v) Drilling

For the original Rocanville potash test holes drilled in 1960s, the primary objective of this drilling was to sample the potash horizon 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, a carbonate immediately overlying the Prairie Evaporite 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 analyzed to establish potash grades.

Original Rocanville drillhole assay data are taken from Robertson et al. (1977), where the best 2.44 m (8') mining interval – the original mining height at Rocanville – is reported. As explained in the Robertson Associates report, the Rocanville prospect was originally explored by 34 drillholes in Saskatchewan and Manitoba. Of these original drillholes, 26 are located within the current Rocanville Lease KL 305 and are shown in Table D below.

Potash intersections for one drillhole in Table D revealed anomalously low grades. With nearly 50 years of mining experience at Rocanville, it is the opinion of the authors that areas of low grade (i.e., <15% K_2O) are localized with a relatively small lateral extent. Therefore, the average grade calculation does not include these drillholes.

No further exploration drilling was done by the Company at Rocanville until 2008 when four potash exploration drillholes and one shaft pilot hole were completed. The basic drilling program was specified by Company technical staff.

Each of the 2008 exploration drillholes and the shaft pilot hole were drilled in such a way as to protect the potash minerals from dissolution while core sampling through the targeted mining zone (the Esterhazy Member of the Prairie Evaporite Formation). To accomplish this, the aquifers above the top of salt (top of the Prairie Evaporite) were isolated behind a casing before the drilling mud was changed over to an oil based system. Each drillhole penetrated approximately 10 m into the Winnipegosis Formation, which lies immediately below Prairie Evaporite salts, before drilling was terminated (i.e., through the Prairie Evaporite Formation and far enough into the underlying formation to permit proper geophysical logging of the base of salt).

Hydrogeology in the formations immediately overlying the Prairie Evaporite Formation was evaluated in part by core sampling through the Dawson Bay Formation (for examination of porosity and permeability). As well, drill stem tests were run in the Dawson Bay and Lower Souris River Formations. In the shaft pilot hole, core sampling and drill stem testing were done more extensively as part of a comprehensive investigation for a shaft liner design. In every drillhole, coring and testing of formations above the Prairie Evaporite was completed prior to setting the casing and changing the drilling mud to an oil based system.

A standard suite of geophysical logs was run in each drillhole. These logs included: Gamma Ray, Neutron, Density, Electrical Resistivity (or Induction), Sonic (full-waveform P & S) and Caliper. In certain drillholes, additional specialized logs were run for fracture mapping and/or porosity investigation over certain geological intervals. A deviation survey was run in each drillhole; the results of which were found to be minimal (i.e., all holes are vertical). Stages of open-hole logging had to be completed before casing was put in place. The stages depended on formational permeability (such as the Mannville Formation, which is a major regional aquifer and needs to be isolated) and formational composition (it is necessary to change drilling mud when drilling through salts to not dissolve the rock).

Potash core samples from the four 2008 exploration drillholes and the Scissors Creek shaft pilot hole were assayed. The assay results for these drillholes are listed in Table D. Note that 2008 assay results are for the best 2.59 m (8.5') mining interval, since an operational decision was made to develop parts of the western portion of Rocanville Lease KL 305 at a height of 2.59 m (8.5'). This mining height allows for more headroom with minimal negative impact on ore grade. Mining machines at Rocanville use potassium sensing technology to ensure that rooms are always cut in the best available 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 2.51 m (8.25') was applied to mineral resource and reserve calculations.

Drillhole assay data for the Rocanville mining interval gives an estimated mean grade of 22.4% K_2O, with 1.2% water insolubles and 3.6% carnallite (Table D).

Due to the remarkably consistent mineralogy and continuity of the potash, as experienced through 48 years of mine production, very little potash exploration drilling has been done at Rocanville since start-up. 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.

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Table D: Assay results for all potash test holes within Rocanville Lease KL 305.

Weighted Average for 2.44 m (8') Mining Interval				
Drillhole	**Year Drilled**	**% K_2O**	**% Water Insolubles**	**% Carnallite**
01-04-17-30 W1	1957	23.84	1.15	4.34
16-14-017-01W2	1957	Excluded	N/A	N/A
04-20-17-32 W1	1958	22.74	0.95	1.77
08-32-17-30 W1	1959	20.74	1.06	5.18
10-12-17-30 W1	1959	16.35	1.06	7.62
13-16-18-30 W1	1959	20.32	0.75	0.74
05-07-18-30 W1	1961	19.95	1.07	4.92
16-04-18-30 W1	1961	21.89	1.26	5.71
02-11-18-30 W1	1961	24.87	0.97	0.2
01-16-17-30 W1	1964	27.05	1.31	4.29
04-20-17-30 W1	1964	23.86	1.22	0.19
16-22-17-30 W1	1964	29.06	1.38	0.11
14-36-17-30 W1	1964	17.06	0.93	6.8
14-36-17-30 W1*	1964	26.26	1.42	4.76
03-28-17-30 W1	1966	26.32	1.26	6.48
13-14-17-30 W1	1966	23.73	1.4	7.02
04-24-17-30 W1	1966	17.88	0.81	0.19
10-34-17-30 W1	1966	24.85	1.48	0.18
11-25-17-30 W1	1966	19.6	1.15	2.13
11-14-18-30 W1	1966	26.53	1.09	0.22
13-22-17-30 W1	1967	35.1	1.3	5.4
01-14-17-33 W1	1967	25.62	2.72	2.52
13-22-17-33 W1	1967	21.75	2.61	7.24
16-26-17-33 W1	1967	24.01	0.92	0.16
14-05-17-30 W1	1969	15.56	0.96	10.27
01-14-17-30 W1	1971	15.67	1.15	N/A
04-01-019-31W1	1989	22.48	0.64	0.00
06-13-17-32 W1**	2008	23.6	0.41	0.25
08-02-18-32 W1**	2008	20.7	1.06	0.76
13-09-16-33 W1**	2008	23.44	1.42	8.32
04-34-16-33 W1**	2008	15.7	0.67	8.84
09-11-18-33 W1**	2008	18.03	0.36	0.25
Average of 31 useable values:		**22.41**	**1.16**	**3.56**

*Refers to a deflection, or whipstock, off original drillhole
**Refers to drillhole from the 2008 exploration program where the best 2.59 m (8.5') mining interval is reported

vi) Sampling, Analysis and Data Verification

Analysis of Exploration Data

Exploration in the Rocanville area was conducted in two very different time periods: the 1960s, then in 2008. Sampling and assaying of potash cores 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. 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 in half 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. Samples from historical drillholes were sometimes quartered; most historical samples have deteriorated substantially. Exploration drillhole samples from 2008 were halved. Potash samples remain stored at the Subsurface Geological Laboratory of the Saskatchewan Ministry of the Economy (Regina, Saskatchewan).

For the exploration holes drilled in 2008, samples were chemically analyzed at the Nutrien Pilot Plant (under the supervision of the Company's Chief Chemist at the time, D. Matthews, MCIC) using the most accurate methods available for the required elements:

- Potassium ("K") content was analyzed by titration using the STPB (sodium tetraphenylboron) method.
- Sodium ("Na") was analyzed by Atomic Absorption.
- Calcium ("Ca") and Magnesium ("Mg") were analyzed by EDTA (ethylenediaminetetracetate) titration.
- Water Insoluble ("WI") was analyzed gravimetrically.

All wet chemical methods are based upon either American Society of Testing Materials (ASTM) or Association of Official Analytical Chemists (AOAC) methods of analysis. The same samples were also analyzed for process (milling) related properties, namely flotation performance, liberation characteristics, and mineralogical content.

Mineralogical (x-ray diffraction) testing was conducted by the Saskatchewan Research Council Mining and Minerals Division, in Saskatoon, Saskatchewan. The Saskatchewan Research Council geoanalytical laboratories are Standards Council of Canada Accredited, with the laboratory management system operated in accordance with ISO/IEC 17025:2005 (Can-P-4E), General Requirements of the Competence of Mineral Testing and Calibration Laboratories.

Detailed sample preparation was as follows:

1. Place core samples in large flat metal pan. Break with hammer into approximately 2.54 cm (1") pieces.
2. Clean out jaw crusher, and place a clean 18.93 L (5 gallon) pail under crusher. Start up crusher, check 0 setting, and then set gap to 10 mm. (Note: jaw crusher should be running when adjusting gap).
3. Put approximately half of the broken core through the jaw crusher. Shake pan under the jaw crusher occasionally to spread out material. Remove crushed material and place on a full height 5 mesh screen with a full height pan underneath. Shake and tap screen by hand. Place +5 mesh in pan to be re-crushed. Place -5 mesh in a separate pan for crushed material.
4. Repeat step #3 with the other half of the original broken sample.
5. Re-crush the +5 mesh from step #3 & #4 with 10 mm opening on jaw crusher. Screen out +5 and -5.
6. Adjust jaw crusher to 5 mm opening and crush +5. Screen out +5 and -5. Repeat crushing +5 mesh at 5 mm opening.
7. Adjust crusher to 2.5 mm opening and crush +5 mesh. Screen out +5 and -5. Repeat crushing +5 mesh at 2.5 mm opening.
8. Combine all crushed fractions and mix well. Place in a well-labeled bag. Seal tightly.
9. Split out 1/4 from each crushed sample and pulverize for chemical analysis. The remaining 3/4 of the sample is bagged and sealed for future test work.

After chemical analysis was completed, the Company's technical staff identified the ore zone (2.59 m) section of the cores. A composite sample of the ore zone was prepared for each core location. Flotation, liberation and metallurgical analysis were conducted on the composite samples to confirm milling assumptions for the ore in the western portion of Rocanville Lease KL 305.

Regarding quality assurance for analytical results of in-mine samples, the Company participates in the 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.

Mean Potash Mineral-Grade In-Mine Samples

In-mine grade samples are taken at 60 m intervals in every underground mine room at Rocanville. Traditionally, Rocanville in-mine grade samples were collected as chips along a sidewall from back (roof) to floor; this methodology is referred to as channel sampling. In 2015, in-mine grade samples were taken from the floor (i.e., grab sampling) at the same 60 m sampling interval. Nutrien technical staff believe that collecting samples from the floor is as representative of ore grade in the mining interval as channel sampling, and far less labor- intensive. Grab sample results are currently being compared to channel sample results to thoroughly assess the best practice.

To the end of December 2017, 39,245 in-mine ore grade samples were collected and analyzed in the Rocanville mill laboratory using analysis techniques that were up-to-date for the era in which the sample was collected. In-mine samples collected and analyzed in 2018 contributed no meaningful change to the overall grade. The mean ore grade for this family of in-mine samples is 23.4% K_2O equivalent, while the median ore grade for this family of in-mine samples is 23.6% K_2O.

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. This is the methodology that was used to determine an estimate of bulk-rock density for the Rocanville ore zone.

The main mineralogical components of the ore zones of Saskatchewan's Prairie Evaporite Formation are:

- Halite – NaCl
- Sylvite – KCl
- Carnallite – $KMgCl_3$ 6(H_2O)
- Insolubles – dolomite, muscovite, clinochlore, potassium feldspar, illite, quartz, anhydrite and other minor mineral components

All Nutrien potash facilities measure and record the in-mine % K_2O grade and insoluble content of the mined rock. In addition, the Mg content is also measured at Rocanville, since this is proportional to the carnallite content of the ore. From this set of measurements, the density of the ore can be estimated. The required composition and mineral density information for each mineral component is given below (sourced from Webmineral Mineralogy Database, 2018):

Halite – NaCl

- Na 39.34%
- CL 60.66%
- Oxide form Na_2O 53.03%
- Mineral density 2160 kg/m^3

Sylvite – KCl

- K 52.45%
- CL 47.55%
- Oxide form K_2O 63.18%
- Mineral density 1990 kg/m^3

Carnallite – $KMgCl_3 \cdot 6H_2O$

- K 14.07%
- Mg 8.75%
- H 4.35%
- Cl 38.28%
- O 34.55%
- Oxide form K_2O 16.95%
- Oxide form MgO 14.51%
- Oxide form H_2O 38.90%
- Mineral density 1600 kg/m^3

Insolubles

- Component minerals: dolomite, muscovite, clinochlore, potassium feldspar, illite, quartz, anhydrite and other minor mineral components
- Average density 2790 kg/m^3 (Nutrien Pilot Plant, 2018)

The value for insoluble density is based on known densities of the constituent parts of the insoluble components of the mineralization and the average occurrence of these insoluble components, which is known from the nearly 50 years of mining experience at Rocanville. Assuming the lowest plausible density of insolubles known for Saskatchewan potash deposits of this nature, the effect upon overall bulk-rock ore density and mineral resource and reserve calculations would be negligible.

The mineral composition of potash ore at Rocanville is halite, sylvite, carnallite and insolubles. To compute bulk-rock density, the carnallite content must be estimated from the Mg measurements. This is followed by

removing the effect of the carnallite from the % K_2O measurements, leaving % K_2O values that are only due to sylvite; the sylvite percentage is estimated from this adjusted % K_2O. From 39,245 Rocanville in-mine grade samples, raw ore composition is:

% Sylvite	=	35.4 (converted from % K_2O)
% Insolubles	=	1.0
% Carnallite	=	6.1

The percent of halite is assumed to be:

% Halite	=	(100-% Sylvite-% Insol.-% Carnallite)
	=	(100-35.4-1.0–6.1)
	=	57.5

Applying this methodology, and using these mean grade data gives a mean bulk-rock density for Lanigan B Zone potash of:

$RHO_{bulk\text{-}rock}$	=	(Halite density * % Halite) + (Sylvite density * % Sylvite) + (Carnallite density * % Carnallite) + (Insol. density * % Insol.)
	=	(2170 * % Halite) + (1990 * % Sylvite) + (1600 * % Carnallite) + (2790 * % Insol.)
	=	2080

$RHO_{bulk\text{-}rock}$ (Rocanville) = 2080 kg/m^3

This method is as accurate as the ore grade measurements and mineral density estimates are.

Assay Data Verification

Original drillhole ore grade assays were studied by independent consultant David S. Robertson and Associates (1977). The original assay results for core samples from historical drillholes were taken as accurate in these studies, as there is no way to reliably reanalyze these samples. Most of the remaining core samples in storage have long since deteriorated to the point where they are no longer usable.

Assay data for the 2008 core samples were supervised and verified by the Company's former Chief Geologist, T. Danyluk (P.Geo.) .

Ore grades of in-mine samples are measured in-house at the Rocanville mine laboratory by Company staff using modern, standard chemical analysis tools and procedures. These results are not verified by an independent agency; however, check sampling through the SPPA program does occur.

It should be noted that assay results from historical drillholes match mine sample results closely – within approximately 1.0% – even though sample spacing is obviously much greater in the case of drillholes. This fact is a validation of the methodology. Based on 48 years of in-mine experience at Rocanville, we consider these historical assay results to be accurate and to provide an excellent basis for estimating potash grade in areas of future mining at Rocanville. The mean mineral grade of 23.4% K_2O equivalent determined from 39,245 in-mine grade samples is thought to provide the most accurate measurement of potash grade for the Rocanville mine.

Exploration Data Verification

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 drillhole from surface sterilizes

potash mineralization; a safety pillar is required around every surface drillhole once underground mining commences. This is the main reason that minimal exploration drilling has been carried out at Rocanville in recent years.

Initial sampling and assaying of cores was done during potash exploration at Rocanville in the 1960s. Methods were consistent with standard procedures for that era. The mine began production in 1970 and no further core drilling was carried out by the Company at Rocanville until 2008 when the decision was made to expand the mine westward.

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 Rocanville have been collected, analyzed 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 reserve and mineral resource estimates for Rocanville mine 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 mine site 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.

vii) Mineral Processing and Metallurgical Testing

At Rocanville, potash ore has been mined and concentrated using flotation and crystallization methods to produce saleable quantities of high-grade finished potash products since 1970. Products include granular and standard grade potash used for agriculture applications.

Over the 48-year mine life, 248.193 million tonnes of potash ore have been mined and hoisted at to produce 80.967 million tonnes of finished potash product (from startup in 1970 to December 31, 2018). Given this level of sustained production over 48 years, basic mineralogical processing and prospective metallurgical testing of Rocanville potash is not considered relevant.

viii) Mineral Resource and Mineral Reserve Estimates

Definitions of Mineral Resource

See “Mineral Projects – a) Allan Potash Operations – viii) Mineral Resource and Mineral Reserve Estimates – Definitions of Mineral Resource” for an overview of CIM’s mineral resource categories and the Company’s general characterization of mineral resource categories for its potash mines.

The Rocanville mine began production in 1970 and, with the exception of five holes drilled during the 2008 exploration program, no further core drilling has been carried out by the Company 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 us with an observation-based understanding of the potash mineralized zone at Rocanville that is far superior to the level of understanding provided by any surface drilling based exploration program. We believe that our approach provides a body of information that guides and constrains our exploration inferences in a much better way than could be achieved from any conventional exploration investigation in areas immediately surrounding, and contiguous to, the Rocanville potash mine.

Mineral Resource Estimate

Exploration information used to calculate reported mineral resource tonnages at Rocanville consist of both physical sampling (drillhole and in-mine) and surface seismic (2D and 3D) as discussed in earlier sections. All mineral rights leased or owned by the Company and within Crown Subsurface Mineral Lease KL 305 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:	2.51	meters (8.25 feet)
Ore Density:	2.080	tonnes/cubic meter

The potash resources for Rocanville division, as of December 31, 2018 are as follows:

Inferred Resource	1,376	million tonnes
Indicated Resource	1,342	million tonnes
Measured Resource	1,761	million tonnes
Total Resource =	4,479	million tonnes

The average mineral grade of the Rocanville Mineral Resource is 23.4% K_20 equivalent, and was determined from 39,245 in-mine samples at Rocanville.

The tonnage reported in the Rocanville Measured Resource is comprised of the potash that is within 1.6 km (1 mile) of physically sampled location (i.e., drillhole or mine working). Also included as Measured Resource is the potash that is left behind as pillars in mined-out areas of the Rocanville 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 Rocanville, in-place pillar mineralization remains as a Mineral Resource rather than a Mineral Reserve at this time.

Definitions of Mineral Reserve

See “Mineral Projects – a) Allan Potash Operations – viii) Mineral Resource and Mineral Reserve Estimates – Definitions of Mineral Reserve” for an overview of CIM’s mineral reserve categories and the Company’s general characterization of mineral reserve categories for its potash mines.

Along with this approach, analysis of in-mine samples for potash grade has provided us with an observation-based understanding of the potash mineralized zone at Rocanville 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 Rocanville.

Mineral Reserve Estimate

Using the definitions outlined above part of the Rocanville Measured Resource has been converted to Mineral Reserve. The assigned Mineral Reserve category is dependent on proximity to sampled mined entries also described above.

The overall extraction rate at the Rocanville mine is 31%. 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.

The Mineral Reserves for Rocanville Potash as of December 31, 2018 are as follows:

Probable Reserve	348	million tonnes
Proven Reserve	195	million tonnes
Total Reserve (Proven + Probable) =	543	million tonnes

The average mineral grade of the Rocanville Mineral Reserve is 23.4% K_2O equivalent, and was determined from 39,245 in-mine samples at Rocanville.

ix) 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 Rocanville 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 shafts;
- 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 early 1970, and the first potash ore was hoisted by the fall of that year. The Rocanville mine has run on a continuous basis since the first ore was hoisted in 1970, other than short-term shutdowns taken for inventory management purposes or occasional plant maintenance and construction work.

In recent years the Rocanville mine has undergone a major expansion which brought the nameplate capacity of the Rocanville facility to 6.5 million tonnes of finished potash products per year. This work involved sinking a third shaft, enhancement of hoists, major expansions of both mine and mill, major improvements to loadout facilities, and other infrastructure improvements. The recent Rocanville expansion, which was announced in 2007, was substantially complete in 2016 and production was ramped up through 2017. The operational capability at Rocanville to December 31, 2018 is 5.2 million tonnes of finished potash product.

Virtually all Rocanville underground mining rooms are in one potash mineralized zone within the Esterhazy Member the Prairie Evaporite Formation (the host evaporite salt). In contrast, Nutrien potash mines further west in Saskatchewan mine in a different potash layer, the Patience Lake Member of the Prairie Evaporite. Rocanville mine elevations range from approximately 895 m to 1040 m, averaging approximately 955 m. Within the Rocanville Lease, depths to the top of the ore zone can reach up 1250 m (the deepest potash exploration drillhole), but are expected to be shallower than 1200 m over most of the lease area. Mine workings are protected from aquifers in overlying formations by approximately 30 m of overlying salt and potash beds, along with salt plugged porosity in the Lower Dawson Bay Formation, a carbonate layer lying immediately above potash hosting salt beds.

The Rocanville mine is a conventional underground mining operation whereby continuous mining machines are used to excavate the potash ore by the long-room and pillar 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 Rocanville potash seam is approximately 2.3 m (7.5') thick, with gradations to lower grade sylvinite salts immediately above and below the mining horizon. The actual mining thickness at Rocanville is dictated by the height of continuous boring machines used to cut the ore, which are designed to cut slightly thicker than the high-grade mineralized zone. Historically, Rocanville borers cut at a thickness of 2.44 m (8'). These five older machines were recently adjusted to cut a thicker 2.51 m (8.25') mining height. Six newly acquired boring machines cut a slightly thicker 2.59 m (8.5') mining height. This mining

height allows for more headroom with minimal negative impact on ore grade. Mining machines at Rocanville use potassium sensing technology to ensure that rooms are always cut in the best available 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 2.51 m (8.25') was applied to mineral resource and reserve calculations.

Conservative local extraction rates (never exceeding 45% in any mining block) are employed at all Saskatchewan mines, including Rocanville, 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 960 m from the potash level through the vertical shafts to a surface mill. Both production shafts also provide exhaust ventilation from underground workings; the third shaft from surface at Scissors Creek is used for service access, fresh air ventilation and second egress.

Over the 48-year mine life, 248.193 million tonnes of potash ore have been mined and hoisted at Rocanville to produce 80.967 million tonnes of finished potash products (from startup in 1970 to December 31, 2018). The life-of-mine average concentration ratio (raw ore/finished potash products) is 3.07 and the overall extraction rate over this time period is 31%.

x) Processing and Recovery Operations

At Rocanville, potash ore has been mined and concentrated to produce saleable quantities of high-grade finished potash products since 1970. Products include granular and standard grade potash used for agriculture applications.

Both flotation methods and crystallization methods are used to concentrate potash ore into finished potash products at the Rocanville mill. Raw potash ore is processed on surface, and concentrated finished potash products (near-pure KCl) are sold and shipped to markets in North America and offshore.

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

- 2016: 2.720 million tonnes finished potash products at 60.60% K_2O (average grade)
- 2017: 4.587 million tonnes finished potash products at 60.62% K_2O (average grade)
- 2018: 5.222 million tonnes finished potash products at 60.46% K_2O (average grade)

Over the past decade actual mill recovery rates have been between 81.5% and 85.7%, averaging 83.5%. Given the long-term experience with potash geology and actual mill recovery at Rocanville 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 mine sites and at Nutrien research facilities. At Rocanville, this is no exception; test work to optimize circuit performance and ensure product quality is carried out on an ongoing basis.

xi) Infrastructure, Permitting and Compliance Activities

Project Infrastructure

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

The Rocanville mine is served by a number of towns and villages within 50 kilometers of the mine site. The nearest towns are Rocanville (15 km distant), Moosomin and Esterhazy (both 50 km distant). The nearest city is Yorkton (100 km distant).

The Rocanville mine surface facilities are accessed by an existing paved road that is part of the Saskatchewan Provincial Highway System. Most finished potash products are shipped by rail over existing track, with some product shipped by truck over the North American highway system.

At present, high voltage power utilization at the Rocanville Potash is 84 MVA (i.e., 72 MVA to the Rocanville Plant site plus 12 MVA to the Scissors Creek site). The ten-year projection of power utilization indicates that the utility can meet foreseeable future demand.

The Rocanville operation requires a sustained fresh water supply for the milling process which is sourced from two subsurface reservoirs called the Welby Plains Surficial Aquifer and the Welby Plains Middle Aquifer. These aquifers provide a sustainable source of process water for Rocanville milling operations, without having any perceptible impact on other users of water drawn from these aquifers.

Environmental Studies, Permitting and Compliance Activities

The tailings management strategy at all Nutrien potash mines in Saskatchewan, including Rocanville, is one of sequestering solid mine tailings in an engineered and provincially licensed TMA near the surface plant site. The Rocanville TMA currently covers an area of approximately 567 hectares (1400 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 around the entire Rocanville TMA. The slurry-wall provides secondary containment for any saline mine waters, minimizing brine impacts from the TMA to surrounding surface water bodies and 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 subsurface aquifers.

Rocanville currently operates five brine disposal wells near the surface plant of the Rocanville mine where clear salt brine (i.e., no silt, clay slimes or other waste) is borehole-injected into the Interlake Carbonates, at a depth of approximately 1200 m to 1400 m below surface. 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 Rocanville operation requires a sustained fresh water supply for the milling process which is sourced from two subsurface reservoirs called the Welby Plains Surficial Aquifer and the Welby Plains Middle Aquifer. This water supply is provincially licensed and provides a sustainable source of process water for Rocanville milling operations, without having any perceptible impact on other users of water drawn from these aquifers.

In Saskatchewan, all potash tailings management activities are carried out under an “Approval to Operate” granted by the MOE. The Rocanville mine is in compliance with all regulations stipulated by the Environmental Protection Branch of the MOE. The current Rocanville Approval to Operate has been granted to July 1, 2028, 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. The Company has conducted numerous studies of this topic, and the most recent decommissioning and reclamation plan for Rocanville was approved by MOE technical staff in October 2016. Because the current expected mine life for Rocanville 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 Rocanville, 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., Allan, Cory, Lanigan, Patience Lake, Rocanville, and Vanscoy).

xii) Capital and Operating Costs

The Rocanville mine has been in operation since 1970; 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 Rocanville mine was completed in 2013, increasing nameplate capacity to 6.5 million tonnes of finished potash products per year. This work involved construction of a third shaft, enhancement of hoists and shaft conveyances, major expansions of both mine and mill, improvements to loadout facilities and some infrastructure improvements. All construction was carried out without significant disruption to existing potash production from the site.

xiii) Exploration, Development and Production

A major expansion to increase the nameplate capacity of Rocanville from 3.0 million tonnes to approximately 6.0 million tonnes of finished potash products per year was announced in 2007. Expansion work was substantially completed by the end of 2016 and production was ramped up through 2017 when a nameplate capacity of 6.5 million tonnes of finished potash product was announced. The operational capability at Rocanville to December 31, 2018 is 5.2 million tonnes of finished potash product.

Potash production in any given year at the Rocanville 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 (13.489 million tonnes of potash ore mined and hoisted per year) is sustained, and if mineral reserves remain unchanged then the Rocanville mine life is 40 years from December 31, 2018.

e) Vanscoy Potash Operations

Certain scientific and technical information regarding Vanscoy Potash Operations (“VPO”) is based on the technical report titled “National Instrument 43-101 Technical Report on Vanscoy Potash Operations” dated effective October 31, 2014 (“Vanscoy Technical Report”) prepared by Michael Ryan Bartsch, P.Eng., and Dennis Grimm, P.Eng., both employees of the Company as of the date of the Vanscoy Technical Report, and A. Dave Mackintosh, P.Geo., of ADM Consulting Limited, who are each a Qualified Person (collectively, the “Authors”) as defined in NI 43-101. The economic analysis set out under the heading “– Exploration and Development – Economic Analysis” below refers to the incremental one million metric tonne Vanscoy Project and not for VPO in its entirety. The Vanscoy Technical Report has been filed with the securities regulatory authorities in each of the provinces of Canada and furnished to the SEC. Portions of the following information are based on assumptions, qualifications and procedures that are not fully described herein. References should be made to the full text of the Vanscoy Technical Report.

i) Project Description and Location

The Company owns and operates VPO, a potash mining and milling facility located in Vanscoy, Saskatchewan (southwest of Saskatoon). The operation has been in existence for 50 years and has produced approximately 57.8 million tonnes of muriate of potash.

The Saskatchewan Ministry of Economy (“SME”) has granted the Company the exclusive right to mine potash on approximately 148,332 acres (600.3 km^2) of crown land pursuant to Subsurface Mineral Leases KL 114-A and KL 204, last revised August 2013. The lands subject to KL 114-A and KL 204, and that are the subject of the Vanscoy Technical Report, form a contiguous area in excess of 189,333 acres (766.2 km^2) containing the lands subject to the Subsurface Mineral Leases KL 114-A and KL 204, lands owned by Agrium and freehold mineral rights owned by others and leased by the Company (“VPO Lands”). Freehold mineral rights not leased by the Company are not included in the Vanscoy Technical Report. For reporting purposes, the VPO Lands have been divided into three areas: (1) the Unitized Area containing most of the mining to date; (2) the South Block to the south and east of the shafts (currently under development); and (3) the North Expansion Block north of the Unitized Area.

The VPO Lands are located in the Province of Saskatchewan, Canada, in the rural municipalities and National Topographic System of Canada ("NTS") blocks indicated in the following table:

Municipal and NTS Block Locations

R.M. Name	R.M. Number	NTS Block
Corman Park	344	073B03/02
Vanscoy	345	072O14/15
Montrose	315	072O14/15

The lands subject to KL 114-A are located within townships 34 to 37 of ranges 7 to 9, west of the 3 rd meridian. The lands subject to KL 204 are located within townships 33 and 35 of ranges 6 to 8 west of the 3rd meridian.

The Company owns the surface rights to approximately 7,200 acres (2,914 hectares) of land to accommodate the processing facility, TMA and provide a surrounding buffer. Useable farm land is rented to local farmers.

All operating licenses required by the provincial government, and permits to operate a tailings area or waste management facility have been obtained. Required permits for VPO include the Subsurface Mineral Lease Agreement, Potash Unitization Agreement, Mine Hoist Operating Certificate, Approval to Operate a Pollutant Control Facility, Approval to Dispose of Waste Brine and the Approved Decommissioning and Reclamation Report.

As a result of the Merger, the timing of the ramp-up to full capacity will be considered as part of the optimization of the combined potash production base of Nutrien. Increased hoisting capacity, an increase to the underground mining fleet, a second parallel milling facility, additional compaction capacity and other enhancements to the site, support the increase.

ii) Accessibility, Climate, Local Resources, Infrastructure and Physiography

The VPO Lands are accessible by the Saskatchewan highway and municipal grid road system. Although grid roads may not have been built in all areas, a one chain (20 meters ("m")) road allowance is provided every one mile (1.6 kilometers ("km")) in an east-west direction and every two miles (3.2 km) in the north-south direction. The mine site is serviced by both national railways through one common spur line from the north of the VPO Lands.

VPO is located in the Saskatchewan Plains Region, which has elevations between 300 m and 600 m above sea level. Land use is almost totally agricultural, largely in cropland with some unimproved pasture and southern woodland. Prairie winters are long and cold with short, warm summers. Average daily mean temperatures range between -16°C in January to +20 °C in July. Mean annual precipitation averages 430 millimeters ("mm") with the majority occurring in the summer months. Winds are predominantly from the northwest throughout the year with mean annual wind speeds of 20 km per hour.

Mining and milling operations continue year-round, utilizing a work force that commutes from nearby cities and towns or comes from the local farming community. The closest major population center is Saskatoon, approximately 25 km northeast of the mine site.

Services are provided by Saskatchewan public utilities with a dedicated 138 KVA electrical power transmission service and natural gas pipelines. Fresh water, provided by SaskWater, is delivered via pipeline from the South Saskatchewan River.

iii) History

Imperial Oil first discovered potash in southeastern Saskatchewan in 1942 during oil exploration activity. In 1950, when oil exploration companies started routinely running gamma logs, the existence of potash rich beds over a vast area in southern Saskatchewan was indicated.

Consolidated Mining and Smelting Company of Canada Limited, subsequently Cominco Ltd. ("CM&S"), carried out an exploration program in 1964, drilling 23 holes in the vicinity of Vanscoy, Delisle and Asquith, Saskatchewan. Of the 23 drill holes, one hole penetrated a major solution collapse feature where, although the

Prairie Evaporite Formation is present, the potash beds are not. The drilling identified a prospect averaging just over 25 percent K_2O that was large enough to support a mining operation, and Stearns-Roger Canada Ltd. along with J.T. Boyd and Associates carried out an engineering study in 1965 and a similar capital and operating cost estimate was also completed by Kilborn Engineering Ltd. in December 1965. The mine went into production under CM&S ownership in early 1969.

In 1993, Cominco Fertilizers Ltd. was formed as a separate entity from Cominco Ltd. In 1995, all Cominco involvement in Cominco Fertilizers Ltd. ceased and shares were transferred to the new entity, Agrium Inc. In the site history, lease expansions occurred in 1993 and 2005 to enlarge the total area available for extraction. This brought three additional drill holes into the lease area. The three exploration wells were completed in 1955 and 1957.

In the past 50 years of operating life, 15 additional drill holes and numerous two-dimensional (2D) and three-dimensional (3D) seismic programs have contributed to the understanding of the Prairie Evaporite Formation. Production from the VPO Lands to December 31, 2018 was 57.8 million tonnes of muriate of potash from 172.1 million tonnes of ore hoisted.

iv) Geological Setting

Canadian potash deposits are estimated to be among the largest in the world, stretching some 720 km (450 miles) across Saskatchewan. The deposits lie diagonally across the southern plains of Saskatchewan gently dipping from approximately 1,000 m depth along a northwest line through Rocanville, Esterhazy and Saskatoon to more than 1,600 m depth at Belle Plaine and up to 3,000 m depth in North Dakota. The deposit is unique in the world in that the mineralization covers such a vast area. The same beds mined on the west side of Saskatoon are mined over 100 km to the east and can be traced into Manitoba, North Dakota and Montana.

The Prairie Evaporite Formation forms part of the Elk Point Basin, a sub-basin of the Williston Basin centered on the northwest corner of North Dakota. The Prairie Evaporite Formation, deposited on the Winnipegosis Formation (limestone), varies in thickness from 120 m (400 feet (“ft”)) to over 210 m (700 ft) and is overlain by the 2nd Red Bed unit, the lower shale member of the Dawson Bay Formation (limestone).

There are four main potash layers in Saskatchewan. The first to be deposited was the Esterhazy Member, which is the bed mined at Mosaic Esterhazy and Rocanville. Above this is the White Bear Marker which is not thick enough or of sufficient grade, to be of commercial value. This is followed by the Belle Plaine and finally the Lower and Upper Patience Lake. The Lower Patience Lake is mined by Lanigan and the Upper Patience Lake is mined by all other Saskatoon area mines. The Esterhazy Member, being the first potash bearing bed to be deposited, is stratigraphically the deepest. However, the Rocanville/Esterhazy area mines are shallower than the younger Patience Lake Member mines (Saskatoon area) because of their proximity to the basin edge.

The salt cover between the ore zone and the overlying 2 nd Red Beds and Dawson Bay Formation varies from no cover near the evaporite edge in Manitoba to over 45 m (150 ft) in south-central Saskatchewan. Salt cover is relied upon to isolate the mining level from potential water-bearing limestone formations above the 2nd Red Beds. Similarly, the depth increases to the southwest from just over 800 m (2,600 ft) in Manitoba to over 1,200 m (4,000 ft) in south-central Saskatchewan.

The local geology of VPO characteristically mirrors the regional geology. The Upper and Lower Patience Lake and Belle Plaine Members exist throughout the VPO Lands. The Esterhazy Member does not exist in the area but is evidenced by a thin (5 centimeters (“cm”) thick) seam containing minor potash values. The mining zone dips gently (less than 0.5°) to the southwest from approximately 500 m to 600 m below sea level. The depth below surface ranges from approximately 1,000 m (3,300 ft) in the northeast to over 1,130 m (3,700 ft) in the southwest. The salt cover ranges from 12 m (40 ft) to just under 20 m (65 ft) across the lease area.

v) Mineralization

The potash deposit is generally a flat-lying, bedded deposit dipping slightly to the southwest. It is amenable to mining using track mounted boring machines, floor or roof mounted conveyor systems and ancillary wheel mounted mining and transport equipment.

The potash beds at the VPO site are entirely composed of sylvinite, a mixture of KCl and NaCl, and are within a stratigraphic sequence of halite beds. The same beds mined on the west side of Saskatoon are mined over 100 km to the east. These same beds can be traced into Manitoba, Montana and North Dakota. Despite this remarkable continuity, potash deposits are not without interruption. Solution activity over geological time has resulted in barren or collapse features that have the potential to introduce water from formations above to the mining level.

vi) Exploration

Exploration work other than drilling has consisted of numerous 2D and 3D seismic programs and underground channel sampling. Seismic exploration has been used to try and delineate solution collapse features to be avoided when mine planning. Initial 2D acquisition programs, on relatively sporadic time intervals, have been replaced by 3D programs that have recently been expanded to shoot the entire areas of interest. The most recent 3D seismic shoot was shot in 2016 with results expected in 2019 and was shot over the northwestern edge of KL 114-R. Programs have confirmed the continuity of the Prairie Evaporite Formation and identified features to be avoided, greatly improving the successful completion of mine development entries. In the opinion of the Authors, in order to be categorized as a Measured Mineral Resource, both 3D seismic coverage and adequately spaced drillhole or assay data points are required. Despite the completed 3D program, given that access to the northwest requires considerable entry development time, and there is no drilling program currently planned for the area, the northwest region will remain categorized as an Inferred Mineral Resource.

In addition to drill holes and seismic programs, Nutrien utilizes an underground sampling program to confirm thickness, grade and insolubles. Samples are acquired by geologists employed by Nutrien and delivered to the Saskatchewan Research Council's (SRC) Geoanalytical Laboratory. The SRC issues a "Sample Shipment Receipt Notification" followed soon after by a "Sample Receipt Report" indicating a complete sample listing, including total numbers and sample labels.

vii) Drilling

Original CM&S Drill Holes

All drilling was carried out following SME regulations. Drilling was originally carried out by Canamerican Drilling Corporation. The initial CM&S program set a 10.75" (273 mm) diameter surface casing in a 15" (381 mm) diameter hole to a depth of 450 ft (137 m). From there, a 9" (228 mm) diameter hole was drilled to a core point just above the Prairie Evaporite Formation. Then, a 7" (177.8 mm) diameter intermediate casing was pinned into the Dawson Bay Formation. Coring was completed in a 6.125" (155 mm) diameter hole. Once complete, abandonment consisted of cementing the hole from the total depth to 150 ft (45 m) into the intermediate casing. The casing was cut off 40 ft (12 m) above the cement top and retrieved. Subsequent plugs were run from the cement top to approximately 65 ft (20 m) into the surface casing. The surface casing was then cut off 3 ft (1 m) below the surface, a cap was welded on, and the area was backfilled. A full suite of geophysical logs was run on each hole from surface to total depth.

Recent VPO Drill Holes

In 1989, hole 2-16-36-8-W3 in the Unitized Area was drilled by Sebco Drilling on behalf of Agrium. A 244.5 mm diameter surface casing was cemented in at 146 m depth in a 349 mm diameter drill hole. From there, a long string 177.8 mm diameter casing was cemented the full length to 979 m depth in a 222 mm diameter hole. The hole confirmed the VPO mining zone was present at a depth of 1,021 m. In 1999, hole 1-24-34-8-W3 in the South Block was completed by Ensign Drilling Services Inc. on behalf of Agrium. A 244.5 mm diameter surface casing was installed to 150 m depth in a 349 mm diameter hole. From there, a 222.3 mm diameter well was then completed "open hole" (without casings) to 1,229 m depth with inverted oil emulsion drilling mud. Hole 1-24-34-8-W3 confirmed the potash beds mined at VPO existed at a depth of 1,110 m.

In 2007, hole 4-3-35-7-W3 in the South Block was drilled by Akita Drilling Ltd. on behalf of Agrium. A 244.5 mm diameter surface casing in a 349 mm diameter hole was cemented to 145 m depth. A 177.8 mm diameter intermediate casing in a 222 mm diameter hole was pinned into the Dawson Bay Formation at 1,092 m depth. The well confirmed the presence of the mining zone at a depth of 1,112 m.

In 2010 and 2011, 14 drill holes were completed on the VPO Lands in the South Block. A 349.0 mm hole was drilled to 165 m where a 244.5 mm surface casing was set and cemented. The main hole was drilled with a 222.0 mm diameter bit to the top of the Dawson Bay Formation at depths ranging from 1,045 m to 1,075 m. The Dawson Bay was cored to the middle of the 2nd Red Beds, providing a 101 mm diameter core from a 199 mm diameter hole. A drill stem test was then carried over the complete Dawson Bay. The mud system was changed from brine water to invert mud in order to core the Prairie Evaporite. A 200 mm diameter hole was then drilled to final depth, approximately 15 m into the underlying Winnipegosis Formation. The hole was geophysically logged from total depth to surface casing. Holes were plugged back to surface with a total of 5 cement plugs. After required gas checks, the surface casing was cut off approximately 1.5 m below ground level, a cap welded on, and the site restored to pre-drilling condition.

Drilling cutting samples were collected on 5 m intervals from approximately 350 m depth to total depth with one set retained by Agrium and two sets delivered to the SME. The evaporite core was logged and sampled on site by ADM Consulting Limited. A quarter core was delivered by ADM Consulting Limited to the SRC Geoanalytical Laboratory in Saskatoon for assay, and the remaining three quarters core delivered to the SME subsurface laboratory in Regina by Blackie's Coring.

Additional drill holes are planned to be drilled in the South Block, with one of the drill holes being drilled in 2018.

Composite grades of all the drill holes over the 3.35 m mining interval are shown in the table below. These intervals represent true thickness.

Drill Hole ID	Composite From (ft)	Composite To (ft)	Comp. % NaCl	Comp. % KCl (1)	Comp. % Insolubles	Comp. % K_2O
D15-32-34-8	1,121.0	1,124.4	82.2	10.3	5.9	6.5
D16-28-34-8	1,114.0	1,117.3	48.4	46.5	4.3	29.4
E04-11-35-9	1,140.0	1,143.4	52.1	38.8	7.1	24.5
E04-12-35-9	1,132.3	1,135.7	48.2	43.4	6.7	27.4
E04-24-35-9	1,096.9	1,100.3	45.5	46.2	7.0	29.2
E04-36-35-9	1,083.6	1,087.0	43.6	46.0	7.8	29.1
E16-22-35-9	1,115.4	1,118.8	46.4	47.4	5.0	29.9
V04-10-35-8	1,076.9	1,080.2	50.4	41.6	6.4	26.3
V04-18-35-8	1,090.7	1,094.0	52.1	40.8	5.6	25.8
V04-20-35-8	1,076.8	1,080.1	50.6	41.6	4.8	26.3
V04-22-35-8	1,081.6	1,085.0	48.8	47.0	3.5	29.7
V04-24-35-8	1,079.8	1,083.2	94.4	2.5	5.2	1.6
V04-28-35-8	1,043.7	1,047.0	51.9	44.5	2.7	28.1
V04-34-35-8	1,052.8	1,056.2	51.7	42.4	4.4	26.8
V11-16-35-8	1,077.9	1,081.3	51.5	41.3	5.6	26.1
V13-01-35-8	1,096.0	1,099.4	47.3	45.7	5.8	28.9
V13-11-35-8	1,069.9	1,073.3	47.7	45.3	5.5	28.6
V13-16-35-8	1,074.7	1,078.0	50.6	42.0	6.0	26.5
V13-23-35-8	1,050.1	1,053.4	49.5	45.8	3.9	28.9
V14-29-35-8	1,048.0	1,051.3	53.4	41.0	4.3	25.9
V16-06-35-8	1,095.4	1,098.8	50.8	43.4	4.3	27.4
V16-08-35-8	1,083.8	1,087.2	47.6	44.3	6.3	28.0
2-16-36-8	1,022.48	1,025.81	52.3	42.2	5.4	26.7
1-24-34-8	1,110.57	1,114.13	55.1	40.6	4.3	25.7
4-3-35-7	1,119.06	1,122.41	49.6	44.2	6.2	27.9

Drill Hole ID	Composite From (ft)	Composite To (ft)	Comp. % NaCl	Comp. % KCl (1)	Comp. % Insolubles	Comp. % K_2O
1-21-34-7	1,106.61	1,109.96	50.7	43.8	5.5	27.7
1-11-35-7	1,100.38	1,103.73	49.5	46.5	4	29.4
1-15-35-7	1,075.48	1,078.83	64.4	28.8	6.8	18.2
1-29-34-7	1,110.55	1,113.9	81.4	14.4	4.2	9.1
8-7-34-7	1,124.55	1,127.9	66.4	30.2	3.4	19.1
8-11-35-7	n/a	n/a	n/a	n/a	n/a	n/a
13-9-34-7	n/a	n/a	n/a	n/a	n/a	n/a
13-23-34-7	1,105.44	1,108.79	50.8	42.4	6.8	26.8
15-28-34-8	1,116.69	1,120.04	51.6	43.4	5	27.4
16-26-34-7	1,098.31	1,101.66	47.4	46.4	6.2	29.3
4-5-34-7	1,122.66	1,126.01	50.9	43.1	6	27.2
6-3-34-7	1,110.85	1,114.2	55.2	39.6	5.2	25
12-31-34-7	1,093.65	1,097.00	57.6	38.8	3.6	24.5
13-35-33-8	1,138.22	1,141.57	51.8	42.3	5.9	26.7
16-6-37-8	1,023.27	1,026.62	58	38.8	3.2	24.5
13-22-36-8	1,020.69	1,024.04	53.9	43.7	2.4	27.6

(1) KCl grade is the % K_2O equivalent divided by 0.63177.

North Expansion Wildcat Drill Holes

North Expansion Wildcat Drill Holes were drilled between 1955 and 1957. Canamerican Drilling Company completed two of the holes and Rio Palmer drilled one. Typically, a 10.75” diameter surface casing was installed in a 13.75” or 15” diameter hole to between 360 and 400 ft depth. From there, a 5.5” or 7” diameter intermediate casing was installed in either a 7” or 9” diameter hole into the 2nd Red Beds near 3,300 ft depth with either cement or an anchor packer. These three holes confirmed the presence of the mining zone within the Prairie Evaporite Formation.

viii) Sampling and Analysis

The 2010 and 2011 holes were all logged and sampled at the well site by ADM Consulting Limited in a lab trailer provided by Blackie’s Coring of Estevan, Saskatchewan. In general, the core was logged, depth corrected using geophysical logs, convenient sample lengths of 0.25 m to 0.5 m were chosen based on geological changes and existing core breaks, and the intervals measured. Sample intervals were chosen by ADM Consulting Limited and a quarter core was removed either by cutting the core in half along the length of the sample, and one half cut into quarters, or a quarter cut out using a diamond bladed cut-off saw. The quarter core was numbered, bagged and tagged for assay purposes by an employee of Agrium and checked by ADM Consulting Limited. The remaining three quarters were returned to the core box.

Before transport, a packing slip was filled out identifying the drill hole and sample numbers being transported. Samples were transported to SRC’s Geoanalytical Laboratories in Saskatoon, Saskatchewan. SRC is accredited by the Standards Council of Canada. Transport was carried out by ADM Consulting Limited on behalf of Agrium.

Upon receiving the samples, SRC acknowledged that the samples had been received and issued a “Sample Shipment Receipt Notification” followed soon after by a “Sample Receipt Report” indicating a complete sample listing, including total numbers and sample labels. The samples were at all times in the possession of a responsible person.

Underground Samples

Underground channel sampling programs are carried out by employees of Nutrien. Samples are obtained by cutting two slots in the mine wall, approximately five centimeters apart and three centimeters deep, from approximately 15 cm above the normal mining zone down to below the normal mining height of 3.35 m.

Horizontal slots are then cut across the verticals to isolate mud seams and noticeable changes in mineralogy to create blocks that are typically 7.5 to 10 cm long. The blocks are removed from the wall with a hammer and chisel. Often, a number of blocks (typically up to three) are combined into one sample interval. The mass of material obtained for assay is very similar to that obtained from a quarter core. Samples are transported to the SRC Geoanalytical Laboratory by an employee of Nutrien and subject to the same documentation procedures as described above.

All VPO drilled hole and underground samples received by the SRC are then crushed, split and a portion pulverized in a grinding mill. The remainder of the split is returned to Nutrien. As part of their Quality Assurance and Quality Control procedures, one in every 20 samples is repeated. A prepared standard sample is also submitted with each batch of client samples. This is done to ensure repeatability of the analyses. The range in results is within the acceptable tolerance.

ix) Data Verification Procedures

The grade forecasts derived from the underground sampling program are reconciled with mill feed grades obtained from belt mounted K40 analyzers and daily feed samples assayed in the on-site laboratory and reported on a daily, monthly, and year to date basis. The mineral reserve tonnage is reconciled monthly to compare the hoisted tonnages, surveyed tonnages and milled tonnages and is approved if agreement is within a 3 percent difference, while the milled grade is reconciled to the block model grade.

x) Mineral Resource and Mineral Reserve Estimates

The table below summarizes the mineral resource estimates regarding VPO as of August 8, 2014:

Area	Grade % Est. % K_2O	% Insolubles	Measured Mineral Resources (million tonnes)	Indicated Mineral Resources (million tonnes)	Inferred Mineral Resources (million tonnes)
South Block	23.4	5.0	687.0	–	–
South Block	25.4	5.2	–	214.9	–
South Block	24.9	5.2	–	–	962.1
North Expansion Block	26.8	3.9	–	–	79.2

(1) Grades are based on the block model estimate.

(2) Insolubles are a deleterious material affecting mineral processing.

(3) Mineral resources that are not mineral reserves do not have demonstrated economic viability.

(4) Mineral reserves are not included in mineral resource estimates.

(5) KCl grade is the % K_2O equivalent divided by 0.63177.

The table below summarizes the mineral reserves estimates regarding VPO as of August 31, 2014:

Area	Grade Est. % K_2O	% Insolubles	Mineral Reserves – Proven (million tonnes)	Mineral Reserves – Probable (million tonnes)
South Block	25.8	4.8	122.9	–
South Block	24.3	4.8	–	56.4
Unitized Area	25.2	4.9	52.8	–

(1) Grades determined using Vulcan block model.

(2) KCl grade is the % K_2O equivalent divided by 0.63177.

To estimate the potential extent, grade and tonnage of the VPO mineral resource and reserves, the Authors made certain assumptions and implemented certain parameters, including assumptions and parameters relating to the property area used in the estimates, the mining height used at VPO, in-situ densities, certain seismic features,

exploration and drilling data, the calculation of tonnages and extraction rates. For a complete description of key assumptions and parameters associated with the information above, reference should be made to the full text of the Vanscoy Technical Report.

xi) Mining Operations

In the mine, borer style miners are used to mechanically excavate the rock and load it directly onto a series of interconnected conveyor belts. The broken ore is then transported to a shaft where it is hoisted from underground to surface at a capacity of 1,800 tonnes per hour and fed to the mill. The mine is accessed using a fleet of 4x4 trucks and a network of roads that stretches 11 km north, 11 km south and 14 km east of the shaft. The borer miners are 3.35 m high, 5.5 m wide and use two, three armed rotors to cut the rock. The miners can advance at about 30 cm (1 ft) per minute and will mine tunnels up to 2,200 m long and 10.2m wide. The potash ore being mined contains about 40 percent potassium chloride (potash), 55 percent sodium chloride (common salt) and 5 percent insolubles.

Production Forecast

Significant changes to the processing facility have been introduced by the Vanscoy Project. As per the Vanscoy Technical Report, the annual production rate will be increased to 2.8 million tonnes from the existing 1.8 million tonnes of product. The circuit is designed to process a range of ore grades between 22.0 percent K_2O to 25.5 percent K_2O, with an average expected grade of 24.6 percent K_2O. The nominal milling rate will be 1,084 tonnes per hour (operating 24 hours per day). VPO produces an agricultural grade muriate of potash with an average product grade of 60.6 percent K_2O (the product grade must exceed 60.0 percent K_2O to achieve the product specification). The design product split will be 75 percent premium (2,100,000 tonnes per annum) and 25 percent non-premium (700,000 tonnes per annum). The amenability of the VPO ore body to recover and concentrate potash has been well established by the long processing history of the plant. Given the remarkable continuity of the Prairie Evaporite Formation potash beds the relative ease of concentration is not expected to change. The process improvements introduced by the Vanscoy Project are supported by bench and pilot scale test work. Furthermore, industry proven technology with a minimum of one year of successful use within the potash industry has been used in the design to improve the target recovery to 87 percent. In 2018, the mill recovery rate was 81.2 percent. The 2019 target recovery is 83.5 percent.

The increased production and recovery will be accomplished through modifications to the existing circuits by installation of new crushing, attrition scrubbing, slimes separation, scavenger flotation and brine handling circuits and the installation of additional flotation and compaction circuit capacity. There have also been enhancements to the existing ore storage, crystallization and loadout circuits.

Infrastructure

The infrastructure at the mine site includes the following key items: mine site location access infrastructure, site power supply, the TMA, rail access and nearby towns and villages. Electrical energy is provided from the SaskPower distribution grid via a 138 KVA power line sized to accommodate current needs. Process water is provided by a dedicated water line from the South Saskatchewan River.

Environmental Considerations

The byproducts of potash extraction are insoluble fine tailings (clay) and salt tailings. The TMA is the destination for these tailings. With an increase in potash production, there will be a corresponding increase in tailings deposition rates. Nutrien has conducted a review of its TMA and developed a plan to extend the current tailings operations through 2077 in the currently approved footprint. As part of the Vanscoy Project, the following scope was completed: relocated and increased the size of its brine pond, relocated and increased the size of the fine TMA (FTMA), installation of a settling pond for both salt and FTMA areas, development of west side deposition cell number 3 (WS3), and planned for significantly higher salt pile heights. In addition, Nutrien will continue to expand the FTMA deposition areas as planned to develop the cell 3B commencing in 2019.

A slope stability study has been completed to understand the sensitivities of containment dyke geometries, deposition rates and duration, and brine mound effect on pore water pressures both in the tailings and underlying soils. Slope inclinometers and pressure transducers are monitored on a continuous basis as tailings are deposited. Additional slope inclinometers and pore water pressure transducers will be installed in key areas of the pile to monitor pile stability as the tailings pile develops. FTMA monitoring equipment is scheduled to be installed in 2019.

Salt deposition is partly offset by excess brine injection into the Deadwood Formation and a road salt operation actively removing tailings from the pile.

Nutrien is in material compliance with all environmental permitting requirements. The site is currently permitted by the Saskatchewan Ministry of the Environment pursuant to *The Environmental Management and Protection Act, 2010*.

The operating potash mines have agreed to provide the Province of Saskatchewan with financial assurances in the form of an irrevocable trust, whereby each producer has agreed to contribute a total of CA$25 million to their respective trusts for the purpose of decommissioning, restoring and rehabilitating their mines site(s). Payments to this trust were initiated on July 1, 2014 and will continue with annual payments through July 1, 2025. This trust agreement provides for possible adjustment of the trust amount at each five-year decommissioning plan review period based upon the most recent closure cost estimate.

Mine Life

Per the Vanscoy Technical Report, after 45 years of production, VPO has a Mineral Reserve remaining of 232.1 million tonnes (Proven Mineral Reserve of 175.7 million tonnes grading 25.6 percent K_2O and Probable Mineral Reserve of 56.4 million tonnes grading 24.3 percent K_2O). The Proven and Probable Reserve estimation is sufficient for approximately 29 years of mining life at the expanded rate of 2.8 million tonnes of product per year.

Measured Mineral Resources of 687.0 million tonnes grading 23.4 percent K_2O and Indicated Mineral Resource of 214.9 million tonnes grading 25.4 percent K_2O has the potential to add a further 32 years.

xii) Exploration and Development

It is reasonable to expect that a significant portion of the Inferred Mineral Resources will be upgraded to Indicated Mineral Resources and Measured Mineral Resources as exploration programs are undertaken in the North Expansion Block and South Block. This has the potential to significantly increase mine life.

Capital and Operating Cost Estimates

As described in the Vanscoy Technical Report, the VPO site has been in operation since 1969. In the years immediately preceding this, major capital investment was made to bring the mine into production. Since then, capital expenditures have been made on a regular and ongoing basis to sustain and expand production. The Vanscoy Project was announced in 2011 whereby VPO would be expanded to increase operational capacity to a total of 2.8 million tonnes muriate of potash product per year. The Vanscoy Project cost is approximately US$2.33 billion. Engineering commenced in 2010 and initial early work construction started in 2011. As a result of the Merger, the timing of the ramp-up to full capacity will be considered as part of the optimization of the combined potash production base of Nutrien.

A summary of the expansion costs is outlined in the table below:

Capital Costs	(billions US$)
Shaft headframe and above ground mining buildings	0.19
Surface ore handing	0.23
Ancillary buildings (offices/shops etc.)	0.02
Underground equipment and development	0.14
Process plants	1.05
Compaction	0.40
Infrastructure	0.23
Product loadout	0.07
Total:	**2.33**(1)

(1) Excludes investigation costs and engineering studies completed prior to Agrium's board of directors' approval of the Vanscoy Project.

Operating costs for the facility are largely driven by labor requirements. As we expand production, more equipment and manpower resources are required in both the mine and mill facilities to cover production, maintenance and administrative requirements. Additionally, as the mine transitions into deeper sections of the ore body in the South Block and eventually into KL 204 mine rehabilitation costs are expected to increase to deal with the impact of increased ground pressure. These costs are expected to manifest themselves in both equipment and manpower and have been included in forecast projections. These and other adjustments, such as reagent usage, have been reflected in operating cost estimates that are updated annually for a forward looking period of 20 years. These projections result in cost per tonne projections that are expected to peak during the period of intense ramp-up before decreasing and levelling off at a more normalized level once full production rates are attained.

f) Taxes Relating to Potash Operations

Royalties are paid to the Province of Saskatchewan in connection with the Company's Potash operations, which holds most of the mineral rights in the lease areas, and royalties from non-Crown lands are paid to various freeholders of mineral rights in the area. 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 to the applicable municipality in Saskatchewan. 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, the Company is also subject to a resource surcharge equal to a percentage of the value of its resource sales (as defined in *The Corporation Capital Tax Act of Saskatchewan*). In addition to this, the Company pays federal and provincial income taxes based on corporate profits from all of its operations in Canada.

Exhibit 99.2



Nutrien

2018
Management's Discussion and Analysis

Management's Discussion & Analysis

of Financial Condition and Results of Operations

February 20, 2019

On January 1, 2018, PotashCorp and Agrium completed a merger of equals creating the world's largest provider of crop inputs and services. The new company, Nutrien Ltd., will play a critical role in helping growers increase food production in a sustainable manner.

The following management's discussion and analysis (MD&A) is the responsibility of management and dated as of February 20, 2019. The Board of Directors of Nutrien carries out its responsibility for review of this disclosure principally through its audit committee, comprised exclusively of independent directors. The audit committee reviews and, prior to its publication, recommends to the Board of Directors for approval of this disclosure. The Board of Directors has approved this disclosure. The term "Nutrien" refers to Nutrien Ltd. and the terms "we," "us," "our," "Nutrien" and "the Company" refer to Nutrien and, as applicable, Nutrien and its direct and indirect subsidiaries as a group, including, for greater clarity, Potash Corporation of Saskatchewan Inc. (PotashCorp or PCS) and Agrium Inc. (Agrium). This MD&A is based on the Company's audited consolidated financial statements for the year ended December 31, 2018 (financial statements) prepared in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board (IFRS) unless otherwise stated.

This MD&A contains certain non-IFRS financial measures which do not have a standard meaning under IFRS including:

- Combined historical results of PotashCorp and Agrium for the year ended December 31, 2017
- EBITDA, Adjusted EBITDA and Potash adjusted EBITDA
- Adjusted net earnings (and the related per share amounts)
- Free cash flow
- Gross margin excluding depreciation and amortization per tonne
- Potash cash cost of product manufactured
- Urea controllable cash cost of product manufactured
- Retail normalized comparable store sales
- Retail average working capital to sales
- Retail cash operating coverage ratio
- Adjusted net debt

See the "Non-IFRS Financial Measures" section which begins on page 77 for a description of and further information on these measures and reconciliation to the most directly comparable measures under IFRS.

Also see the cautionary statement on forward-looking information on page 76.

All references to per share amounts pertain to diluted net earnings (loss) per share. Financial data in this annual report are stated in US dollars unless otherwise noted.

See page 87 for the definitions of financial andnon-financial terms used in this annual report.

See pages 157 and 158 for a list of abbreviations and terms used in the annual report.

Additional information relating to Nutrien (which, except as otherwise noted, is not incorporated by reference herein), including our first quarter 2018 unaudited interim report, second quarter 2018 unaudited interim report, third quarter 2018 unaudited interim report, and the Annual Information Form for the year ended December 31, 2018, can be found on SEDAR at www.sedar.com and on EDGAR at www.sec.gov. The Company is a foreign private issuer under the rules and regulations of the US Securities and Exchange Commission (the SEC).

Grey shading has been used throughout this MD&A to emphasize required regulatory and IFRS comparative figures, which are amounts previously reported by PotashCorp as it is the continuing reporting entity for accounting purposes.

The information contained on or accessible from our website or any other website is not incorporated by reference into this Management's Discussion and Analysis of Financial Condition and Results of Operations or any other report or document we file with or furnish to applicable Canadian or US securities regulatory authorities.

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44-49 **Nitrogen**

50-55 **Phosphate & Sulfate**

56 **Enterprise Risk Management**

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Nutrien's Global Footprint

This is Nutrien. A global agriculture company with operations and investments in 14 countries. Our integrated platform combines the world's premier Ag Retail network with some of the highest quality, lowest cost production assets. With this position, we are able to efficiently supply crop inputs and services to major growing regions of the world.



Largest Crop Nutrient Producer

~27 Mmt

of Worldwide Sales

Industry Leading Ag Retailer with

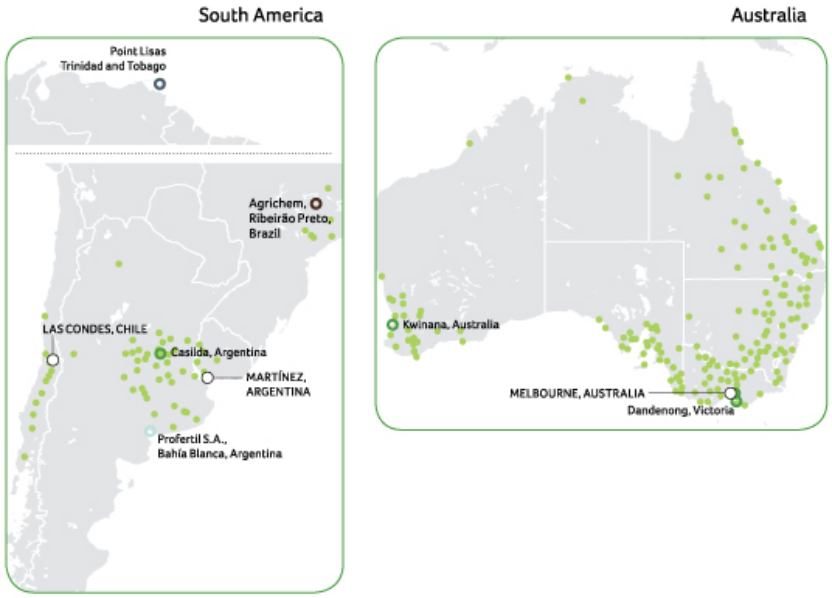
>1,700

Retail Locations Globally

Nutrien Employs

>20,000

Globally



Nutrien's Strategy is Delivering Value

It begins with our people and our portfolio of assets. We have more than 20,000 employees worldwide helping grow our world from the ground up. To enable the global achievement of Nutrien's strategy, we must attract, develop and engage employees who live our values and principles.

We have a world-class integrated portfolio of assets that provides opportunity to reduce cost, grow earnings and deliver supply chain synergies that create value for the grower and our shareholders.

We unlock this potential by building a unique relationship with the grower by establishing the best channel to the customer for reliably and effectively serving their needs, and by backward integrating across the agricultural value chain with leading production assets and a solutions offering that is unique within our industry.

As a leading diversified company in the agricultural space, our strategy focuses on creating value through the cycle and a platform for long-term growth.

Strategic Road Map

Basic Beliefs

Key external and internal factors that inform our strategic choices

Learn more on page 13

Strategy and Risk

Integrated approach that considers risk throughout our strategic planning activities

Learn more on pages 14-28

Governance

Process and oversight to ensure we deliver sustained value to all stakeholders

Learn more on page 29

Basic Beliefs Provide Foundation for Our Strategic Choices

Our strategic process starts with a view of the core drivers for our business: how these factors will shape the future of our industry and how we are positioned to create value for our stakeholders today and in the future.

Basic Beliefs

Ag markets will remain cyclical with favorable long-term demand drivers.

Innovation and technology development must focus on adding value for the grower.

Integrating production and distribution provides efficiencies and market access.

Leading sustainability practices will create competitive advantages and make a global difference.

Talent acquisition and people development are critical to sustaining long- term success.

How We Are Positioned

We have a unique opportunity to benefit from recovering agriculture and fertilizer markets and generate superior returns through the cycle.

We have the resources and relationship with the grower to best develop innovative products and solutions.

The scale of our production and distribution footprint is unmatched in the ag space, providing the opportunity to generate significant cost savings across our supply chain.

Sustainability is integrated across our value chain to reduce our environmental footprint and make a meaningful contribution to society and the economy.

Fostering our purpose driven culture will create a long-term competitive advantage.

Our Strategic Approach

Our vision is to be the leading global integrated Ag solutions provider

Our Strategy

Build the Channel

Enhance the Content

How We Compete

Build a Unique Relationship with the Grower

Create the Best Channel to the Customer

Own Leading Production Assets & Proprietary Offerings

Our Key Actions

Focus on Sustainability & Safety

Drive Integration & Optimization

Strategically Allocate Capital

Invest in Growth & Innovation

Engage Employees

Our Strategy = Channel + Content

Our relationship with the grower, channel to the customer, and extensive product and service offering provide Nutrien with very distinct and **valuable competitive advantages**—this is how we and our customers succeed on a daily basis.

How We Compete

Build a Unique Relationship with the Grower

We are the leading retailer of crop inputs and services across key global agricultural markets, primarily in North America, Australia and South America. With more than 1,700 Retail locations and 500,000 grower accounts worldwide, we interact with growers on a daily basis. This relationship provides valuable insight to help us anticipate the needs of our end-customer.

Create the Best Channel to the Customer

Nutrien creates value through integration of our supply chain and market approach—as demonstrated by our integrated footprint in North America. Nutrien has the premier North American storage and distribution network with more than 2,100 distribution points. We are focused on having the systems, processes, and people in place to connect our business from site to customer.

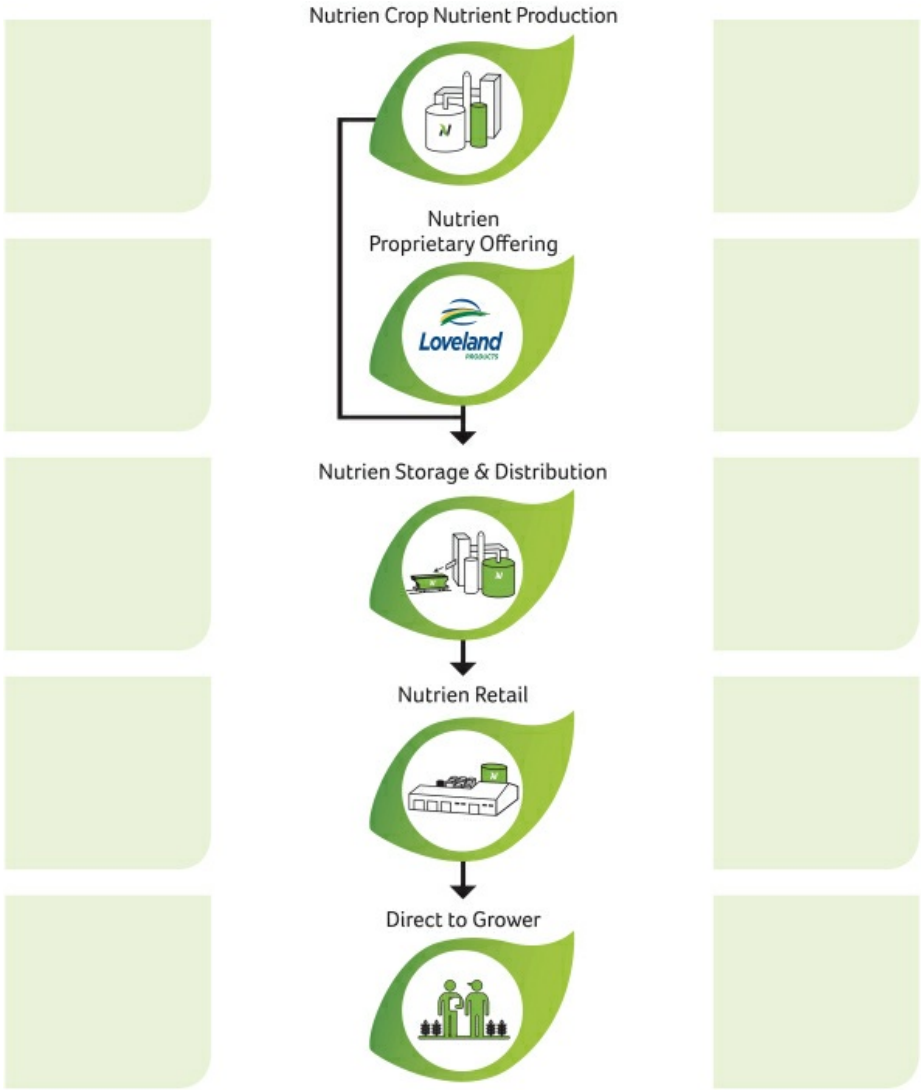
Own Leading Production Assets and Proprietary Offerings

Nutrien is the world's largest producer of crop nutrients with approximately 27 million tonnes of annual sales. We have distinct scale, market and cost advantages across our portfolio that provide a significant competitive advantage.

We also produce a range of high-quality proprietary crop protection, seed and crop nutrient products that generate higher margins for our Retail business unit. Having access to such a large offering allows Nutrien to provide meaningful solutions and yield-enhancement opportunities to our customers.

Our Integrated Platform Provides Advantages

We leverage our extensive distribution system to efficiently move our crop nutrients and proprietary products to our world-class retail network. Providing products and solutions direct to the grower strengthens our partnership with our customer.



#1
Largest Potash Producer

3RD
Largest Nitrogen Producer by Capacity

>1,700
Proprietary Products Available

25%
of Retail Total Gross Margin is Proprietary Product Sales

6.2 Mmt
of Storage Capacity Outside of Facilities

~15,000
Railcars

>1,700
Retail Locations
Globally

>17,000
Total
Products Available
to Growers

>500,000
Grower Accounts

>50%
of Customer Sales Linked to
Nutrien Ag Solutions
Digital Platform

Creating Value through Our Key Actions

Nutrien's key actions drive each and every employee's deliverables on a daily basis. We set priorities for each of these areas to ensure we can define and measure our performance. Our strategy and performance are supported by governance oversight and risk management by our leaders and Board of Directors.

Sustainability & Safety
is foundational to everything we do

18-19

Drive Integration & Optimization
to unlock potential and improve existing asset base

20-21

Strategically Allocate Capital
to maximize long-term shareholder returns

22-23

Invest in Growth & Innovation
to identify and pursue long-term value-enhancing opportunities

24-25

Engage Employees
to ensure we can deliver on our priorities

26-27



Sustainability & Safety

Feeding a growing population is one of the world's greatest opportunities and one of its greatest challenges. Nutrien is well positioned to make meaningful contributions to many of the United Nations Sustainable Development Goals (SDGs), most notably Goal 2: *"End hunger, achieve food security and improved nutrition and promote sustainable agriculture".*

In 2018, we began the development of a new Nutrien sustainability strategy to advance resilient agricultural practices and strengthen sustainable food production. Through innovative solutions, we aim to balance environmental, social and economic factors in our business and across our value chain.

In 2018, we built on the following core foundations:

Ethics and Human Rights

Ethical behavior is the basis of our core values. Acting with integrity helps us attract and retain talent, and reinforces our relationships with stakeholders. We are committed to the 10 principles of the United Nations Global Compact, and we take our role to protect human rights seriously while following all laws and regulations related to anti-discrimination and equal employment.

Safety

With safety as a core value in Nutrien, our priority is that everyone goes home safe, every day. Our safety culture is ingrained in everything we do; it extends to the care and protection of our people, the environment, our products and communities. As committed safety leaders, we are guided by three principles: do it safely or not at all; there is always time to do it safely; and care for each other's safety and health. We strive for zero life-altering injuries to employees and a reduction in our recordable injury rates.

Environment

We believe it's critical to minimize the impact our operations and products have on the environment with comprehensive stewardship programs at our sites and with key stakeholders.

We also work closely with our growers to help them sustainably intensify production with investments in digital technology, innovative product lines such as Environmentally Smart Nitrogen (ESN®) and science-based management plans such as 4R Nutrient Stewardship initiatives. Our priority is to continually improve upon our environmental performance.



Sustainability Priorities

- Sustainable Agriculture:
Lead the next wave of innovation and sustainability in agriculture.

- Environmental Footprint:
Protect the planet and minimize our environmental impact.

- Diversity and Inclusion:
Champion diversity and inclusive growth in the agriculture industry.

Stakeholder Engagement

Nutrien has a comprehensive approach to stakeholder engagement. Ongoing, two-way stakeholder dialog across a variety of channels helps us focus and refine our efforts to minimize negative impacts and maximize positive outcomes. We are committed to ensuring that our sustainability priorities match those that matter most to our stakeholders. In 2018, we engaged with our stakeholders to help determine our priority sustainability topics. Three external sustainability-specialty companies held independent reviews, focus groups and interviews to ensure our stakeholders could speak openly and help shape our strategy.

Community Relations

We don't just operate in communities, we are a part of them. It's important to us that we develop meaningful partnerships to strengthen, support and enhance our communities. Through volunteering, outreach, investment and employment opportunities, we help grow our world. In 2018, we invested $17 million dollars in communities and partnered with over 2,500 non-profit organizations. A few highlights in 2018 were continuing our support of Shock Trauma Air Rescue Services (STARS) in Saskatchewan by funding a new H145 helicopter and supporting youth education programs such as Caring for our Watersheds.

In September 2018, a Company-wide Employee Volunteer Program was implemented allowing employees one day off to help grow our world.

2018 was a year of stakeholder engagement, process alignment and strategic planning. We are working on targets and initiatives to improve our social, economic and environmental impact. Details, including more about our priorities, will be available in Nutrien's first sustainability report in 2019.

Find out more at nutrien.com/sustainability

2018 Performance

$17M	0.07	0.34	>600K
Invested in Communities	Total Environmental Incidents Frequency*	Lost-Time Injury Frequency*	Students Reached Through Ag Education

* Frequency based for every 200,000 hours worked.

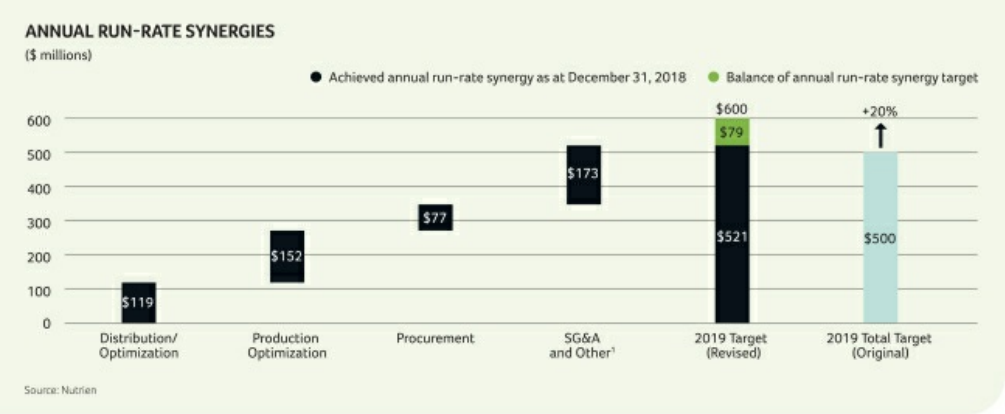


Drive Integration & Optimization

Delivering sustained value to all our stakeholders requires a constant focus on being a low-cost supplier to the markets we serve. Integrating and optimizing our extensive production and distribution channel ensures that our customers receive top quality products and services in a reliable and timely manner.

Drive Integration

At the onset of the Merger, we committed to delivering $500 million in annual run-rate synergies by the end of 2019. We were able to accelerate the rate of synergy capture and achieve this target within the first 12 months after the Merger. We also raised our target to $600 million by the end of 2019. The increased synergy target is indicative of the tremendous value that has been created by combining the two legacy companies.



[1] Other includes synergies related to administrative functions which may not appear in Selling or General & Administrative expenses (SG&A) in the financial statements.



Integration and Optimization Priorities

- Realize $600 million run-rate synergy target by the end of 2019 and drive further integration opportunities across the organization in the near and long term.
- Continue to improve capacity utilization and reduce cash costs across our nutrient production assets.
- Deliver higher year-over-year normalized comparable store sales and EBITDA margin in our Retail operations.

Optimization

Our focus extends beyond the synergies realized through the Merger. Optimizing our organizational cost structure is also about operational excellence and defining what matters to our bottom line and what we can control. By focusing on these and other factors, Nutrien expects to reduce the cost to produce and sell our products and services, and thereby deliver industry leading results.

In 2018, our Potash business unitcontinued to reduce cash cost of product manufactured (COPM) through Merger synergies and rebalancing our overall portfolio to increase production from our lower cost mines.

Our Nitrogen business unitin 2018 also achieved significant improvements in cost and utilization rates as a result of Merger synergies as well as innovation and process improvements. Across all three nutrients, we are continuing to share and capitalize on maintenance practices to reduce capital spending and improve the reliability of our facilities.

Retail continues to drive margin improvement by focusing on proprietary product growth and reducing overall operating cash costs. The consolidation of Retail acquisitions also allows for cost synergies as more customers are served effectively by centralized supportive operations. These efforts have contributed to the improvement in our cash operating coverage ratio and stability in EBITDA margins, while supporting record EBITDA in 2018.

2018 Performance

$60	$72	92%	10%
Potash Cash Cost of Product Manufactured per Tonne	Urea Controllable Cash Cost of Product Manufactured per Tonne	Ammonia Operating Rate (excludes Trinidad and Joffre)	Retail EBITDA Margin



Strategically Allocate Capital

We maintain a **disciplined approach to capital allocation,** with our priorities being: invest in growth of the business, return cash to shareholders, and maintain a strong investment-grade rating.

The diversity of our asset base and stability of Retail earnings provides significant advantages for deploying capital through the agriculture commodity cycle. During low points of the cycle, we expect to focus on growing our crop nutrient production, share repurchases and transformational opportunities. At the high points of the cycle, we expect to shift to paying down debt and focusing on organic growth opportunities. The stability of Retail allows us to keep growing this business unit and our dividend throughout the cycle.

In 2018, Nutrien generated $2.0 billion of free cash flow and received $5.3 billion in net cash proceeds from the sale of equity interests in Israel Chemicals Ltd., Arab Potash Company and Sociedad Quimica y Minera de Chile S.A. due to regulatory requirements to dispose of these investments in connection with the Merger. The strength of our diversified earnings and receipt of substantial value for our equity investments allowed us to provide meaningful returns to our shareholders and invest in our organization.







Capital Allocation Priorities

- Continue to invest in Nutrien earnings growth, predominantly in Retail.
- Provide a stable and growing dividend in a targeted range of 40-60 percent of free cash flow after sustaining capital through the cycle.
- Maintain investment-grade credit rating.

Our goal is to provide shareholders a stable and growing dividend underpinned by growth in our Retail business unit. We increased the amount of dividends paid by approximately 17 percent in 2018 compared to the combined amount paid by our legacy companies in 2017.

In 2018, we also repurchased for cancellation 36 million shares for $1.8 billion. At the end of 2018, the existing share repurchase program was extended to 8 percent from 5 percent of outstanding common shares, and as of February 20, 2019, another 6 million shares have been repurchased for $297 million. We will continue to evaluate allocation of capital to further share repurchase programs in 2019.

Our focus on Retail growth was supported by approximately $600 million invested into US and Australian Retail acquisitions, global Retail greenfield projects, and the purchases of Agrichem in Brazil and Waypoint and Agrible in the US.

Sustaining the performance of our assets is critical to the success of our company and ensuring timely and reliable product to our customers. The appropriate level of spend requires thoughtful analysis based on historical data and industry expertise to provide the best return for risk mitigation and to deliver optimal operational performance of our assets. In 2018, Nutrien spent $1.1 billion on sustaining capital, similar to the investment level in 2017.

In the process of prudent capital allocation decisions, it is important that Nutrien maintain its balance sheet strength and sustain its investment-grade rating. This was achieved in 2018 and we were able to improve upon various debt ratios by the end of the year.

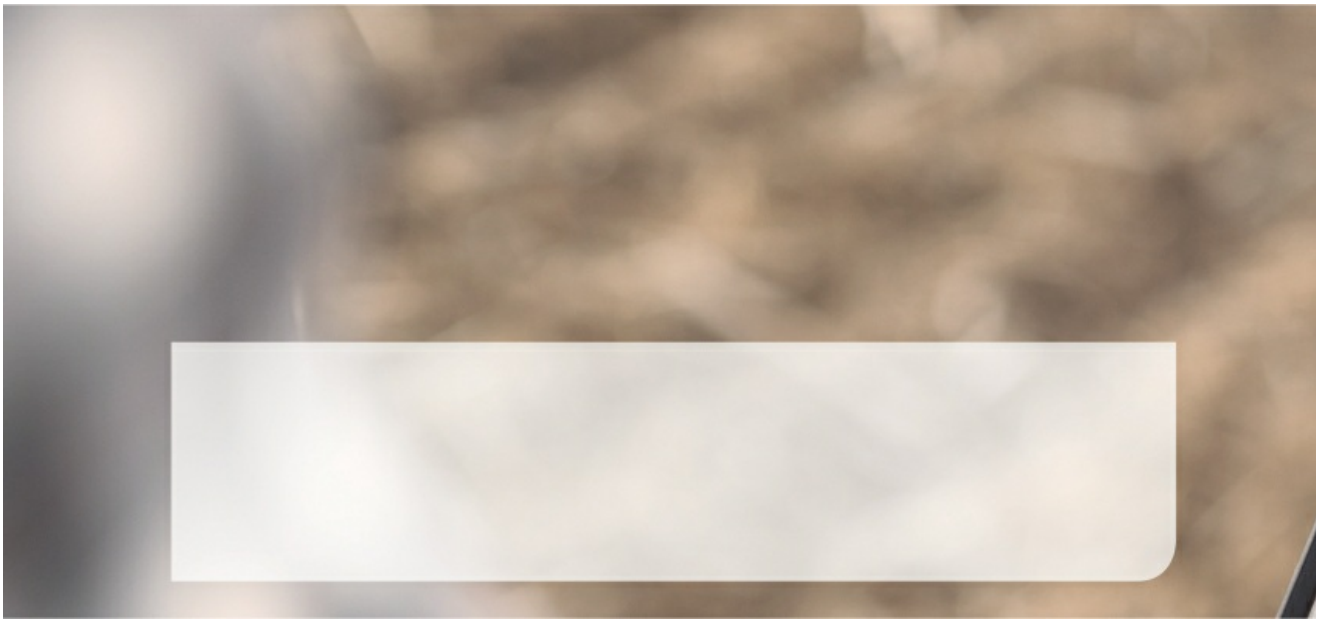
2018 Performance

58%
of Capital Deployment to Dividends and Share Repurchases

$2.8B
in Dividends and Share Repurchases

1.6x
Adjusted Net Debt / Adjusted EBITDA Ratio

$1.1B
in Sustaining Capital Expenditures



Invest in Growth & Innovation

Growth and Innovation Priorities

- Continue to grow US and Australian Retail footprint and develop Retail network in Brazil.
- Enhance our digital omni-channel offering and our proprietary crop input product technologies.
- Evaluate nitrogen brownfield projects in North America.

Investing in growth and innovation is intended to support not only continual earnings progression, but the long-term viability of our company and benefit all our stakeholders. We remain committed to prudently identifying and pursuing long-term, value-enhancing opportunities while executing on them in a timely manner.

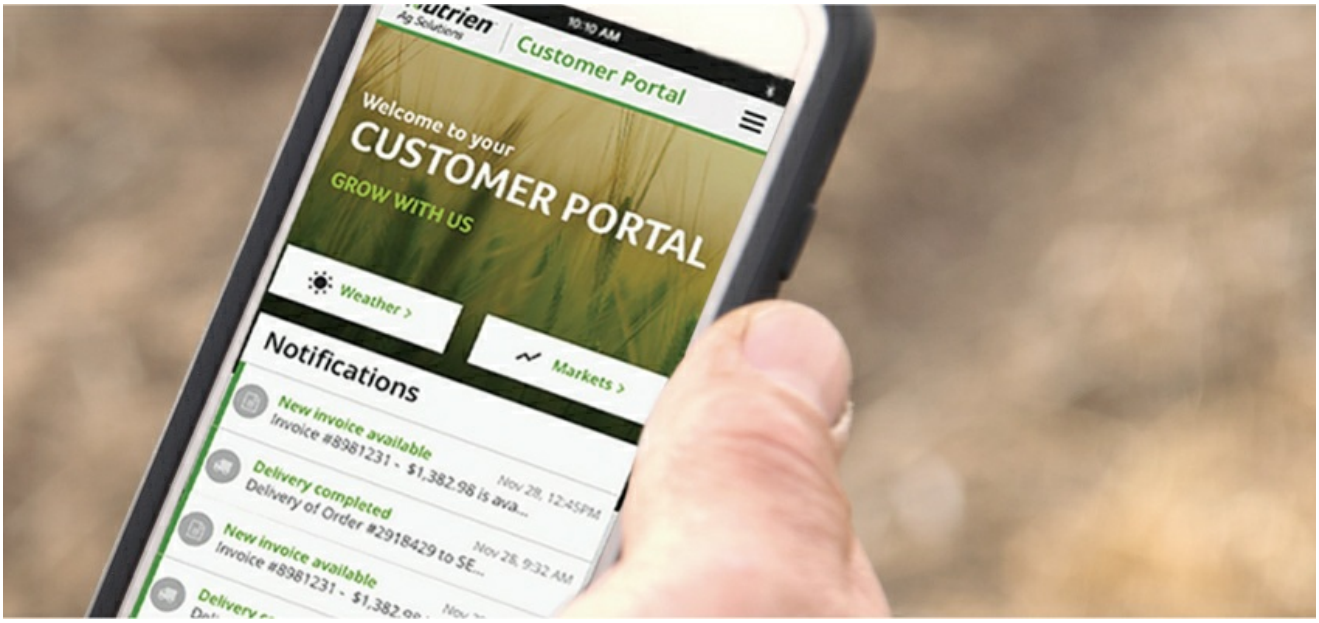
Growth

Nutrien remains focused on investing in its world-class Retail distribution network in North America, Australia and Brazil. We believe the US provides the best opportunity for growth through acquisitions along with the highest margins and synergy realization. Australia remains a market with opportunities for additional acquisitions and proprietary product expansion.

Brazil represents a new focus for Retail growth as a major global player in the production of food and purchase of crop inputs and services. We expect to invest capital in Brazil in order to achieve a meaningful presence and provide Brazilian growers with the latest in yield-enhancing products, agronomic advice and digital tools.

We are evaluating debottlenecking and brownfield projects across our North American nitrogen network that could increase total capacity and our capability to produce higher-margin products. Despite the recent increase in global nitrogen prices and natural gas price advantages in North America, we do not believe greenfield nitrogen projects would be currently economically viable.

With approximately 5 million tonnes of incremental potash operational capability in Saskatchewan, we can bring on additional tonnes with minimal capital as global demand grows.



Innovation

We are focused on developing new products, services and tools that meet the needs of our customers in their challenge to feed a growing planet.

Our user-friendly Nutrien Ag Solutions' digital platforms and eKonomics tools provide our customers with industry leading data and analytics, helping them make informed decisions to improve yields and returns. Nutrien Ag Solutions award winning integrated digital customer portal includes account management, weather data and interpretation, and commodity data. In 2019, we will be adding other valuable applications such as e-commerce capabilities, allowing both customers and crop consultants to place online orders for crop protection products, together with actionable crop plans and tailored agronomic insights.

We have invested in more than 1,700 proprietary products that include patented technology in micronutrients, crop protection and seed. Loveland Products® is one of our key crop protection proprietary brands available to growers, as well as Dyna-Gro® and Proven™ – highly valuable seed options for growers of corn, soybeans, cotton and canola in North America and Australia. Over the past five years, we have also invested in other agricultural technology companies, vastly increasing our portfolio of innovative products and options for our customers.

We are also providing financial services to growers under Nutrien Financial™ and Ag Resource Management™ (ARM™). These provide specialized lending to US customers, some of which is backed by grower collateral. The combination of the two lending platforms provides complementary credit options, helping growers make timely purchases of required crop inputs.

2018 Performance

~$400M
of Expected Annual Revenue Acquired
(related to purchased retail locations)

AGRICHEM
Crop Protection Acquisition in Brazil

120
New Product Launches and Registrations

>50%
of Customer Sales Linked to Digital Platform



Engage Employees

Nutrien's People Strategy is to attract, develop and engage skilled employees who live our values and principles. In 2018, we focused on establishing our foundational people program to enable the continued growth of the business and infuse Nutrien's purpose driven culture into the organization.

Managing Performance

In 2018, we designed and implemented a performance management system which measures both achievements and behavior. This system provides accountability for results on measurable goals as well as ensures our culture and values are guiding day-to-day behavior of our employees and leaders.

Talent Attraction and Sourcing

In 2018, Nutrien established its Talent Attraction & Sourcing group, which specializes in Strategic Talent Outreach and Delivery. Using a candidate-centric approach, this group targets and attracts job seekers into Nutrien roles and establishes diverse candidate pools.

Employee Engagement

As a new organization, we are greatly interested in hearing the voices of our employees and understanding their experience with Nutrien. One way we plan to do this is through a global employee engagement survey to be conducted in 2019. The results of the survey will be used to provide a Company-wide perspective on engagement and experience and will allow us to prioritize organizational efforts.

Purpose Driven Culture

Nutrien articulated its greater purpose as one of its first orders of business. It unifies the organization and provides meaning to employees and their work. Purpose is at the foundation of Nutrien's culture and is supported by two of our core values of safety and integrity, as well as our engagement principles of innovation, performance, inclusion and community.

Growing Our Diverse Workforce

We recognize that having a diverse workforce enhances our organizational strength and better reflects our customers and stakeholders. In 2018, we established a robust Diversity & Inclusion strategy that focuses on increasing gender diversity and match-to-market representation of visible minorities, including Indigenous peoples in Canada. Within the strategy, the organization is committed to increasing inclusive practices and sense of belonging for our employees.

Developing Our Employees

In 2018, Nutrien established its Strategic Talent Management process to manage organizational risk and succession in critical roles – a process stewarded by our Executive Leadership Team.



Employee Engagement Priorities

- Achieve progress toward our diversity priority of increasing the representation of women in senior leadership to 20 percent or more by 2022.
- Become more representative of our local markets in our employment of protected groups and visible minorities.
- Maintain at least 92 percent acceptance rate of all Nutrien employment offers, increasing to 95 percent acceptance by 2023.
- Maintain an annual voluntary resignation rate, globally, below 9.5 percent.
- By 2023, achieve an employee engagement survey score of no less than 75 percent.

Our Purpose

Grow Our World From The Ground Up™

Our Core Values

Safety
Home Safe Every Day

Integrity
Say What We Do, Do What We Say

Engagement Principles

Inclusion
Involve, Respect, Embrace

Performance
Deliver on Commitment

Community
Cultivate, Care and Collaborate

Integrity
Search for a Better Way

2018 Performance

17%
of Senior Leaders are Women

92%
Acceptance Rate of all Nutrien Employment Offers

<1.5%
Voluntary Resignation Rate of Senior Leaders

85%
of North American Senior Leaders Trained in Leading Purpose Driven Culture

Our Integrated Approach to Strategy & Risk

Enterprise Risk Management at Nutrien is integrated into our strategic and business planning activities, with a focus on managing our key business risks and facilitating informed risk taking. By fostering a risk-aware culture in decision making at all levels of the Company, Nutrien is positioned to better manage risk and identify opportunities to enhance value.



Our strategic and risk management processes are integrated with a view to ensuring we understand and benefit from the relationship between strategy, risk, and value creation. By considering risk throughout our strategic and business planning activities, we seek to align our strategy with our vision, and effectively manage the embedded business risks that could impact the achievement of our strategy.

Our approach to risk management is governed by our Board of Directors, including through our Board Committees, which oversee our Executive Leadership Team in understanding the principal risks to our business and strategy and implementing measures to manage those risks, while achieving an appropriate balance between risk and return.

In 2018, Nutrien undertook a top-down, bottom-up approach with our Executive Leadership Team and management in each of our business units to review and refine our risk profile. Through this process, we identified and evaluated the most significant risks and developed an approach to monitor mitigation and changes over time. See page 56 for a discussion of our Key Risks.

Governance Oversight

Corporate governance at Nutrien is key to long-term success and ensuring that our basic beliefs, strategy and enterprise risk management, are aligned and carried out with a view to acting in the best interests of all our stakeholders and are consistent with our core values. Our Board of Directors is comprised of directors with a vast array of relevant experience and education, skills and leadership that is applied in the strategic decision-making process.

In 2018, the Board played a critical role in developing the initial strategic road map for Nutrien and establishing the governance structure and policies that will support our key strategic actions that deliver value to all stakeholders.

Diversity is a core belief at Nutrien, and this is demonstrated by 33 percent of the Board being comprised of women. This diversity is invaluable and brings new and progressive perspectives and well-rounded skills to our Board. Nutrien formally adopted a Board Diversity Policy in January 2018 to help fulfill its diversity objectives. The policy provides that, although the selection of candidates for appointment to the Board will be based on merit, Board vacancy decisions will have regard for the appropriate level of diversity, including gender diversity. The Board Diversity Policy includes a target that women comprise not less than 30 percent of our directors.

It is imperative that directors understand our business, including its size, complexity and risk profile, and stay current with corporate governance, regulatory, industry and other key issues to be effective members of our Board. Over the course of 2018, our directors continued to advance their knowledge of our business, industry, regulatory environment, as well as other topical areas of interest to enhance their effectiveness as directors and stewards of Nutrien.

To increase alignment with shareholders' interests, allnon-executive directors are expected to hold three times their annual retainer in common shares and/or Nutrien deferred share units (DSUs) within five years of joining the Board. We believe it is important that our senior leadership have an ownership mentality in Nutrien as well, with mandatory equity ownership required, with the CEO expected to hold five times base salary.

For a more comprehensive view of Nutrien's corporate governance practices, please refer to our Meeting and Management Proxy Circular on our website:

nutrien.com/investors



Operating Segment Performance & Outlook

We report our results in four operating segments:
Retail, Potash, Nitrogen and Phosphate and Sulfate.

- Our reporting structure reflects how we manage our business.
- EBITDA is the primary profit measure used to evaluate performance and allocate resources in all operating segments.
- Net sales (sales revenues less freight, transportation and distribution expenses) is the primary revenue measure used in planning and forecasting in the Potash, Nitrogen and Phosphate and Sulfate operating segments.

31-37	**Retail**
38-43	**Potash**
44-49	**Nitrogen**
50-55	**Phosphate & Sulfate**



5%

25%

59%

53

EBITDA Growth in 2018

Percentage of Total Gross Margin Related to Proprietary Products in 2018

Cash Operating Coverage Ratio in 2018

Retail Locations Acquired in 2018

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Retail Operating Environment

Overview

Today's grower relies heavily on the expertise of the agricultural retailer to provide yield enhancing solutions through all crop inputs, agronomic advice, application services, data analysis, and financing. Agricultural retail is comprised of a distribution network serving growers within a local region. The network of retail facilities allows for logistical and working capital efficiencies, while providing products and services to the grower in a timely manner. Retailers deal with numerous vendors of crop inputs—so the scale of the retailer can provide procurement savings. The numerous challenges that growers face on a daily basis creates the opportunity for the retailer to be a business partner with the grower, and to provide meaningful support and guidance while improving economic and crop productivity.

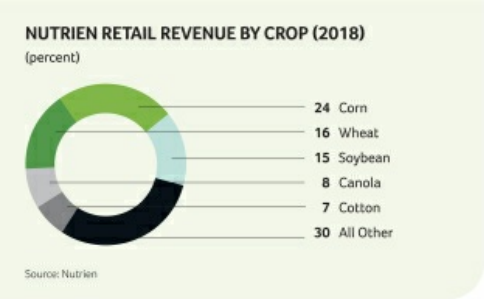
Competitive Landscape

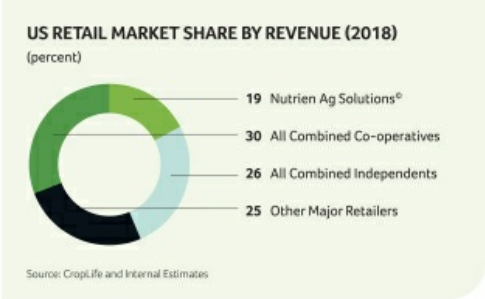
The retail landscape in most developed agriculture markets is comprised of numerous competitors of differing size and ownership structure. It is a fragmented market and continues to require scale to be able to meet evolving grower needs. Growers want more services and solutions, rooted in analytics, delivered in a shorter time window than ever before.

In North America and Australia, we compete with large national retailers, co-operatives and smaller independent operations. In Brazil, the market is characterized by smaller independent owners and represents an opportunity for larger retailers, including Nutrien, to provide a significant improvement in grower performance.

Key Success Factors

Meeting the needs of the grower requires the capability to deliver a wide range of bulk products in a timely and cost-effective manner. The ability to provide application services, agronomic advice, technology and financial services further enhances the relationship with the grower. This requires significant scale and investment supported by the latest in agricultural technology. As the majority of products and services are required in a very short application window, it is critical that the retail network is able to deliver when the grower is in the field. Strong relationships with suppliers of crop input products and prudent working capital management are crucial to the success of the retail operations.





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Our Business

Our Nutrien Ag Solutions© and Landmark© Retail businesses provide complete agricultural solutions, including nutrients, crop protection products, seed, services and agronomic advice to growers. As the world's largest retail distributor of crop inputs, we operate more than 1,700 Retail facilities across the US, Canada, Australia and key areas of Latin America. Our operations service more than 100 crops globally, with corn, soybeans, wheat and canola being the majority of our business.

We have approximately 3,300 agronomists and field experts working directly with growers, helping them optimize crop yields and maximize economic returns on their farms. Our experts help growers implement sustainable management practices based on a thorough understanding of soils, climate conditions and crop requirements, and utilizing our portfolio of leading products and services.

Products & Services	Purpose for the Grower
Crop Nutrients	Crop nutrients are the essential fertilizers of potash, nitrogen, phosphate, sulfates and micronutrients that allow plants to grow and provide meaningful nutrition to our planet.
Crop Protection Products	Crop protection products are a broad spectrum of herbicides, fungicides, insecticides and adjuvants products that help growers minimize yield losses from weeds, diseases and insects.
Seed	We provide the seed and seed-related information and analysis our customers require. We sell seed brands from top global suppliers as well as our proprietary seed products that include licensed traits best suited for the grower's specific geography.
Merchandise	Merchandise includes a variety of products in Australia and Canada, including most notably fencing, feed supplements, livestock-related animal health products, storage and irrigation equipment. It also includes the fuel and equipment businesses in Canada.
Service and Other	This includes services, such as product application, soil and leaf testing, crop scouting and precision agriculture services under our ECHELON® platform and financial services. We maintain a large fleet of application equipment and other rolling stock to ensure timely and optimal applications of both nutrients and crop protection products in a safe and effective manner for our growers.

We also manufacture and sell several advanced proprietary crop protection products and nutritionals under the Loveland Products® brand, seed products under the brand names Dyna-Gro® and Proven™, and animal health products under the Dalgety® brand. These leading crop input and animal health products provide farmers and ranchers with a portfolio of useful and competitive choices to successfully grow and protect their crops and livestock. The crop protection products also provide meaningfully higher margins than vendor brand offerings as we procure and blend the products at seven formulation facilities across the globe.

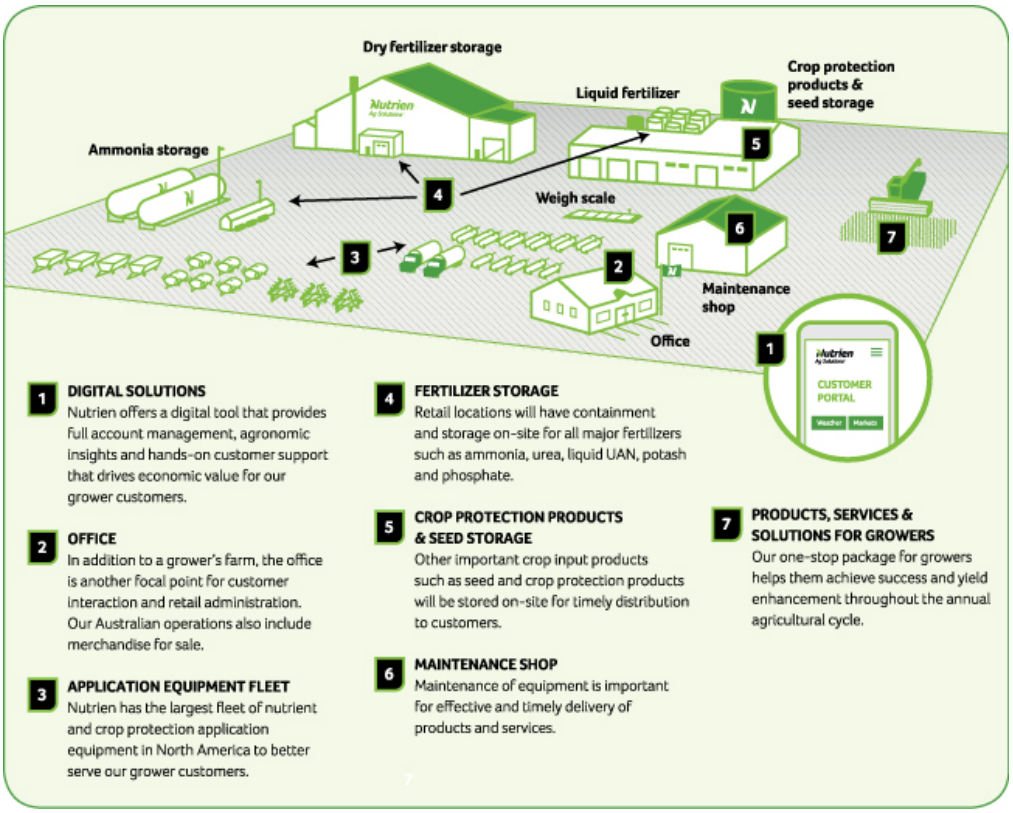
In 2018, Nutrien Ag Solutions created an award-winning integrated digital platform for customers and our crop consultants to harness technology and help growers achieve the best outcomes on their farms. The customer portal was launched with industry leading tools such as customer account management, weather data, and interpretation and commodity data—all on one digital platform.

In 2019, we will be focused on adding other valuable applications such as e-commerce capabilities, allowing both customers and crop consultants to place online orders for crop protection products. Developing tools for crop planning and digital agronomy will be a key focus, with actionable crop plans and tailored agronomic insights tied to the purchase of specific products and services.

Our digital omni-channel will allow our customers and crop consultants to interact easily and cohesively, while using information and analytics directly tied to a product purchase interface and an account management tool. The value of this customer portal is demonstrated with customers representing over 50 percent of our historical sales now signed up at the end of 2018.

We are also expanding the financial services we offer to our customers through Nutrien Financial™ and ARM™. We are currently in the process of expanding our lending capabilities while minimizing collection risk. This will further support our customers' annual crop input purchases.

Standard Retail Facility Operations



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2018 Market Conditions

US/China trade restrictions pressured crop prices while weather issues impacted spring and fall application seasons.

Global grain and oilseed prices were mixed in 2018, influenced primarily by Chinese trade restrictions on US soybeans, broad market volatility from political uncertainty and historically high yields. Robust demand for corn and other grains helped support year-over-year price increases, while soybean prices declined. Farmers in key growing regions continued to plant large crop acreage and make decisions to maximize yields. Due to a strong demand environment, global grain stocks decreased year-over-year, including a 13 percent decline in US stocks. Global and US grains stocks-to-use is now the lowest since 2014.

North American planting was delayed due to cold and wet weather in the spring, resulting in a condensed application season and a shift in Retail sales into the second quarter. Crop conditions improved through the growing season, supporting above trend yields, increased production and reduced need for crop protection products. With one of the wettest fall seasons in the US in over 100 years, growers applied lower volumes of fall fertilizer and crop protection products.

In 2018, Australia weather was extremely dry with multi-decade low rainfalls. Crop input demand remained relatively strong despite the severe drought conditions.

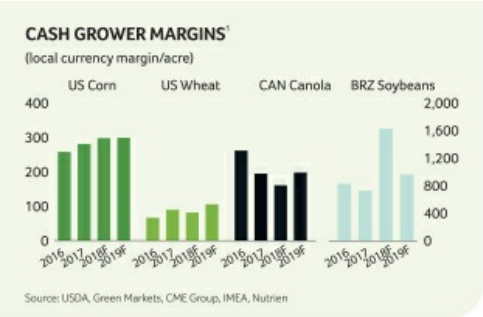
Market Outlook

We expect increased acreage of input intensive crops such as corn and cotton to support North American crop input expenditure in 2019.

North American grower economics continue to be challenged as a result of the impact of record corn and soybean yields and the US-China trade dispute on crop prices and demand. However, given current prices and supply/demand fundamentals, we expect two to four million acres of increased US corn and cotton in place of soybeans, which is supportive of fertilizer, seed and crop protection demand.

The poor fall application season is expected to lead to a significant proportion of pre-plant field work to be done in the spring. We expect this to lead to higher-than-normal spring nitrogen demand, which tends to be particularly supportive to urea and UAN. Potash and phosphate demand is also expected to be supported by the short fall application window and high nutrient removal as a result of record yields.

Globally, weather will be an important factor as dryness is currently prevalent in Brazil, while conditions in Argentina have been relatively favorable. Soybean growers in both countries have benefited from the US-China trade dispute and higher prices, particularly on a local currency basis. The soil moisture conditions in Australia have improved, but precipitation during the winter crop growing season will be critical to 2019 crop production.



[1] 2016-2017 margins are based on average realized cash crop prices and estimated average fertilizer costs; 2018F margins are based on new crop 2018 futures prices less estimated basis and estimated average retail fertilizer prices; 2019F margins are based on new crop 2019 futures prices less estimated bases and estimated spot retail fertilizer prices; Brazilian grower margins are based on IMEA cost of production and price estimates for Mato Grosso.

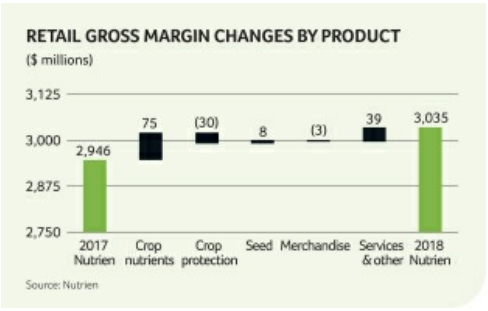


[1] 2011 to 2017 data is based upon legacy Agrium financials.

Retail Financial Performance

	Dollars (millions)					Gross Margin Dollars (millions)					Gross Margin (percentage)		
	Nutrien 2018	Nutrien 2017	% Change	PCS 2017	% Change	Nutrien 2018	Nutrien 2017	% Change	PCS 2017	% Change	Nutrien 2018	Nutrien 2017	PCS 2017
Sales													
Crop nutrients [1,2]	$ 4,577	$ 4,121	11	$ –	n/m	$ 923	$ 848	9	$ –	n/m	20	21	–
Crop protection products	4,862	4,937	(2)	–	n/m	1,155	1,185	(3)	–	n/m	24	24	–
Seed	1,687	1,628	4	–	n/m	333	325	2	–	n/m	20	20	–
Merchandise	734	683	7	–	n/m	103	106	(3)	–	n/m	14	16	–
Services and other	810	734	10	–	n/m	521	482	8	–	n/m	64	66	–
	12,670	12,103	5	–	n/m	$ 3,035	$ 2,946	3	$ –	n/m			
Cost of goods sold	(9,635)	(9,157)	5	–	n/m								
Gross margin	3,035	2,946	3	–	n/m								
Expenses [3]	(2,328)	(2,090)	11	–	n/m								
EBIT	707	856	(17)	–	n/m								
Depreciation and amortization	499	289	73	–	n/m								
EBITDA	$ 1,206	$ 1,145	5	$ –	n/m								

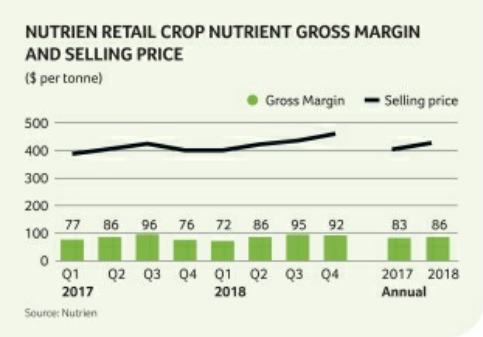
1 Sales tonnes were 10,689,000 tonnes (2017 (Nutrien) – 10,202,000 tonnes), average per tonne prices were $428 (2017 (Nutrien) – $404) and average margin per tonne was $86 (2017 (Nutrien) – $83).
2 Includes intersegment sales. See note 4 to the financial statements.
3 Includes selling expenses of $2,303 million (2017 (Nutrien) – $2,007 million).

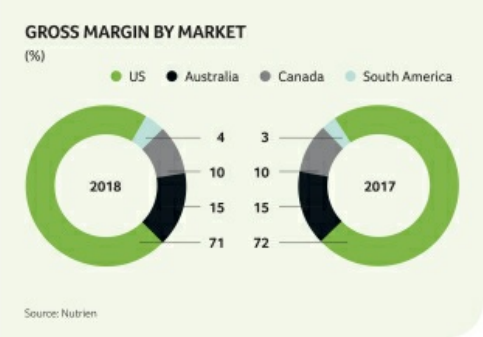


The most significant contributors to the change in EBITDA were as follows (direction of arrows refers to impact on EBITDA and ● means no impact):

		2018 vs 2017 (Nutrien)	2018 vs 2017 (PotashCorp)
Sales volumes	↑	Crop nutrient volumes were up across all geographic locations with much of the increase coming from Australia and North America acquisitions.	PotashCorp did not have Retail operations prior to the Merger.
	↓	Crop protection volumes decreased mainly due to adverse weather in North America and Australia.	
	↑	Strong cotton seed volumes in the US more than offset lower seed volumes in Australia caused by dry weather.	
	↑	Merchandise sales increased in Canada primarily due to higher fuel sales and in Australia primarily due to increased animal health volumes.	
	↑	Services and other sales increased primarily due to higher livestock sales and wool commissions in Australia.	
Sales prices	↑	Crop nutrients prices were higher in all geographic locations consistent with higher global benchmark prices.	
Gross margin	↑	Crop nutrient gross margin was higher primarily due to increased volumes in all geographic locations. Gross margin percentage was flat due to the increase in selling prices being offset by rising costs.	
Selling expenses	↓	Expenses were up due to higher depreciation and amortization discussed below and increased payroll from acquisitions.	
Depreciation and amortization	●	Expense was higher primarily due to the PPA adjustments as a result of the Merger and from recently acquired businesses.	

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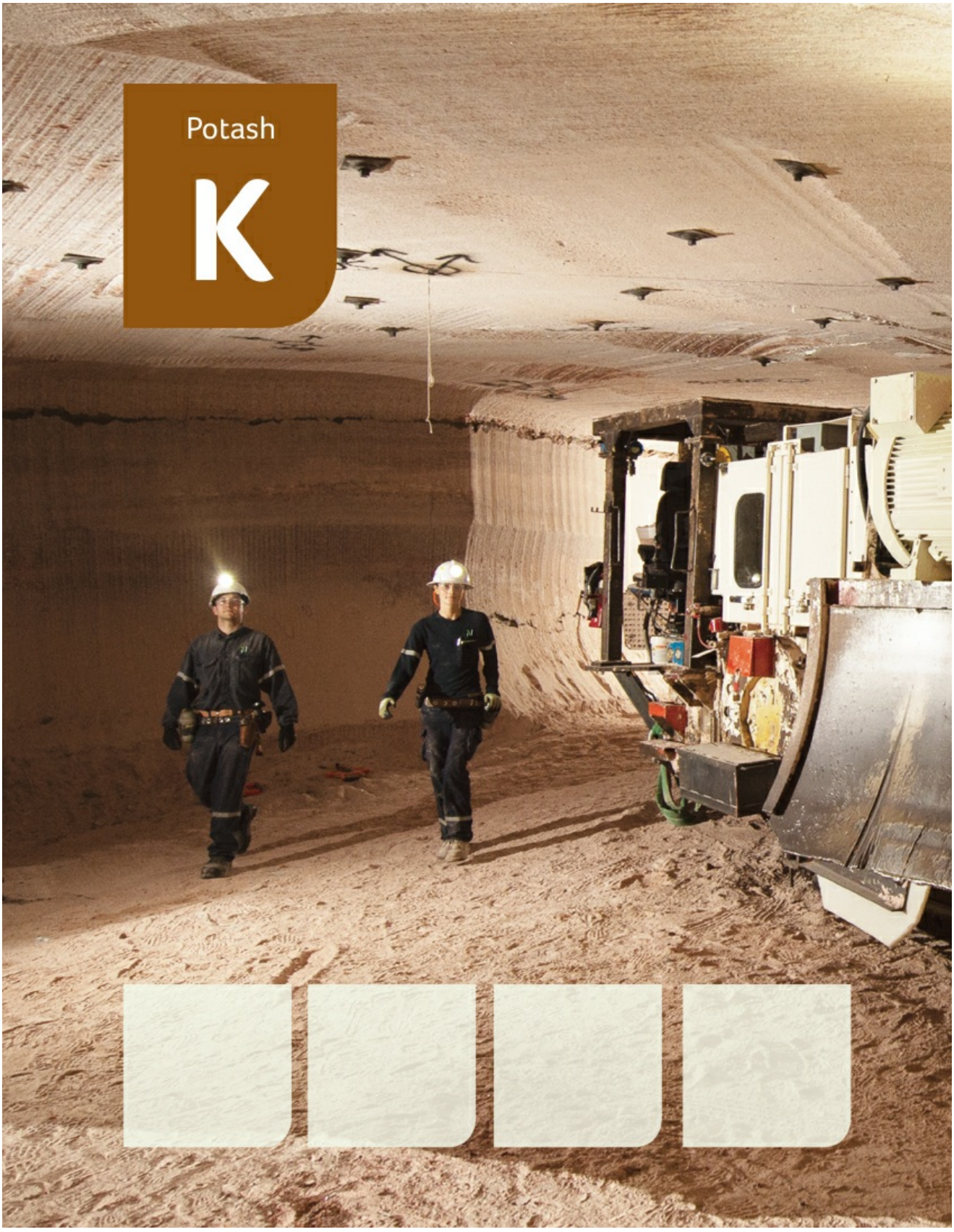
SELECTED RETAIL FINANCIAL PERFORMANCE MEASURES

	Nutrien 2018	Nutrien 2017 1	% Change	PCS 2017
Comparable store sales	1%	0%	n/m	n/a
Normalized comparable store sales	(1%)	2%	n/m	n/a
Average working capital to sales	21%	17%	26	n/a
Cash operating coverage ratio	59%	60%	(2)	n/a

1 2017 average working capital to sales and cash operating coverage ratio are from Agrium's 2017 Annual Report.
n/m = not meaningful
n/a = not available

Normalized comparable store sales decreased due primarily to US and Australia weather-related impacts to fertilizer and crop protection sales volumes more than offsetting sales volume growth in Canada and South America.




Potash
K

48%

Adjusted EBITDA Growth in 2018

$205

Average Realized Net Selling Price per Tonne in 2018

$60

Cash Cost of Product Manufactured per Tonne in 2018

1.3MMT

Increase in Potash Sales in 2018

Potash Operating Environment

Overview

Potassium chloride (KCl), commonly called potash, is mined from ore deposits located deep underground or extracted from specific salt lakes or seas. Potash is sold into the agricultural market primarily as solid granular or standard products. Granular product has a larger and more uniformly shaped particle that 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. Standard product is more commonly used in major Asian markets.

Potassium plays an important role in the growth and development of plants by improving root and stem strength, water utilization and disease resistance, thereby enhancing taste, color and texture of food.

Competitive Landscape

Potash is found in significant quantity and quality in a limited number of countries. Canada has the largest known global reserves and approximately 35 percent of global production capability. More than 70 percent of the world's potash capacity is held by the six largest producers. Our primary competitors are located in Belarus, Canada, Germany, Israel, Jordan and Russia.

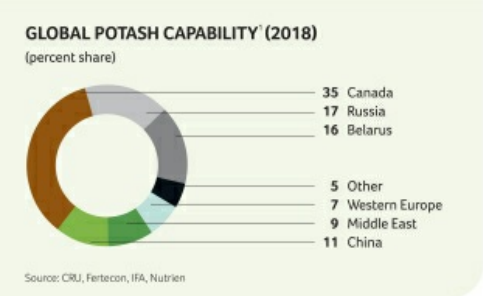
Most major potash consuming countries in Asia and Latin America have limited or no indigenous production capability and rely on imports to meet their needs. This is an important difference between potash and the other major crop nutrient businesses. Trade typically accounts for approximately three-quarters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

The demand growth rate for potash has outpaced that of other primary nutrients, reaching over 4 percent CAGR between 2013-2018. This growth is driven by the biological requirement of higher yielding crops and improving soil fertility practices, particularly in emerging markets where potash has been historically under-applied and crop yields lag.

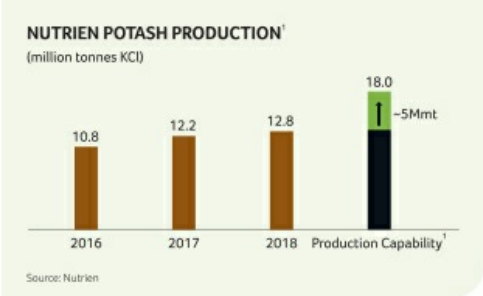
Key Success Factors

Securing access to high-quality deposits in a country with both political stability and infrastructure availability can present significant challenges to building new potash capacity. In addition, the extensive time and cost of building greenfield capacity provides a significant advantage to producers with the capability to expand production from existing facilities.

The most recent greenfield projects are estimated to have a cost of $2,300 to $2,700 per tonne of capacity with a seven-year timeline to commercial production.



[1] Based on operational capability.



[1] Assuming full ramp up of Saskatchewan mines.

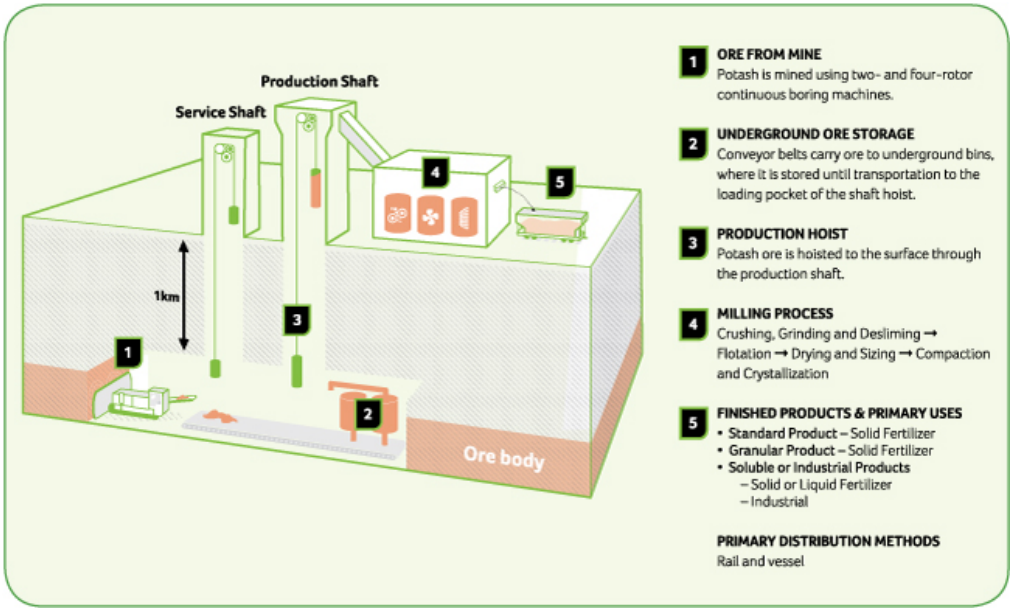
Our Business

Nutrien is the world's largest producer of potash with access to decades of low-cost reserves from our six potash mines in Saskatchewan. We have at least 5 million tonnes of incremental operational capacity that we can bring on with limited capital as global demand grows. We also have the ability to add further brownfield expansions in Saskatchewan that are much lower cost than greenfield expansions. We have the most extensive distribution network in North America, and our investment in Canpotex provides low-cost marketing and logistics to the approximately 40 international markets we serve.

Nutrien's potash mines represent some of the lowest cost and highest quality mines in the world. We take great care to ensure our mines run at optimal levels and to undertake preventative maintenance to minimize safety risk and unscheduled downtime.

In September 2018, Nutrien announced the launch of the Potash Full Potential Program to drive a step change in safety, productivity, lower cost, and increase flexibility across our operations network in Saskatchewan. The program is also establishing the digital operations strategy for Potash and will leverage data, advanced analytics, automation and many other new technologies to accelerate results. We have commenced work at one site and will extend the program across our network through 2021.

Potash Production Process



K

2018 Market Conditions

Robust potash consumption in key consuming regions resulted in the second consecutive year of record global potash demand.

We estimate global potash shipments reached 66.5 million tonnes in 2018, an increase of approximately 1.3 million tonnes from 2017, which represents a three-year CAGR of 3.3 percent and a five-year CAGR of 4.5 percent.

North American and South American growers replenished soil nutrients following record production and elevated yields, while growers in China and Other Asia improved soil fertility practices as a result of increased soil testing and improved agronomic practices. India continues to face political barriers to significantly growing potash demand; however, the agronomic need and willingness of farmers to improve yields persists.

Supply from new projects in Canada and the Former Soviet Union (FSU) region was slow to ramp up with less than 1.4 million tonnes of new potash from greenfield projects being produced in 2018. Limited new supply and strong global demand led to year-over-year price increases in spot markets of around 20 percent. Potash contracts with customers in China and India were concluded in the second half of 2018 with $60 per tonne and $50 per tonne increases, respectively, reflecting tight market fundamentals and higher spot market prices that existed all year.

Market Outlook

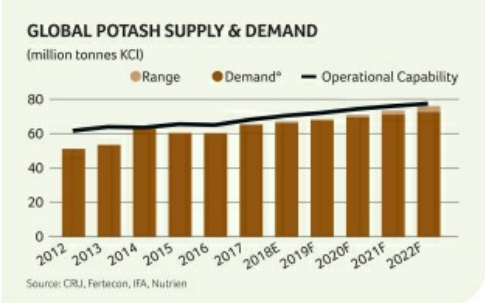
Positive global agricultural developments and lower inventories in key import regions could support another record year of shipments.

Potash market fundamentals remain firm, supported by strong demand growth and tight availability. Canpotex and several other suppliers have all reported they are fully committed through early 2019. While we do expect that product availability from greenfield plants will increase during 2019, this is expected to be partially offset by production curtailments and permanent mine closures from other existing producers.

We continue to observe positive agricultural developments in the standard-grade markets, particularly in China, where there has been a continuous shift to more potassium-intensive crops like fruits and vegetables. While the fertilizer subsidy policy in India and weaker palm oil economics may pose some near-term risks on demand in these regions, the long-term agronomic need for potash is undeniable.

High nutrient removal in 2018 related to expected record crop yields, combined with potash prices remaining affordable relative to grower revenues, are expected to support continued strong consumption in North American and Latin America. Along with lower inventories in key import regions to begin the year, we anticipate world potash shipments between 67 million to 69 million tonnes in 2019.





* Demand growth range based on 20-year CAGR (2002 to 2022) of 2.8 to 3.0 percent. 5-year forecast range of 2.3 to 3.3 percent.

Potash Financial Performance

	Dollars (millions)					Tonnes (thousands)					Average per Tonne				
	Nutrien 2018	Nutrien 2017	% Change	PCS 2017	% Change	Nutrien 2018	Nutrien 2017	% Change	PCS 2017	% Change	Nutrien 2018	Nutrien 2017	% Change	PCS 2017	% Change
Manufactured product [1]															
Net sales															
North America	$ 1,007	$ 881	14	$ 639	58	4,693	4,535	3	3,201	47	$ 214	$ 194	10	$ 200	7
Offshore	1,657	1,167	42	989	68	8,326	7,193	16	6,096	37	$ 199	$ 162	23	$ 162	23
	2,664	2,048	30	1,628	64	13,019	11,728	11	9,297	40	$ 205	$ 175	17	$ 175	17
Cost of goods sold	(1,182)	(1,115)	6	(824)	43						$ (91)	$ (95)	(4)	$ (89)	2
Gross margin	1,482	933	59	804	84						$ 114	$ 80	43	$ 86	33
Other [2]	2	–	–	–	n/m	Depreciation and amortization					$ 31	$ 29	7	$ 25	24
Gross margin	1,484	933	59	804	85	Gross margin excluding depreciation and amortization					$ 145	$ 109	33	$ 111	31
Impairments [3]	(1,809)	–	n/m	–	n/m										
Expenses [4]	(282)	(195)	45	(179)	58										
EBIT	(607)	738	n/m	625	n/m										
Depreciation and amortization	404	345	17	232	74										
EBITDA	$ (203)	$ 1,083	n/m	$ 857	n/m										
Adjusted EBITDA	$ 1,606	$ 1,083	48	$ 857	87										

1 Includes intersegment sales. See note 4 to the financial statements.
2 Includes other potash and purchased products and is comprised of net sales of $3 million (2017 (Nutrien) – $9 million, 2017 (PotashCorp) –$5 million) less cost of goods sold of $1 million (2017 (Nutrien) – $9 million, 2017 (PotashCorp) – $5 million).
3 Impairment of property, plant and equipment of $1,809 million (2017 (Nutrien) – $NIL, 2017 (PotashCorp) – $NIL). See note 16 to the financial statements.
4 Includes provincial mining and other taxes of $244 million (2017 (Nutrien) – $159 million, 2017 (PotashCorp) – $146 million).
n/m = not meaningful



The most significant contributors to the change in EBITDA were as follows (direction of arrows refers to impact on EBITDA and ● means no impact):

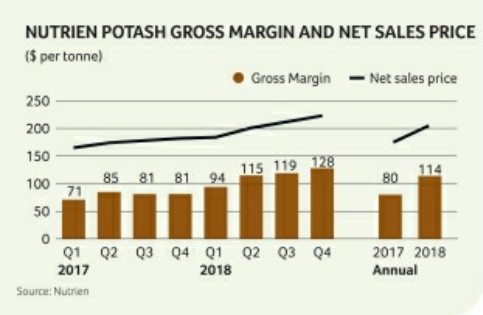
	2018 vs 2017 (Nutrien)	2018 vs 2017 (PotashCorp)
Volumes	↑ Offshore volumes were higher due to increased demand and a higher Canpotex allocation. ↑ North America volumes were up primarily due to increased intercompany sales to Retail and lower imports.	↑ Offshore volumes were higher due to increased demand and a higher Canpotex allocation. ↑ North America volumes were up primarily due to lower imports. ↑ Volumes were also higher as a result of the Merger, specifically the addition of the Vanscoy Potash mine and intercompany sales to Retail.
Net sales prices	↑ Selling prices were higher due to increased prices in all major spot markets due to strong demand.	↑ Selling prices were higher due to increased prices in all major spot markets due to strong demand.
Cost per tonne	↑ Costs decreased due to our portfolio optimization and results from our cost reduction strategy more than offsetting increased depreciation related to PPA adjustments as a result of the Merger.	↓ Costs increased due to the addition of Agrium's operations and higher depreciation on the related PPA adjustments as a result of the Merger.

		2018 vs 2017 (Nutrien)		2018 vs 2017 (PotashCorp)
Impairment of property, plant and equipment	↓	A non-cash impairment of property, plant and equipment was recorded as a result of the decision to safely shut down our New Brunswick operations due to the operations no longer being part of our medium or long-term strategic plans. See note 16 to the financial statements.	↓	A non-cash impairment of property, plant and equipment was recorded as a result of the decision to safely shut down our New Brunswick operations due to the operations no longer being part of our medium or long-term strategic plans. See note 16 to the financial statements.
Provincial mining and other taxes	↓	Under Saskatchewan provincial legislation, we are subject to resource taxes, including the potash production tax and the resource surcharge. Provincial mining and other taxes increased primarily due to stronger potash prices.	↓	Provincial mining and other taxes increased primarily due to stronger potash prices.
Depreciation and amortization	•	Expenses were higher due to PPA adjustments as a result of the Merger and increased sales volumes.	•	Expenses were higher due to the addition of the Vanscoy Potash mine, increased sales volumes and PPA adjustments as a result of the Merger.

CANPOTEX SALES BY MARKET

(percentage of sales volumes)	Nutrien 2018	Nutrien 2017	% Change
Latin America	33	30	10
Other Asian markets [1]	31	33	(6)
China	18	18	–
India	10	12	(17)
Other markets	8	7	14

1 All Asian markets except China and India.





POTASH PRODUCTION

(million tonnes KCl)	Nameplate Capacity [1]	Operational Capability [2] 2019	Operational Capability [2] 2018	Nutrien Production 2018	Nutrien Production 2017
Rocanville Potash	6.5	5.4	5.2	5.22	4.86
Allan Potash	4.0	2.8	2.6	2.41	1.83
Vanscoy Potash	3.0	2.2	2.7	2.24	2.42
Lanigan Potash	3.8	2.1	2.0	1.96	1.82
Cory Potash [3]	3.0	1.0	0.8	0.81	0.99
Patience Lake Potash	0.3	0.3	0.3	0.20	0.30
Total	20.6	13.8	13.6	12.84	12.22

1 Represents estimates of capacity as at December 31, 2018. Estimates based on capacity as per design specifications or Canpotex entitlements once determined. In the case of Patience Lake, estimate reflects current operational capability. Estimates for all other facilities do not necessarily represent operational capability.
2 Estimated annual achievable production level at current staffing and operational readiness (estimated at beginning of year). Estimate does not include inventory-related shutdowns and unplanned downtime.
3 In November 2016, we announced operational changes at Cory Potash to produce only white potash, with an expected operational capability of approximately 0.8 million tonnes per year. In 2019, Cory Potash commenced partial operation of the red mill. Additional operational capability is achievable with increased staffing.


Nitrogen
N

43%

EBITDA growth in 2018

$2.83

Average Natural Gas Cost in Production per MMBtu in 2018

$112

Gross Margin per Tonne in 2018

(excluding depreciation and amortization)

92%

Ammonia Operating Rate in 2018

(excludes Trinidad and Joffre)

N

Nitrogen Operating Environment

Overview

Synthesized from hydrogen sources (primarily natural gas or coal), steam and air, ammonia (NH_3) is a concentrated source of nitrogen and the basic feedstock for all upgraded nitrogen products.

Nitrogen is required by every living cell and is a fundamental building block of plant proteins that improve crop yield and quality. Nitrogen is also used in a variety of industrial products such as plastic resins, adhesives and emissions control.

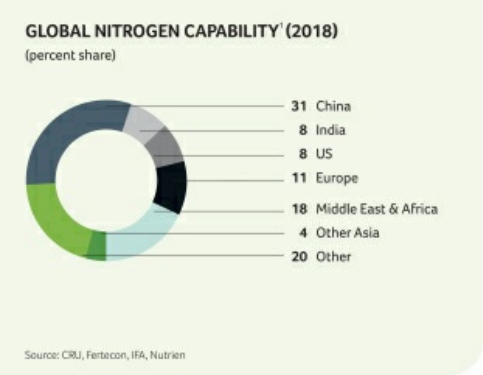
Competitive Landscape

Production of nitrogen is the most geographically diverse of the three primary nutrients due to the widespread availability of hydrogen sources. Ammonia is primarily consumed close to the regions in which it is produced due to the high cost of transportation, whereas urea and nitrogen solutions are more widely transported and traded. We compete with other producers in Canada, the US and a number of offshore suppliers.

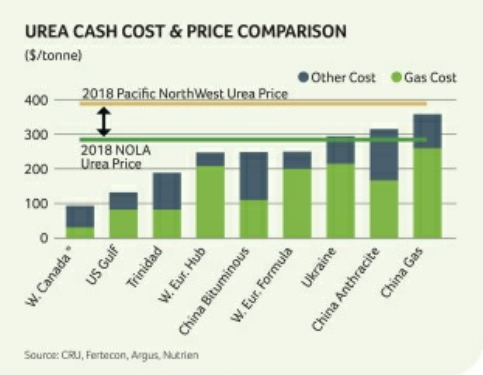
In recent years, a significant amount of new capacity was built in locations with access to low-cost gas, which displaced higher-cost exports from regions such as China and Europe. The US remains the largest importer of nitrogen and a key driver of global trade despite a significant increase in domestic capacity and production over the past few years.

Key Success Factors

Natural gas can represent up to 60 percent to 80 percent of the cash cost of producing a tonne of ammonia, and a low-cost and reliable source of feedstock is therefore imperative. Having reliable production assets located in key consuming regions is also advantageous as the risk and cost of transportation is significantly reduced.



[1] Based on operational capability.



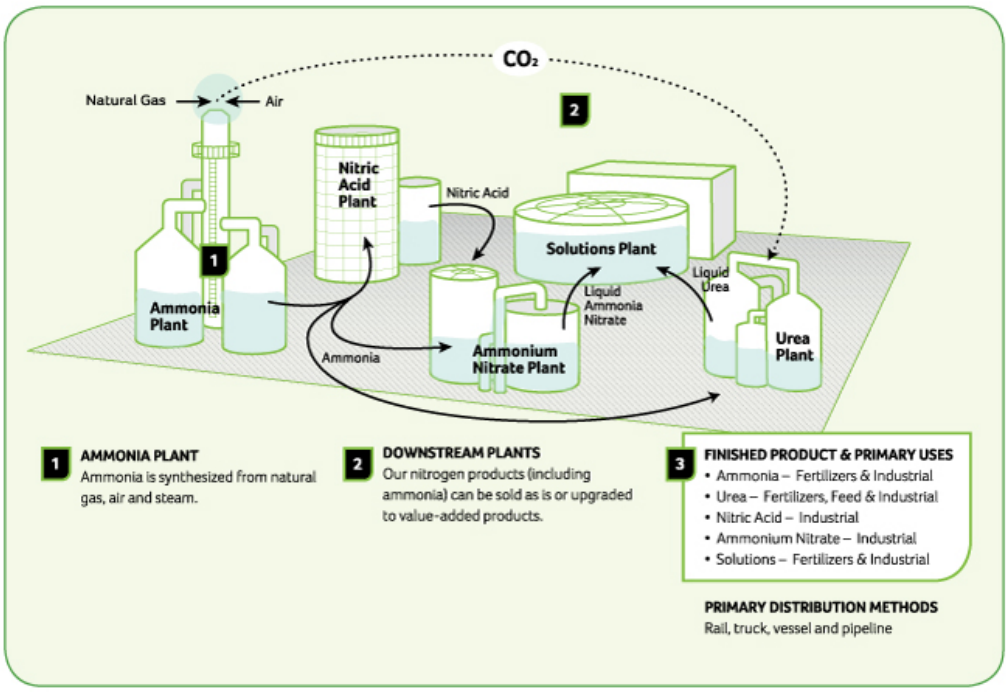
* Western Canadian cash cost is shown as FOB.

Our Business

Nutrien has a total of 7.1 million mt of ammonia capacity and the ability to produce and sell more than 11 million tonnes of total nitrogen products. Our asset base is highly flexible, allowing us to optimize product mix and profitability in response to changing market conditions. Our nitrogen plants in Canada and the US have access to low-cost natural gas and benefit from regional selling advantages. We also operate a large-scale nitrogen facility in Trinidad with gas costs indexed primarily to ammonia prices, providing for greater margin stability and access to import markets. In 2018, we signed new long-term gas contracts with the Government of Trinidad.

Approximately half of our nitrogen sales are agricultural related and the remaining sold for industrial purposes. A portion of our industrial sales are linked to natural gas costs, reducing variability in margins. We are currently reviewing a number of brownfield growth opportunities across our Nitrogen system that could increase total capacity and our upgraded product capability.

Nitrogen Production Process



N

2018 Market Conditions

Nitrogen prices were supported by limited new supply, production curtailments and higher feedstock prices.

Urea benchmark prices rose 20 to 25 percent in 2018 as export volumes from high-cost producing regions such as China and Europe declined significantly, more than offsetting new capacity additions that have come online over the past few years. Chinese urea exports were 2.4 million tonnes in 2018, down 2.3 million tonnes compared to 2017. Chinese urea production has been pressured by domestic environmental regulation—resulting in shutdowns—as well as higher energy feedstock costs. European nitrogen production costs also supported global prices as domestic natural gas prices increased by between 30 and 40 percent year-over-year.

Ammonia prices reached a two-year high supported by a balanced trade market. Growing ammonia requirements in key importing regions, such as China and Morocco, in addition to lower global export supply, offset the effect of lower import requirements in the US due to increased domestic production.

Approximately 70 percent of our nitrogen production is located in North America where natural gas prices remained subdued in 2018 relative to the rest of the world. In 2018, Canadian AECO benchmark gas prices were $1.19/MMBtu and US NYMEX gas prices were $3.09/MMBtu.

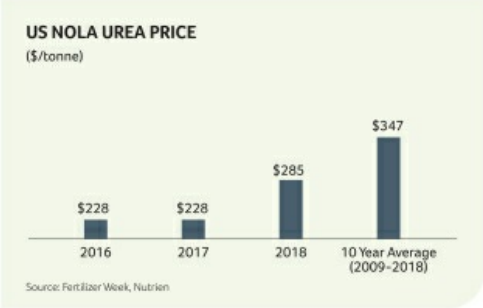
Market Outlook

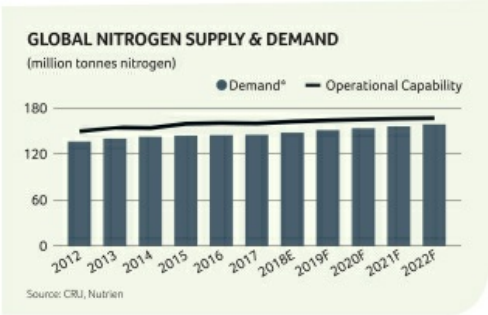
Strong demand and limited supply additions expected to support prices.

We expect that limited urea capacity additions, combined with further closures, will support further tightening of the urea supply/demand balance in 2019. Chinese urea export availability is expected to remain constrained due to the impact of environmental regulations and its relatively high cost inputs, which supports the global floor price for nitrogen. Coal prices have remained relatively stable entering 2019 and Chinese production levels are in line with year ago levels. The US sanctions on Iran also place significant uncertainty around Iran's urea export potential, which could tighten the global urea market and provide support to urea prices.

The ammonia market entered 2019 under pressure as energy prices have softened and buyers anticipate new supply, but the high-cost positions from European suppliers will continue to establish the floor.

Nitrogen demand is expected to increase by approximately 2 percent in 2019. We expect a two to four million acre increase in US corn and cotton acreage in 2019, which will support robust US nitrogen consumption. Furthermore, we expect the poor fall application season will result in a higher than normal proportion of nitrogen applications in the spring, supporting spring demand, particularly for urea and UAN.





* Demand growth based on 20-year CAGR (2002 to 2022) of 2 percent.

Nitrogen Financial Performance

	Dollars (millions)					Tonnes (thousands)					Average per Tonne				
	Nutrien 2018	Nutrien 2017	% Change	PCS 2017	% Change	Nutrien 2018	Nutrien 2017	% Change	PCS 2017	% Change	Nutrien 2018	Nutrien 2017	% Change	PCS 2017	% Change
Manufactured product [1]															
Net sales															
Ammonia	$ 903	$ 911	(1)	$ 584	55	3,330	3,404	(2)	2,205	51	$ 271	$ 267	1	$ 265	2
Urea	895	672	33	302	196	3,003	2,641	14	1,166	158	$ 298	$ 254	17	$ 259	15
Solutions and nitrates	644	594	8	421	53	3,925	3,808	3	2,946	33	$ 164	$ 156	5	$ 143	15
	2,442	2,177	12	1,307	87	10,258	9,853	4	6,317	62	$ 238	$ 221	8	$ 207	15
Cost of goods sold	(1,729)	(1,670)	4	(1,066)	62						$(168)	$(170)	(1)	$(169)	(1)
Gross margin	713	507	41	241	196						$ 70	$ 51	37	$ 38	84
Other [2]	67	48	40	15	347						$ 42	$ 30	40	$ 32	31
Gross margin	780	555	41	256	205										
Expenses	(47)	(34)	38	(21)	124						$ 112	$ 81	38	$ 70	60
EBIT	733	521	41	235	212										
Depreciation and amortization	429	291	47	203	111										
EBITDA	$ 1,162	$ 812	43	$ 438	165										

Depreciation and amortization

Gross margin excluding depreciation and amortization

1 Includes intersegment sales. See note 4 to the financial statements.

2 Includes other nitrogen and purchased products and is comprised of net sales of $417 million (2017 (Nutrien) – $462 million, 2017 (PotashCorp) – $33 million) less cost of goods sold of $350 million (2017 (Nutrien) – $414 million, 2017 (PotashCorp) – $18 million).



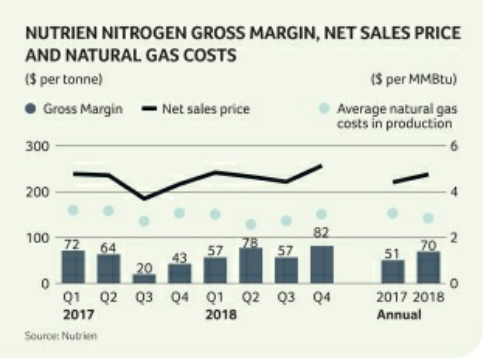
The most significant contributors to the change in EBITDA were as follows (direction of arrows refers to impact on EBITDA and ● means no impact):

	2018 vs 2017 (Nutrien)	2018 vs 2017 (PotashCorp)
Volumes	↑ Total sales volumes were up in 2018 due to higher reliability/utilization rates at our facilities, and higher production of upgraded products such as urea and UAN solutions, partly due to the continued ramp up at our Borger urea facility. ↓ Ammonia sales volumes were lower due primarily to increased production of upgraded nitrogen products, limiting excess ammonia available for sale.	↑ Volumes increased primarily as a result of the Merger.
Net sales prices	↑ Our average price increased for all manufactured product categories, reflecting the impact of higher fertilizer benchmarks supported by tight supply and continued demand growth. ↓ Realized prices in parts of our industrial portfolio (mainly ammonia and nitrates) were lower given lower natural gas prices in Canada.	↑ Our average price for all manufactured product categories was higher, reflecting the impact of higher fertilizer benchmarks supported by tight supply and continued demand growth.

N

	2018 vs 2017 (Nutrien)	2018 vs 2017 (PotashCorp)
Cost per tonne	↑ Costs decreased due to lower natural gas costs, higher utilization and from realized synergies, which more than offset higher depreciation and amortization related to PPA adjustments as a result of the Merger.	↑ Costs decreased due to lower natural gas costs (discussed below) and higher operating rates more than offsetting higher depreciation and amortization related to PPA adjustments as a result of the Merger.
	↑ Average natural gas costs, including our hedge position, decreased 7 percent, principally as a result of lower AECO index prices and a reduced realized impact from gas derivatives, partly offset by higher gas costs in Trinidad (contract prices indexed primarily to Tampa ammonia prices).	↑ Average natural gas costs, including our hedge position, decreased 17 percent due to the relatively lower-cost gas available at our Alberta facilities acquired in the Merger, partially offset by higher gas costs in Trinidad (contract prices indexed primarily to Tampa ammonia prices).
Expenses	• There were no significant changes between 2017 and 2018.	↓ Expenses were higher in 2018 due to the addition of Agrium's operations in the Merger.
Depreciation and amortization	• Expense was higher in 2018 due to higher volumes and the PPA adjustments as a result of the Merger.	• Expense was higher in 2018 due to higher volumes and the PPA adjustments as a result of the Merger.

	Sales Tonnes (thousands)			Average Net Sales Price per Tonne		
	Nutrien 2018	Nutrien 2017	PCS 2017	Nutrien 2018	Nutrien 2017	PCS 2017
Fertilizer	5,340	5,093	2,564	$ 254	$ 226	$ 215
Industrial and feed	4,918	4,760	3,753	$ 220	$ 215	$ 201
	10,258	9,853	6,317	$ 238	$ 221	$ 207





NITROGEN PRODUCTION

(million tonnes product)	Ammonia 1 Annual Capacity 3	Ammonia 1 Production Nutrien 2018	Ammonia 1 Production Nutrien 2017	Urea 2 Annual Capacity 3	Urea 2 Production Nutrien 2018	Urea 2 Production Nutrien 2017
Trinidad Nitrogen	2.2	1.88	1.94	0.7	0.58	0.55
Redwater Nitrogen	0.9	0.88	0.80	0.7	0.73	0.53
Augusta Nitrogen	0.8	0.72	0.60	0.5	0.52	0.45
Lima Nitrogen	0.8	0.67	0.65	0.4	0.46	0.44
Carseland Nitrogen	0.5	0.52	0.46	0.7	0.68	0.51
Joffre Nitrogen	0.5	0.47	0.31	–	–	–
Geismar Nitrogen	0.5	0.44	0.47	0.4	0.26	0.23
Fort Saskatchewan Nitrogen	0.4	0.40	0.46	0.4	0.37	0.43
Borger Nitrogen	0.5	0.39	0.31	0.6	0.42	0.23
Total	7.1	6.37	6.00	4.4	4.02	3.37

1 All figures are shown on a gross production basis.
2 Reflects capacity and production of urea liquor prior to final product upgrade. Urea liquor is used in the production of solid urea, UAN and DEF.
3 Annual capacity estimates include allowances for normal outages and planned maintenance shutdowns.


Phosphate &
Sulfate
P

$383M

EBITDA growth
in 2018

$416

Average Realized Net Selling
Price per Tonne in 2018

$92

Gross Margin
per Tonne in 2018
(excluding depreciation
and amortization)

90%

Operating Rate
in 2018
(excludes Geismar)

P

Phosphate Operating Environment

Overview

Phosphate rock is mined from underground ore deposits and dissolved in a mixture of phosphoric and sulfuric acids. This results in the production of additional phosphoric acid, which is the feedstock for most fertilizer, industrial and feed phosphate products.

Phosphoric acid can be combined with ammonia and granulated to produce solid fertilizers such as DAP and MAP, evaporated to produce merchant-grade phosphoric acid (MGA), or further evaporated to produce superphosphoric acid (SPA), which is then converted into liquid fertilizer. It is also widely used as an input for animal feed and industrial products.

Competitive Landscape

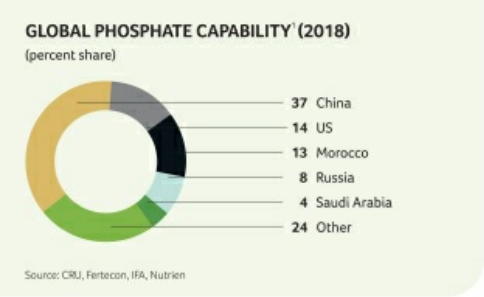
Phosphate rock is found in significant quantity and quality in only a handful of geographic locations, and few with a progressive ethical and sustainability record.

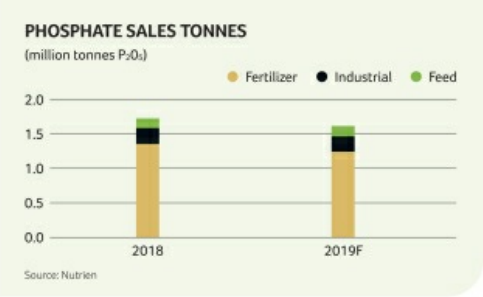
There are a number of factors that can affect the viability of developing a rock deposit for mining. These include the quality of the deposit, government stability, access to financing, environmental requirements and proximity to target markets. Given the concentration of deposits in North Africa and the Middle East, government stability is a major factor to consider when evaluating potential phosphate project developments. We compete with producers primarily from China, Morocco, Russia, Saudi Arabia and the US.

Significant low-cost capacity has been commissioned over the past few years, including most notably in Morocco and Saudi Arabia. This, in turn, has pressured higher-cost supply in China leading to significant production curtailments and industry restructuring.

Key Success Factors

Approximately 70 percent of global phosphate production is integrated with captive sources of phosphate rock, which provides a significantly lower cost of production relative to non-integrated producers. Access to high- quality rock not only provides cost advantages, but also the ability to produce a more diversified product mix, including feed and industrial products. Having a reliable, lower-cost source of sulfur and ammonia is also a key factor that impacts margins.





[1] Based on operational capability.

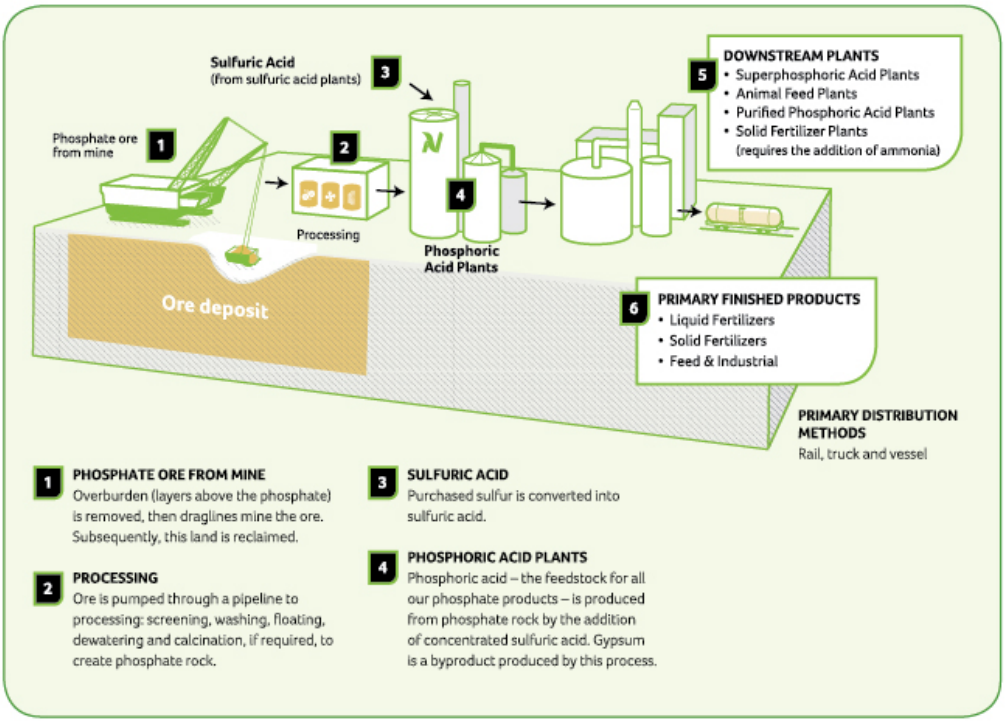
P

Our Business

Nutrien has two integrated phosphate facilities in the US, located near key fertilizer consuming markets. Due to the high quality of our rock, we are able to produce a diverse mix of phosphate products, including solid and liquid fertilizers, feed and industrial acids.

We made the decision in 2018 to close our Geismar, LA phosphate facility and repurpose our Redwater, Alberta facility to double our ammonium sulfate capacity. We plan to increase production at our facilities in North Carolina and Florida to supply finished phosphate product into regions typically served by our Alberta facility. This strategy allowed us to eliminate the purchase of imported phosphate rock by the end of December 2018, while lowering per-tonne costs and maintaining existing sales volumes.

Phosphate Production Process



P

2018 Market Conditions

Production curtailments, delayed ramp-up of new projects and strong import demand supported phosphate prices.

Global phosphate fertilizer prices increased more than 20 percent in 2018 as the effect of production curtailments in the US and delayed ramp-up of projects in Morocco and Saudi Arabia helped to balance market supply. In addition, Chinese phosphate exports in the first half of 2018 were lower year-over-year due to more stringent environmental regulation. Subsequently, Chinese exports in the second half of 2018 increased as some environmental audits concluded, production rates increased and the ability to export more phosphate returned.

Global import demand for phosphate was strong in 2018 with record import volumes in the US and Brazil and multi-year high import volumes in India. Imports continue to represent a larger share of US supply considering recent domestic closures and curtailments, while demand in Brazil reached record levels due to agricultural expansion and improved agronomic practices. Despite unfavorable government policy and a weakening rupee, demand in India was strong in 2018. Higher raw material costs for ammonia, sulfur and phosphate rock in 2018 pressured Indian production of phosphate fertilizers requiring higher year-over-year imports to meet increasing domestic demand.

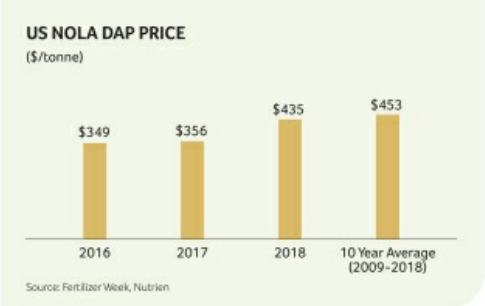
Market Outlook

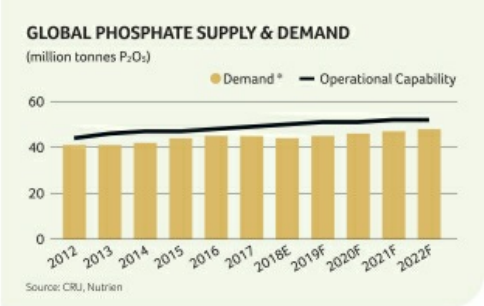
Supplies from major exporters and feedstock costs are key factors to watch.

We expect demand growth for phosphate will match historical trends of 2 percent in 2019, and believe import requirements from India will be significant as its domestic production remains low due to favorable DAP import economics versus domestic DAP production.

New capacity in Morocco and Saudi Arabia is expected to further ramp up in 2019 after delays in 2018. However, the new supply could be largely absorbed by global demand increases, and Chinese export supplies may be constrained due to environmental pressure.

We expect movement in ammonia and sulfur prices to continue to influence phosphate prices in 2019.



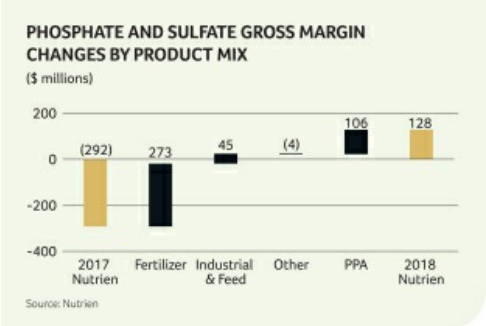


* Demand growth based on 20-year CAGR (2002 to 2022) of 2 percent.

Phosphate & Sulfate Financial Performance

	Dollars (millions)					Tonnes (thousands)					Average per Tonne				
	Nutrien 2018	Nutrien 2017	% Change	PCS 2017	% Change	Nutrien 2018	Nutrien 2017	% Change	PCS 2017	% Change	Nutrien 2018	Nutrien 2017	% Change	PCS 2017	% Change
Manufactured product [1]															
Net sales															
Fertilizer	$ 995	$ 800	24	$ 609	63	2,425	2,285	6	1,809	34	$ 410	$ 350	17	$ 337	22
Industrial and feed	424	423	–	494	(14)	847	868	(2)	1,002	(15)	$ 500	$ 487	3	$ 493	1
Ammonium sulfate	85	81	5	–	n/m	340	345	(1)	–	n/m	$ 250	$ 235	6	–	n/m
	1,504	1,304	15	1,103	36	3,612	3,498	3	2,811	28	$ 416	$ 373	12	$ 393	6
Cost of goods sold	(1,377)	(1,601) [2]	(14)	(1,471)	(6)						$(381)	$(457)	(17)	$(523)	(27)
Gross margin	127	(297)	n/m	(368)	n/m						$ 35	$ (84)	n/m	$(130)	n/m
Other [3]	1	5	(80)	2	(50)						Depreciation and amortization			$ 57	$ 68	(16)	$ 78	(27)
Gross margin	128	(292)	n/m	(366)	n/m						Gross margin excluding depreciation and amortization			$ 92	$ (16)	n/m	$ (52)	n/m
Expenses	(26)	(23)	13	(14)	86													
EBIT	102	(315)	n/m	(380)	n/m													
Depreciation and amortization	206	240	(14)	220	(6)													
EBITDA	$ 308	$ (75)	n/m	$ (160)	n/m													

1 Includes intersegment sales. See note 4 to the financial statements.
2 Includes a non-cash impairment of property, plant and equipment of $305 million.
3 Includes other phosphate and purchased products and is comprised of net sales of $163 million (2017 (Nutrien) – $53 million, 2017 (PotashCorp) – $8 million) less cost of goods sold of $162 million (2017 (Nutrien) – $48 million, 2017 (PotashCorp) – $6 million).
n/m = not meaningful

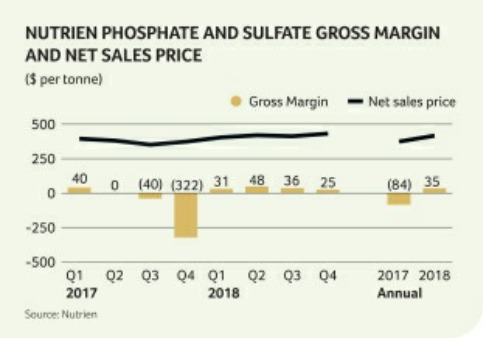


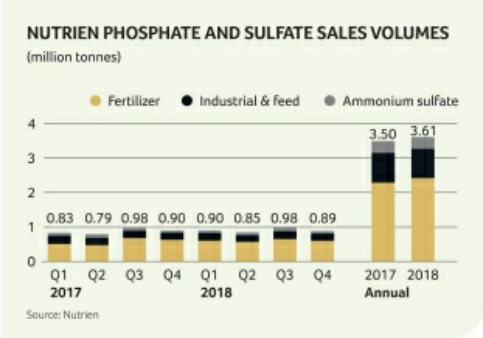
The most significant contributors to the change in EBITDA were as follows (direction of arrows refers to impact on EBITDA and ● means no impact):

	2018 vs 2017 (Nutrien)	2018 vs 2017 (PotashCorp)
Volumes	↑ Volumes were up due to strong fertilizer demand and increased production levels at our phosphate facilities.	↑ Volumes increased primarily as a result of the Merger. ↓ Industrial volumes decreased primarily due to the decision to close our small phosphate facility at Geismar.
Net sales prices	↑ Our average realized fertilizer price was up due to strong demand and higher global sulfur benchmark prices.	↑ Our average realized fertilizer price was up due to strong demand and higher global sulfur benchmark prices.
Cost per tonne	↑ Industrial and feed costs were lower in 2018 than in 2017 due to the non-cash impairment of feed assets at Aurora in 2017. ↑ Fertilizer costs were lower in 2018 than in 2017 due to the non-cash impairment of White Springs assets due to sustained negative performance and the write-off of other assets that were no longer used in 2017, more than offsetting higher sulfur costs in 2018.	↑ Industrial and feed costs were lower in 2018 than in 2017 due to the non-cash impairment of feed assets at Aurora in 2017. ↑ Fertilizer costs were lower in 2018 than in 2017 due to the non-cash impairment of White Springs assets due to sustained negative performance and the write-off of other assets that were no longer used in 2017, more than offsetting higher sulfur costs in 2018.

P

	2018 vs 2017 (Nutrien)	2018 vs 2017 (PotashCorp)
Depreciation and amortization	• Expense was lower in 2018 primarily due to lower depreciable asset balances at our US facilities as a result of the non-cash impairments recorded in the latter half of 2017 and the impact of the PPA adjustments as a result of the Merger. The decrease was partially offset by an increase in depreciation at our Redwater facility due to a change in the assets' estimated useful lives.	• Expense was lower in 2018 primarily due to lower depreciable asset balances at our US facilities as a result of the non-cash impairments recorded in the latter half of 2017 and the impact of the PPA adjustments as a result of the Merger. The decrease was partially offset by an increase in depreciation at our Redwater facility due to a change in the assets' estimated useful lives.





PHOSPHATE PRODUCTION

(million tonnes)	Phosphate Rock Annual Capacity	Phosphate Rock Nutrien Production 2018	Phosphate Rock Nutrien Production 2017	Phosphoric Acid (P_2O_5) Annual Capacity	Phosphoric Acid (P_2O_5) Nutrien Production 2018	Phosphoric Acid (P_2O_5) Nutrien Production 2017	Liquid Products Annual Capacity	Liquid Products Nutrien Production 2018	Liquid Products Nutrien Production 2017	Solid Fertilizer Products Annual Capacity	Solid Fertilizer Products Nutrien Production 2018	Solid Fertilizer Products Nutrien Production 2017
Aurora Phosphate	5.4	4.03	4.78	1.2	1.08	1.03	2.7 [2]	2.10	2.04	0.8	0.82	0.79
White Springs Phosphate	2.0 [1]	1.85	1.55	0.5	0.47	0.42	0.7 [3]	0.62	0.57	0.8 [4]	0.17	0.13
Redwater Phosphate	–	–	–	0.3	0.30	0.25	–	–	–	0.7	0.57	0.46
Total	7.4	5.88	6.33	2.0	1.85	1.70						

1 Revised capacity estimates based on review of mining operations completed in 2017. Prior capacity was 3.6 million tonnes.
2 A substantial portion is consumed internally in the production of downstream products. The balance is exported to phosphate fertilizer producers or sold domestically to dealers who custom-mix liquid fertilizer. Capacity comprised of 2.0 million tonnes merchant grade acid and 0.7 million tonnes superphosphoric acid.
3 Represents annual superphosphoric acid capacity. A substantial portion is consumed internally in the production of downstream products. The balance is exported to phosphate fertilizer producers and sold domestically to dealers who custom-mix liquid fertilizer.
4 The second MAP train was restarted at the end of 2018 which added 0.4 million tonnes of annual capacity.

In addition to the production above, annual capacity (in millions of tonnes) for phosphate feed, ammonium sulfate and purified acid was 0.7, 0.4 and 0.3, respectively. 2018 production was 0.29, 0.36 and 0.23, respectively, and 2017 production was 0.28, 0.31 and 0.23, respectively.

Enterprise Risk Management

Key Risks

We characterize a Key Risk as a risk or combination of risks that could negatively impact the achievement of our vision and ability to deliver on our strategy. We evaluate those risks we believe could have a significant negative effect on safety, health and environment, the Company's financial results, or our reputation, taking into consideration mitigation efforts. We consider the following to be Key Risks at this time. For a more detailed discussion of our risks, refer to Nutrien's 2018 Annual Information Form.



1. Long-Term Agriculture Changes

Associated Key Actions

Description

Farm and industry consolidation, shifting grower demographics, agriculture productivity and development, changes in consumer food preferences, technological innovation and digital business models, and climate change, among other factors, could impact our strategy, demand for our products or financial performance.

Risk Management Approach

Our integrated platform and diversified earnings portfolio of crop inputs and services are designed to respond and adapt to changes in agriculture. We are proactive in the development and use of new agricultural products and practices and recently launched our integrated digital platform. We believe our teams have strong industry knowledge and direct customer relationships across the value chain, providing unique insights on trends and developments in the agriculture industry.

2. Shifting Global Dynamics

Associated Key Actions

Description

Changes in global macro-economic conditions, including trade tariffs and/or other trade restrictions and increased price competition, or a significant change in agriculture production or consumption trends, could lead to a low crop price environment and reduced demand for our products, or increased prices for, or decreased availability of, raw materials necessary to produce our products.

Risk Management Approach

Our diversified portfolio of agricultural products, services and solutions, combined with our global footprint, is designed to enable us to respond to changing economic conditions and dynamics.

We have a favorable cost-to-service position and flexibility to make operational changes across our portfolio to minimize the impact of changing market dynamics. In addition, we engage in market development, education, training and customer relations initiatives to support demand growth.

Sustainability & Safety | Drive Integration & Optimization | Strategically Allocate Capital | Invest in Growth & Innovation | Engage Employees

3. Political, Economic and Social Instability

Description

Political, economic and social instability may affect our business in the jurisdictions in which we operate. Among other things, restrictions on monetary distributions, forced divestitures or changes to or nullification of existing agreements, mining permits or leases could result. Instability in political or regulatory regimes could also affect our ability to transact business and could impact our sales and operating results, our reputation or the value of our assets.

Associated Key Actions

Risk Management Approach

We have an active engagement strategy with governments, regulators and other stakeholders in the countries where we operate or plan to operate, and we assess our capital investments and project decisions against political, country and other related risk factors to ensure our exposure is controlled. Dedicated teams regularly monitor political, economic, and social developments and global trends that may impact us.

4. Changing Regulations

Description

Changing laws, regulations and government policies affecting our operations, including health and safety, environmental and climate change pressures, could affect our ability to produce or sell certain products, reduce efficiency, increase our raw material, energy, transportation or compliance costs, or require us to make capital improvements to our operations, all of which could impact our financial performance or reputation.

Associated Key Actions

Risk Management Approach

We have an active engagement strategy with governments and regulators to stay informed of emerging issues and participate in regulatory developments affecting our business. We are also active members in various industry associations that address proposed changes to laws and regulations impacting the agriculture industry. Where regulations are subject to change, we evaluate the potential implications and strive to adapt as necessary.

5. Cybersecurity Threats

Description

Cyberattacks or breaches of our systems, including our digital platform or exposure to potential computer viruses, could lead to disruptions to our operations, loss of data, or the unintended disclosure of confidential information or property damage resulting in business disruptions, reputational damage, personal injury, and third-party claims, which could impact our operations, financial performance or reputation.

Associated Key Actions

Risk Management Approach

We maintain an enhanced focus on cybersecurity, including continuous monitoring of key systems for abnormal and elevated risk behavior in conjunction with our cybersecurity strategy, policy and framework.

Threat and risk assessments are completed for all new information technology systems, and our cybersecurity incident response processes are backstopped by external response capability.

6. Capital Allocation

Description

Our inability to deploy capital or to effectively execute on opportunities, whether due to market conditions, lack of options or otherwise, or our decisions to deploy capital in a manner that is inconsistent with strategic priorities, could impact our returns, operations, reputation or access to capital.

Associated Key Actions

Risk Management Approach

We allocate capital in a disciplined manner that is consistent with our strategic priorities focused on creating the greatest long-term value while ensuring sufficient capital is allocated to safety and asset preservation. We employ a governance process for all capital allocation decisions and incorporate risk-related factors, including execution risk, in those decisions.

See page 23 of this report for more information on our capital allocation priorities.

Sustainability & Safety | Drive Integration & Optimization | Strategically Allocate Capital | Invest in Growth & Innovation | Engage Employees

7. Talent and Organizational Structure

Associated Key Actions

Description

An inability to attract, develop, or retain skilled employees, or establish the right organizational structure or culture, could impact productivity, reliability, safety performance, costs or our reputation.

Risk Management Approach

We strategically map critical talent in anticipation of future needs, seeking to hire talent at the right time and with the right fit for our culture and purpose. Our succession planning proactively identifies critical roles in the organization and links to internal top talent. Our incentive programs are competitive and support our purpose driven culture with performance expectations encouraging inclusion and a desire to add greater diversity to our workforce.

See page 26 of this report for Nutrien's People Strategy.

8. Retail Business Model

Associated Key Actions

Description

Digital innovations, increasing research and development activity and new technology in the agriculture market, among other factors, could alter the competitive environment, which could impact our Retail operations and financial performance.

Risk Management Approach

Our full-service offering and investment in technology, including our integrated digital platform, is intended to position our Retail business as a leader in agricultural solutions for growers. We are actively involved in the ag technology innovation space through external investments and partnerships, which supports access to early stage technology. Further, we seek to maintain strong relationships with industry partners, positioning Nutrien Ag Solutions as a key part of the ag value chain for both suppliers and growers.

Our dedicated in-house product innovation teams continue to invest in enhancing our digital platform and e-commerce capabilities through focused research and development and acquisition.

See page 25 of this report for more information on innovation.

9. Safety, Health & Environment

Associated Key Actions

Description

Our operations are subject to safety, health and environmental risks inherent in mining, manufacturing, transportation, storage and distribution. These factors could result in injuries or fatalities, or impact the biodiversity, water resources or related ecosystems near our operations, impacting our operations, financial performance or reputation.

Risk Management Approach

Our people arriving home safe, every day, is a core value for us. We have robust governance processes that ensure we follow all regulatory, industry and internal standards of operation, including benchmarking to global organizations and adopting best practices. We have structured incident prevention and response systems in place, conduct regular security vulnerability assessments and maintain protocols for employees working and traveling abroad, including pre-travel threat and risk intelligence. Crisis communication protocols and emergency response programs and personnel are in place in the event of a significant incident.

We maintain environmental monitoring and control systems, including third-party reviews of key containment structures.

Sustainability & Safety | Drive Integration & Optimization | Strategically Allocate Capital | Invest in Growth & Innovation | Engage Employees

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Financial Highlights

Dollars (millions) unless otherwise noted	Nutrien 2018	Nutrien 2017	PCS 2017	PCS 2016
Sales	$ 19,636	$18,169	$ 4,547	$ 4,456
Net (loss) earnings from continuing operations	(31)	656	154	199
Basic net (loss) earnings per share from continuing operations	(0.05)	n/a	0.18	0.24
Diluted net (loss) earnings per share from continuing operations	(0.05)	n/a	0.18	0.24
Net earnings from continuing and discontinued operations	3,573	n/a	327	323
Basic net earnings per share from continuing and discontinued operations	5.72	n/a	0.39	0.39
Diluted net earnings per share from continuing and discontinued operations	5.72	n/a	0.39	0.38
Total assets	45,502	34,940	16,998	17,255
Total non-current financial liabilities	7,616	n/a	3,746	3,763
Dividends declared per share	2.06	n/a	0.40	0.70

n/a = Information was not prepared on a combined historical basis.

	2018 vs 2017 (Nutrien)	2018 vs 2017 (PotashCorp)	2017 vs 2016 (PotashCorp)
Sales	Sales increased due to higher potash, urea and phosphate fertilizer prices, as well as higher potash sales volumes and increased retail sales due to recent acquisitions.	Sales increased primarily due to the addition of Agrium's operations in the Merger. Sales also increased due to Retail acquisitions, higher potash sales volumes and increases in potash, urea and phosphate fertilizer prices.	Sales increased slightly due to increases in potash sales volumes and net sales prices being partially offset by decreases in nitrogen and phosphate net sales prices.
Earnings and earnings per share from continuing operations	There was a loss from continuing operations in 2018 compared to earnings in 2017 primarily due to a non-cash impairment of property, plant and equipment in the Potash segment of $1,809 million in 2018 more than offsetting the impact of higher gross margin in all operating segments.	There was a loss from continuing operations in 2018 compared to earnings in 2017 primarily due to a non-cash impairment of property, plant and equipment in the Potash segment of $1,809 million in 2018 more than offsetting the impact of the addition of Agrium's operations in the Merger and higher gross margin in all operating segments.	Net earnings from continuing operations (and related per share amounts) decreased slightly due to increased non-cash impairments of property, plant and equipment and increased Merger and related costs, which were partially offset by an income tax recovery in 2017 compared to income tax expense in 2016.
Earnings and earnings per share from continuing and discontinued operations	2017 information was not prepared on a combined historical basis.	Net earnings, and the related per share amounts, were higher in 2018 due to the gains on sale of our investments presented as discontinued operations, the addition of Agrium's operations in the Merger and higher gross margin in all operating segments more than offsetting the non-cash impairment of property, plant and equipment in the Potash segment.	Net earnings (and related per share amounts) were flat due to the decrease in net earnings from continuing operations being offset by an increase in earnings from discontinued operations consisting primarily of the earnings of equity-accounted investees SQM and APC.
Assets and non-current financial liabilities	Assets increased primarily due to the fair value adjustments to legacy Agrium assets as a result of the PPA in the Merger. Combined historical non-current financial liability information was not prepared.	Assets and financial liabilities increased primarily due to the addition of Agrium's assets and liabilities, including related PPA adjustments, acquired in the Merger.	There were no significant changes.

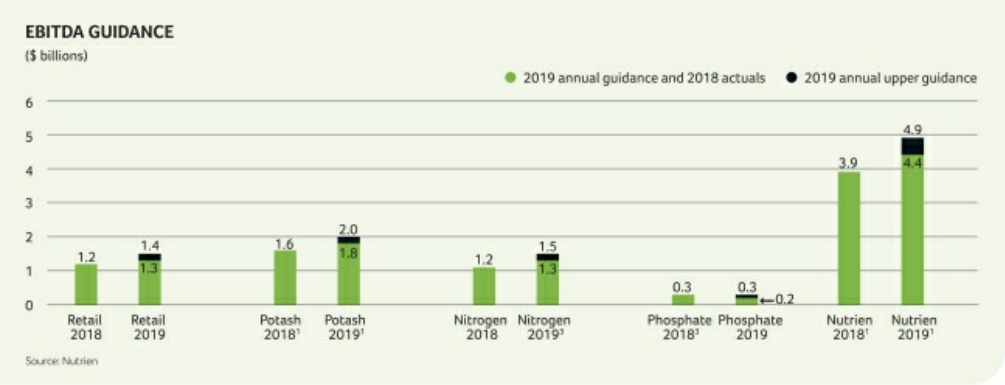
Nutrien 2018 EBITDA Compared to Nutrien 2017 EBITDA

Dollars (millions) except per share amounts, excluding depreciation and amortization	EBITDA		Changes in EBITDA	Earnings per share impact
EBITDA December 31, 2017	$ 2,412			
RETAIL				
Increases in Retail selling expenses		↓	$ (86)	$ (0.10)
Increase in Retail crop nutrient gross margin		↑	75	0.09
POTASH				
Non-cash impairment of property, plant and equipment in Potash in 2018		↓	(1,809)	(2.11)
Increases in Potash prices		↑	389	0.45
Increases in Potash sales volumes		↑	110	0.13
Decreases in Potash cost of goods sold (COGS)		↑	109	0.13
Increase in Potash provincial mining and other taxes		↓	(85)	(0.10)
NITROGEN				
Increases in Nitrogen prices		↑	181	0.22
Decreases in Nitrogen COGS		↑	143	0.18
PHOSPHATE AND SULFATE				
Decreases in Phosphate and Sulfate COGS due primarily to the 2017 non-cash impairment [1]		↑	228	0.28
Increases in Phosphate and Sulfate prices		↑	156	0.19
OTHERS				
Decreases in Others segment other income due primarily to the defined benefit plans curtailment gain		↑	151	0.19
ALL OTHER CHANGES				
Other changes		↑	32	0.04
EBITDA December 31, 2018	$ 2,006			

1 Includes a non-cash impairment of property, plant and equipment of $305 million. See note 16 to the financial statements.

2019 Guidance

Dollars (billions) unless otherwise noted	2019 Guidance Ranges Low	High
Adjusted net earnings per share [1]	$ 2.80	$ 3.20
Adjusted EBITDA [1]	$ 4.4	$ 4.9
Retail EBITDA	$ 1.3	$ 1.4
Potash EBITDA	$ 1.8	$ 2.0
Nitrogen EBITDA	$ 1.3	$ 1.5
Phosphate EBITDA	$ 0.2	$ 0.3
Potash sales tonnes (millions) [2]	13.0	13.4
Nitrogen sales tonnes (millions) [2]	10.6	11.0
Depreciation and amortization	$ 1.8	$ 1.9
Integration and synergy costs (millions)	$ 50	$ 75
Effective tax rate on continuing operations	24%	26%
Sustaining capital expenditures	$ 1.0	$ 1.1



[1] Adjusted EBITDA and/or earnings per share from continuing operations guidance and/or actuals. This guidance is provided on a non-IFRS basis. We do not provide a reconciliation of such forward-looking measures to the most directly comparable financial measures calculated and presented in accordance with IFRS due to unknown variables and the uncertainty related to future results. These unknown variables may include unpredictable transactions of significant value which may be inherently difficult to determine, without unreasonable efforts. Guidance excludes the impacts of synergy costs ($50 to $75 million) and share-based compensation.

[2] Manufactured product only. Nitrogen sales tonnes excludes ESN® and Rainbow products.

[3] Includes sulfate.

2019 Sensitivities

Price and Volume Sensitivities		Effect on EPS
Price	Potash changes by $20/tonne	$ 0.26
	Ammonia changes by $20/tonne	0.05
	Urea changes by $20/tonne	0.08
	DAP/MAP changes by $20/tonne	0.04
Volume	Potash changes by 100,000 tonnes	0.03
	Nitrogen changes by 50,000 N tonnes	0.02
	Phosphate changes by 50,000 P_2O_5 tonnes	0.02
Retail	Crop nutrients changes by 1% [1]	0.07
	Crop protection changes by 1% [1]	0.07
	Seed changes by 1% [1]	0.02

Input Cost Sensitivities		Effect on EPS
NYMEX natural gas price increases by $1/MMBTu	Nitrogen	$ (0.20)
	Potash	(0.01)
Canadian to US dollar strengthens by $0.02	Canadian operating expenses excluding provincial taxes and translation gain/loss	(0.02)

1 Gross margin as a percentage of sales.

Others Segment Financial Performance

"Others" is a non-operating segment comprising corporate and administrative functions that provide support and governance to our operating business units. No sales are made in this segment.

Dollars (millions), except percentage amounts	Nutrien 2018	Nutrien 2017	% Change	PCS [1] 2017	% Change
Selling expenses	$ 22	$ 15	47	$ (2)	n/m
General and administrative expenses	(400)	(377)	6	(170)	135
Provincial mining and other taxes	(2)	–	n/m	–	n/m
Other expenses	(106)	(256)	(59)	(99)	7
Loss before finance costs and income taxes	(486)	(618)	(21)	(271)	79
Depreciation and amortization	54	56	(4)	37	46
EBITDA	$ (432)	$ (562)	(23)	$ (234)	85

1 Certain amounts have been reclassified to conform to the current period's presentation as described in note 33 to the financial statements.
n/m= not meaningful

	2018 vs 2017 (Nutrien)	2018 vs 2017 (PotashCorp)
EBITDA	EBITDA increased primarily due to the impact of the defined benefit plans curtailment gain included in other expenses (see note 28 to the financial statements).	EBITDA decreased primarily due to the addition of Agrium's operations more than offsetting the impact of a defined benefit plans curtailment gain in other expenses (see note 28 to the financial statements).

Expenses & Income Below Gross Margin

Dollars (millions), except percentage amounts	Nutrien 2018	Nutrien 2017	% Change	PCS [1] 2017	% Change
Selling expenses [2]	$(2,337)	$(2,043)	14	$ (29)	n/m
General and administrative expenses [3]	(539)	(503)	7	(185)	191
Provincial mining and other taxes [4]	(250)	(159)	57	(146)	71
Impairment of property, plant and equipment [5]	(1,809)	–	n/m	–	n/m
Other expenses	(43)	(255)	(83)	(125)	(66)
Finance costs	(538)	(515)	4	(238)	126
Income tax recovery (expense)	93	(20)	n/m	183	(49)
Net earnings from discontinued operations	3,604	n/a	n/m	173	n/m

1 Certain amounts have been reclassified to conform to the current period's presentation as described in note 33 to the financial statements.
2 Expenses are primarily in the Retail segment. See page 36 for analysis.
3 Expenses are primarily in the Others segment. See above for analysis.
4 Expenses are primarily in the Potash segment. See page 43 for analysis.
5 Impairment was in the Potash segment. See page 43 for analysis.
n/m= not meaningful
n/a= not available

The most significant contributors to the change in expenses and income below gross margin results were as follows:

	2018 vs 2017 (Nutrien)	2018 vs 2017 (PotashCorp)
Other (Expenses) Income	Other expenses decreased primarily due to a defined benefit plans curtailment gain (see note 28 to the financial statements) in 2018 (none in 2017) and foreign exchange gains in 2018 (losses in 2017).	Other expenses decreased as a defined benefit plans curtailment gain (see note 28 to the financial statements) in 2018 (none in 2017) more than offset the increase in Merger and related costs.
Finance Costs	There were no significant changes to finance costs.	Finance costs increased primarily as a result of the Merger. See note 8 to the financial statements for a breakdown of these costs.

WEIGHTED AVERAGE DEBT BALANCES & RATES

Dollars (millions), except percentage amounts	Nutrien 2018	Nutrien 2017	PCS 2017
Short-term balance [1]	$ 2,933	$ 1,525	$ 381
Short-term rate [1,2]	3.3%	2.4%	1.3%
Long-term balance	$ 8,175	$ 8,641	$ 4,229
Long-term rate	4.8%	4.7%	4.7%

1 North American weighted average short-term debt balances were $2,719 (2017 (Nutrien) – $1,345, 2017 (PotashCorp) – $381) and rates were 2.5% (2017 (Nutrien) – 1.5%, 2017 (PotashCorp) – 1.3%).
2 Rates were higher in 2018 due to increases in benchmark interest rates.

Income Tax Recovery (Expense)	A loss from continuing operations was realized for accounting purposes in 2018 compared to earnings from continuing operations in 2017. As a result, a tax recovery was recorded in 2018 compared to a tax expense in 2017. The 2017 tax expense included a net discrete recovery of $178 as a result of a federal income tax rate decrease pursuant to US tax reform legislation. See note 9 to the financial statements for further information on income tax recovery (expense).	A loss from continuing operations was realized for accounting purposes in 2018 and 2017. The 2017 tax recovery included a discrete recovery of $187 as a result of a federal income tax rate decrease pursuant to US tax reform legislation. See note 9 to the financial statements for further information on income tax recovery (expense).

EFFECTIVE TAX RATES & DISCRETE ITEMS

Dollars (millions), except percentage amounts	Nutrien 2018	Nutrien 2017 [1]	PCS 2017 [1]
Actual effective tax rate on ordinary earnings	72%	29%	(7)%
Actual effective tax rate including discrete items	75%	3%	n/m
Discrete tax adjustments that impacted the rate	$ 4	$ 176	$ 185

1 Rates have been adjusted as a result of our equity interests in SQM, APC and ICL being classified as discontinued in 2017.
n/m= not meaningful

Net Earnings From Discontinued Operations	Combined historical Nutrien information was not prepared for discontinued operations.	Net earnings from discontinued operations were higher in 2018 primarily due to the gains on sale of our equity investments in SQM and APC, and dividends from SQM and APC, exceeding the equity earnings and dividend income from these investments in 2017 (equity accounting for these investments ceased when the investments were classified as held for sale). This was partially offset by an increase in income tax expense.

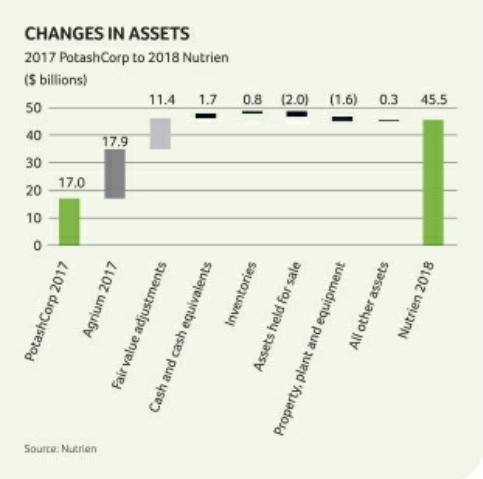
Other Comprehensive (Loss) Income

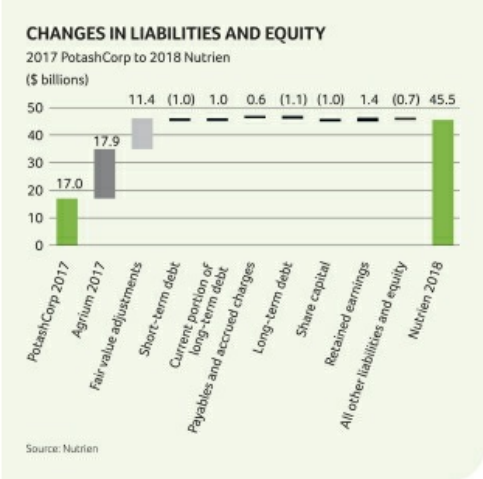
Other comprehensive (loss) income in 2018 was a $302 million loss compared to $176 million income for 2017 Nutrien and $96 million income for 2017 PotashCorp due primarily to a loss on translation of our net operations in Canada and Australia (gain for 2017 Nutrien) and a fair value loss on our investment in Sinofert (Gain for 2017 Nutrien and 2017 PotashCorp).

Financial Condition Review

Balance Sheet Analysis

The most significant contributors to the changes in our balance sheet are analyzed below (direction of arrows refers to increase or decrease in financial condition and ● means no impact). All impacts for balance sheet line items are after the opening balance sheet impacts of the Merger, which includes fair value adjustments in relation to the Merger (if any).





Total assets and liabilities increased primarily as a result of the Merger and fair value adjustments described in note 3 to the financial statements. Total equity increased primarily as a result of the issuance of Nutrien shares in the Merger. The analysis below explains the further changes after these adjustments.

Assets

↑ For information regarding changes in cash and cash equivalents, refer to the "Sources and Uses of Cash" section on page 67 and the consolidated statements of cash flows in our financial statements.

↑ Inventory increased primarily due to lower than expected Retail crop protection sales caused by adverse weather in North America and earlier than average seasonal inventory purchases in Retail.

↓ Assets held for sale were lower due to the sale of our equity interests in SQM, APC and ICL as discussed in note 10 to the financial statements.

↓ Property, plant and equipment were primarily impacted by a non-cash impairment loss relating to our New Brunswick Potash operations as described in note 16 to the financial statements.

Liabilities

↑ Short-term debt decreased due to repayments upon receipt of cash proceeds from the sale of our held for sale equity investments.

● Current portion of long-term debt increased and long-term debt decreased due to the 6.75 percent notes due January 15, 2019 and 6.5 percent notes due May 15, 2019 becoming due within one year.

↓ Payables and accrued charges increased due to a higher dividend payable, accelerated seasonal Retail inventory purchases, higher customer prepayments and the timing of cash payments.

Equity

↓ Share capital was reduced by share repurchases.

↑ Retained earnings was higher primarily as a result of net earnings exceeding the impact of share repurchases and dividends declared.

As at December 31, 2018, $NIL (December 31, 2017 (Nutrien) – $104 million, (PotashCorp) – $104 million) of our cash and cash equivalents was held in certain foreign subsidiaries that could be subject to taxes upon repatriation.

Liquidity & Capital Resources

Sources & Uses of Liquidity

Liquidity risk arises from our general funding needs and in the management of our assets, liabilities and capital structure. We manage liquidity risk to maintain sufficient liquid financial resources to fund our financial position and meet our commitments and obligations in a cost-effective manner. Our 2018 significant liquidity sources are listed below along with our expected ongoing primary uses of liquidity. Proceeds from the sale of investments are not expected to be a significant liquidity source in 2019 now that the required Merger-related divestitures have been completed.

Liquidity sources:

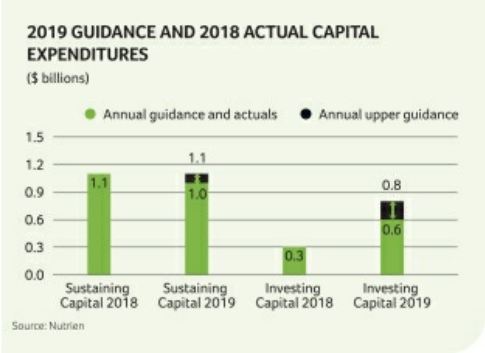
- Cash from operations
- Investments sale proceeds 1
- Commercial paper issuances
- Credit facility drawdowns
- Accounts receivable securitization borrowings
- Debt capital markets

Primary uses:

- Operational expenses
- Seasonal working capital requirements
- Sustaining and investing capital 2
- Business acquisitions and investments 3
- Dividends 4 and interest
- Debt securities principal payments
- Share repurchases 5

1 In 2018, we closed sales on our equity interests in SQM, ICL and APC for net proceeds of approximately $5.3 billion.
2 See graph below for forecast 2019 and actual 2018 capital expenditures to sustain operations and for investing (excluding business acquisitions and investments in equity-accounted investees). Amounts are based on a forecast exchange rate of 1.32 Canadian Dollars per US Dollar.
3 In 2018, we acquired 53 retail locations in North America and Australia, in addition to companies operating within the digital agriculture, proprietary products and agricultural services businesses (note 3 and note 21 to the financial statements). On February 5, 2019, we announced the planned acquisition of Actagro, LLC, a developer, manufacturer and marketer of environmentally sustainable soil and plant health products and technologies for approximately $340 million. Closing of the transaction is subject to US regulatory approval and is expected to be completed in the first half of 2019.
4 We target a stable and growing dividend that represents 40 to 60 percent of free cash flow after sustaining capital through the agricultural cycle. In November 2018, we increased our dividend from $0.40 per share to $0.43 per share.
5 During 2018, 36,332,197 common shares were repurchased for cancellation at a cost of $1,852 million with an average price per share of $50.97. In the fourth quarter of 2018, the Board of Directors approved an increase to the existing share repurchase program, raising the maximum number of shares that can be repurchased by February 22, 2019 to 50,363,686 common shares, representing approximately 8% of our outstanding common shares. On February 20, 2019, the Board of Directors approved the renewal of the share repurchase program of up to 5 percent of our outstanding common shares over a one-year period through a normal course issuer bid. As of February 20, 2019, an additional 5,933,135 common shares were repurchased at a cost of $297 million and an average price per share of $50.10.





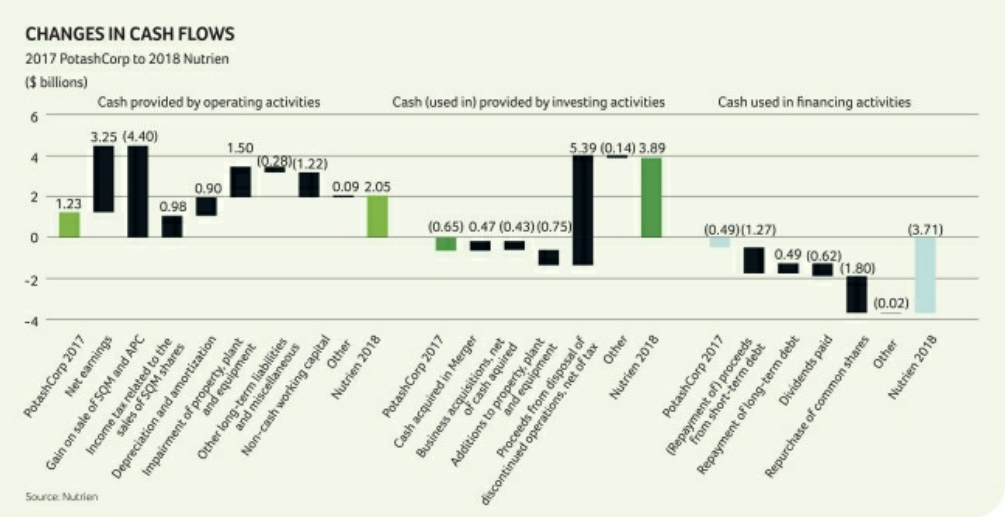
We believe that internally generated cash flow, supplemented by available borrowings under our existing financing sources, if necessary, will be sufficient to meet our anticipated capital expenditures and other cash requirements for at least the next 12 months. At this time, we do not reasonably expect any presently known trend or uncertainty to affect our ability to access our historical sources of liquidity. We had positive working capital of $3.33 billion and a working capital ratio of 1.40 at December 31, 2018 and an adjusted net debt to adjusted EBITDA ratio of 1.64.

Sources and Uses of Cash

Our cash flows from operating, investing and financing activities are summarized in the following table:

Dollars (millions), except percentage amounts	Nutrien 2018	Nutrien 2017	% Change	PCS 2017	% Change
Cash provided by operating activities	$ 2,052	$ 2,568	(20)	$ 1,225	68
Cash provided by (used in) investing activities	3,887	(1,594)	n/m	(652)	n/m
Cash used in financing activities	(3,705)	(824)	350	(489)	658
Effect of exchange rate changes on cash and cash equivalents	(36)	(12)	200	–	n/m
Increase in cash and cash equivalents	$ 2,198	$ 138	n/m	$ 84	n/m

n/m = not meaningful



The most significant contributors to the changes in cash flows were as follows:

	2018 vs 2017 (Nutrien)	2018 vs 2017 (PotashCorp)
Cash Provided by Operating Activities was impacted by:	• Higher net earnings in 2018 than in 2017. • Significant changes in non-cash adjustments were due to the gain on disposal of SQM and APC net of tax in 2018 ($NIL – 2017), higher depreciation and amortization, and higher impairment of property, plant and equipment. • Non-cash working capital was impacted primarily by cash outflows for payables and accrued charges (inflows in 2017) and inventories (lower outflows in 2017) more than offsetting inflows from prepaid expenses and other current assets (outflows in 2017).	• Higher net earnings in 2018 than in 2017. • Significant changes in non-cash adjustments were due to the gain on disposal of SQM and APC net of tax in 2018 ($NIL – 2017), higher depreciation and amortization, and higher impairment of property, plant and equipment. • Non-cash working capital was impacted primarily by cash outflows for payables and accrued charges (inflows in 2017) and inventories (lower outflows in 2017) more than offsetting inflows from prepaid expenses and other current assets (outflows in 2017).

	2018 vs 2017 (Nutrien)	2018 vs 2017 (PotashCorp)
Cash Provided by (Used in) Investing Activities was impacted by:	• Higher net cash outlays for business acquisitions (net of cash acquired) in 2018 compared to 2017. • Cash proceeds received from the disposals of our discontinued operations in SQM, ICL and APC in 2018.	• Cash acquired in the Merger in 2018. • Higher net cash outlays for business combinations (net of cash acquired) in 2018 compared to 2017. • Higher cash additions to property, plant and equipment in 2018 than in 2017 due primarily to the addition of Agrium's Retail operations in the Merger. • Cash proceeds received from the disposals of our discontinued operations in SQM, ICL and APC in 2018.
Cash Used in Financing Activities was impacted by:	• A net repayment of commercial paper in 2018 compared to net proceeds in 2017. • Lower cash repayments of long-term debt in 2018. • Cash outlays for share repurchases under the NCIB in 2018 (none in 2017).	• A net repayment of commercial paper in 2018 compared to net proceeds in 2017. • Lower cash repayments of long-term debt in 2018. • Higher cash dividends paid in 2018 than in 2017. • Cash outlays for share repurchases under the NCIB in 2018 (none in 2017).

Cash Requirements

The following aggregated information about our contractual obligations and other commitments summarizes certain of our liquidity and capital resource requirements as at December 31, 2018. The information presented in the table below does not include planned (but not legally committed) capital expenditures or potential share repurchases.

		Payments Due by Period				
Dollars (millions) at December 31, 2018		Total	Within 1 Year	1 to 3 Years	3 to 5 Years	Over 5 Years
Long-term debt obligations	Notes 23, 26	$ 8,175	$ 1,000	$ 500	$ 1,000	$ 5,675
Estimated interest payments on long-term debt obligations	Note 26	4,543	341	612	576	3,014
Operating leases	Note 26	1,087	216	316	212	343
Purchase commitments[1]	Note 26	3,396	1,364	949	945	138
Capital commitments	Note 26	57	37	18	2	–
Other commitments	Note 26	318	114	123	61	20
Asset retirement obligations and environmental costs[2]	Note 20	3,051	206	290	332	2,223
Other long-term liabilities[3]	Notes 9, 13, 28	3,468	119	99	93	3,157
Total		$ 24,095	$ 3,397	$ 2,907	$ 3,221	$ 14,570

1 In 2018, we entered into a new long-term natural gas purchase agreement in Trinidad, which will commence January 1, 2019 and is set to expire December 31, 2023. The contract provides for prices that vary primarily with ammonia market prices, and annual escalating floor prices. The commitments included in the table are based on floor prices and minimum purchase quantities.

2 Commitments associated with our asset retirement obligations are the estimated cash outflows and are expected to occur over the next 480 years for phosphate (with the majority taking place over the next 80 years) and between 50 and 430 years for Potash. Potash cash flows are estimated for the first year of decommissioning for operating sites and for all years for permanently shut down sites. Environmental costs consist of restoration obligations, which are expected to occur through 2048.

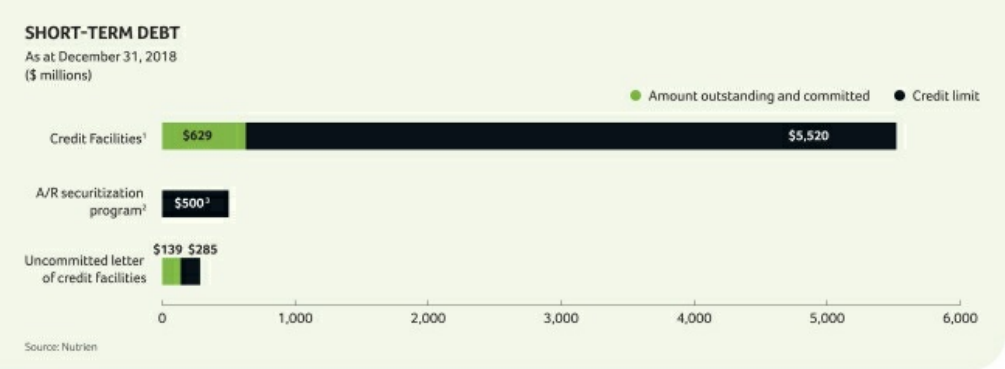
3 Other long-term liabilities consist primarily of pension and other post-retirement benefits, derivative instruments, income taxes and deferred income taxes. Deferred income tax liabilities may vary according to changes in tax laws, tax rates and our operating results. Since it is impractical to determine whether there will be a cash impact in any particular year, all deferred income tax liabilities have been reflected as other long-term liabilities in the Over 5 Years category.

Capital Structure & Management

We manage our capital structure with a focus on maintaining a strong balance sheet, enabling a strong investment-grade credit rating.

Principal Debt Instruments

We use a combination of cash generated from operations and short-term and long-term debt to finance our operations. We have the following short-term debt instruments available:

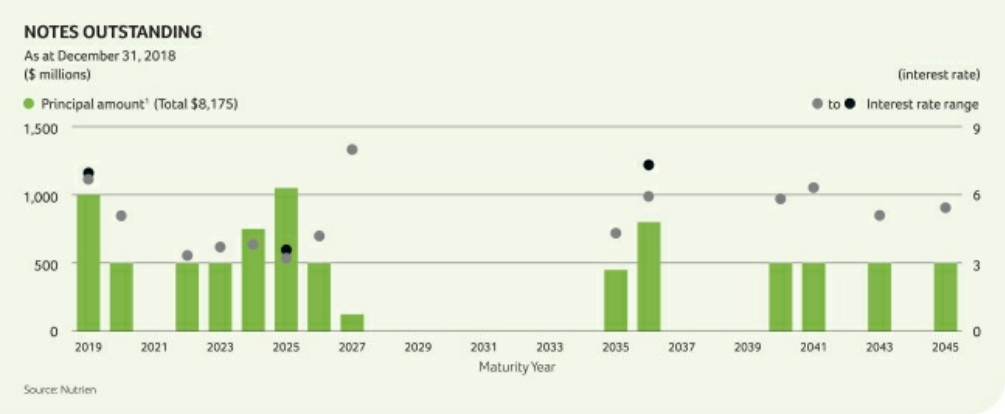


[1] The credit limit consists of a $4,500 million unsecured North American revolving term credit facility, a $500 million North American uncommitted revolving demand facility and approximately $520 million of other credit facilities in Europe, Australia and South America. Included in the amount outstanding and committed is $391 million of commercial paper and $238 million of other short-term debt. We have a $4,500 million credit limit under our commercial paper program, which is limited to the availability of backup funds backstopped by the $4,500 million unsecured revolving term credit facility. Interest rates on outstanding commercial paper ranged from 2.7 to 3.2 percent.

[2] Under the accounts receivable (A/R) securitization program, sold accounts receivable balances ($1,327 million outstanding at December 31, 2018) are used as capacity for collateralized borrowings from a third-party financial institution as described in note 22 to the financial statements. The weighted average interest rate on outstanding borrowings was $nil as there were no outstanding borrowings at December 31, 2018.

[3] Limit is reduced to $300 million from January to March each year.

Our long-term debt consists primarily of notes with the following maturities and interest rates:



[1] During 2018, we commenced offers to exchange all validly tendered and accepted senior notes of PotashCorp and debentures of Agrium, representing all of the outstanding senior notes and debentures of PotashCorp and Agrium, respectively, for new notes issued by Nutrien having interest rates and maturities identical to those of the applicable exchanged series of PotashCorp senior notes or Agrium debentures. In addition, we solicited consents from the holders of the PotashCorp senior notes and Agrium debentures to amend the terms and remove certain covenants and events of default under the indentures. Substantially all of the outstanding senior notes and debentures, other than Agrium's debentures due 2027, were exchanged. We are not required to provide additional financial reporting related to unexchanged notes and debentures, as the requisite number of debt holders consented to amend the applicable reporting requirements such that reports filed by Nutrien will be deemed to satisfy those requirements.

DEBT COVENANTS

Our credit facilities have financial tests and other covenants with which we must comply at each quarter-end. Non-compliance with any such covenants could result in accelerated payment of amounts borrowed and termination of lenders' further funding obligations under the credit facilities. We were in compliance with all covenants as at December 31, 2018.

The accompanying table summarizes the limits and results of certain covenants.

DEBT COVENANTS AT DECEMBER 31		Limit	2018
Debt-to-capital ratio [1]	£	0.65	0.28

1 This debt covenant is a non-IFRS financial measure and is calculated as the sum of short-term debt, long-term debt (including current portion), finance lease obligations and financial letters of credit divided by the sum of those amounts, non-controlling interests and shareholders' equity. The ratio of our short-term debt and long-term debt (including current portion) to our short-term debt, long-term debt (including current portion) and shareholders' equity, which is the nearest comparable IFRS measure, is 0.27.

CREDIT RATINGS

Our ability to access reasonably priced debt in the capital markets is dependent, in part, on the quality of our credit ratings. We continue to maintain investment-grade credit ratings for our long-term debt. A downgrade of the credit rating of our long-term debt could increase the interest rates applicable to borrowings under our credit facilities.

Commercial paper markets are normally a source of same-day cash for us. Our access to the US commercial paper market primarily depends on maintaining our current short-term credit ratings as well as general conditions in the money markets.

	Long-Term Debt Rating (Outlook)	Short-Term Debt Rating
	December 31, 2018	December 31, 2018
Moody's	Baa2 (stable)	P-2
S&P	BBB (stable)	A-2

A security rating is not a recommendation to buy, sell or hold securities. Such ratings may be subject to revision or withdrawal at any time by the respective credit rating agency and each rating should be evaluated independently of any other rating.

OUTSTANDING SHARE DATA

	December 31, 2018
Common shares [1]	602,630,027
Options to purchase common shares	9,044,237
Share-settled performance share units	65,850

1 Common shares issued and outstanding as at February 20, 2019.

For more information on our capital structure and management, see note 25 to the financial statements.

For more information on our short-term debt and long-term debt, see notes 22 and 23 to the financial statements.

Off-Balance Sheet Arrangements

Principal off-balance sheet activities include:

- Operating leases and long-term contracts containing fixed price and/or volume components (disclosed on page 68 under Cash Requirements). As of January 1, 2019, we adopted the new accounting standard for leases as described in note 32 to the financial statements. We anticipate approximately $1 billion of leases being brought on the balance sheet as "right of use assets" and an equal amount recognized for lease obligations. The expected impact on net earnings is minimal based on leases currently outstanding as the adoption of the standard is expected to result in a decrease in lease expenses of $225 million (COGS of $145 million and selling expenses and general and administrative expenses of $80 million), an increase in depreciation and amortization of $190 million (COGS of $130 million and selling expenses and general and administrative expenses of $60 million) and an increase in finance costs of $30 million. The expected impact on EBITDA is an increase of $225 million.
- Agreement to reimburse losses of Canpotex (see note 31 to the financial statements).
- Issuance of guarantee contracts (see note 27 to the financial statements).
- Certain non-financial derivatives that were entered into and continued to be held for the purpose of the receipt or delivery of a non-financial item in accordance with expected purchase, sale or usage requirements. Other derivatives are included on our balance sheet at fair value.

We do not reasonably expect any presently known trend or uncertainty to affect our ability to continue using these arrangements.

Other Financial Information

Related Party Transactions

Refer to note 30 to the financial statements for information on related party transactions.

Market Risks Associated with Financial Instruments

Market risk is the potential for loss from adverse changes in the market value of financial instruments. The level of market risk to which we are exposed varies depending on the composition of our derivative instrument portfolio, as well as current and expected market conditions. See note 13 to the financial statements for information on our financial instruments' risks and risk management.

Critical Accounting Estimates

We prepare our financial statements in accordance with IFRS, which requires us to make judgments, assumptions and estimates in applying accounting policies. Critical accounting estimates are those which are highly uncertain at the time they are made or where different estimates would be reasonably likely to have a material impact on our financial condition or results of operations.

Critical Accounting Estimate	Financial Statement Note Reference [1]	Primary Segment(s) Impacted
Business combinations	Note 3	All segments were impacted as all assets acquired, and liabilities assumed, from Agrium in the Merger were required to be measured at fair value.
Goodwill impairment	Note 17 and Note 32	The Retail, Potash, Nitrogen and Phosphate and Sulfate segments have goodwill allocated to them that could be subject to impairment.
Long-lived asset impairment	Note 16 and Note 32	The Potash and Phosphate and Sulfate segments have had impairments recorded, which could be subject to reversal. Further, all segments could be subject to impairment in the event there is an impairment trigger.
Income taxes	Note 9 and Note 31	Income taxes are not allocated to segments, therefore no segments are impacted by these estimates.
Asset retirement obligations and accrued environmental costs	Note 20	The Potash and Phosphate and Sulfate segments have these liabilities associated with their mining operations (Others segment has asset retirement obligations associated with non-operational mines) which have a high degree of estimation uncertainty for future costs and estimated timelines.

1 Included in the notes are a description of the estimate and the methodology for calculating (when applicable) key areas of judgment related to the estimate, changes to the estimate (if any) and sensitivity analysis (when available and would provide material information to investors).

We have discussed the development, selection and application of our key accounting policies, and the critical accounting estimates and assumptions they involve, with the audit committee of the Board.

Recent Accounting Changes

Refer to note 32 to the financial statements.

Quarterly Results

Dollars (millions) except as otherwise noted	Nutrien 2018 Q1	Q2	Q3	Q4	Total	PCS 2017 [1] Q1	Q2	Q3	Q4	Total
Sales	$ 3,695	$ 8,145	$ 4,034	$ 3,762	$ 19,636	$ 1,112	$ 1,120	$ 1,234	$ 1,081	$ 4,547
Gross margin	847	2,131	1,155	1,259	5,392	273	260	233	(72)	694
Earnings (loss) before finance costs and income taxes	76	1,151	(1,359)	546	414	175	149	100	(215)	209
Net (loss) earnings from continuing operations	(1)	741	(1,067)	296	(31)	106	152	16	(120)	154
Net earnings from discontinued operations	–	675	23	2,906	3,604	43	49	37	44	173
Net (loss) earnings [2]	(1)	1,416	(1,044)	3,202	3,573	149	201	53	(76)	327
EBITDA	487	1,507	(932)	944	2,006	347	317	280	(43)	901
Basic net (loss) earnings per share from continuing operations	–	1.18	(1.74)	0.48	(0.05)	0.13	0.18	0.02	(0.14)	0.18
Diluted net (loss) earnings per share from continuing operations	–	1.17	(1.74)	0.48	(0.05)	0.13	0.18	0.02	(0.14)	0.18
Basic net (loss) earnings per share [2]	–	2.25	(1.70)	5.23	5.72	0.18	0.24	0.06	(0.09)	0.39
Diluted net (loss) earnings per share [2]	–	2.24	(1.70)	5.22	5.72	0.18	0.24	0.06	(0.09)	0.39
Other comprehensive (loss) income	(70)	(105)	1	(128)	(302)	39	69	42	(54)	96
Cash (used in) provided by operating activities	(340)	601	(177)	1,968	2,052	223	328	293	381	1,225

1 Certain amounts have been reclassified to conform with Nutrien's new method of presentation and certain fourth quarter amounts have been reclassified as a result of discontinued operations discussed in note 10 of the financial statements.
2 From continuing and discontinued operations.

The agricultural products business is seasonal. Crop input sales are primarily concentrated in the spring and fall application seasons. Crop nutrient inventories are normally accumulated leading up to each application season. Our cash collections generally occur after the application season is complete, and our customer prepayments are concentrated in December and January. Feed and industrial sales are more evenly distributed throughout the year. Beginning in 2018, earnings were impacted by the operations acquired in the Merger. In the third quarter of 2018, earnings were impacted by a $1.8 billion non-cash impairment to property, plant and equipment in the Potash segment as discussed in note 16 to the financial statements. In the fourth quarter of 2017, earnings were impacted by a $276 million non-cash impairment to property, plant and equipment in the Phosphate and Sulfate segment.

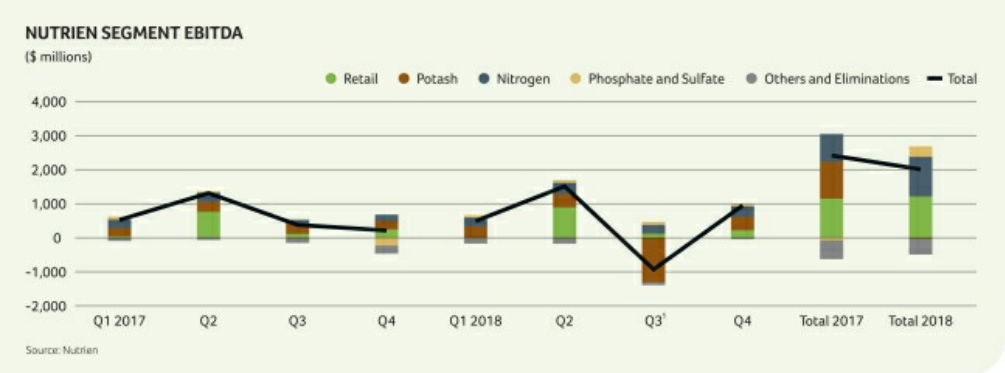
Dollars (millions)	Nutrien 2018 Q1	Q2	Q3	Q4	Total	Nutrien 2017 Q1	Q2	Q3	Q4	Total
Sales	$ 3,695	$ 8,145	$ 4,034	$ 3,762	$ 19,636	$ 3,737	$ 7,348	$ 3,586	$ 3,498	$ 18,169
Gross margin	847	2,131	1,155	1,259	5,392	838	1,791	793	729	4,151
Earnings (loss) before finance costs and income taxes	76	1,151	(1,359)	546	414	222	995	74	(100)	1,191
Net (loss) earnings from continuing operations	(1)	741	(1,067)	296	(31)	97	705	(53)	(93)	656
EBITDA	487	1,507	(932)	944	2,006	521	1,306	375	210	2,412

Fourth Quarter Financial Performance

Dollars (millions) Three months ended December 31	Sales					Gross Margin				
	Nutrien 2018	Nutrien 2017	% Change	PCS 2017	% Change	Nutrien 2018	Nutrien 2017	% Change	PCS 2017	% Change
RETAIL										
Crop nutrients	$ 917	$ 890	3	$ –	n/m	$ 184	$ 168	10	$ –	n/m
Crop protection products	644	712	(10)	–	n/m	270	327	(17)	–	n/m
Seed	103	107	(4)	–	n/m	56	51	10	–	n/m
Merchandise	179	187	(4)	–	n/m	27	28	(4)	–	n/m
Services and other	211	193	9	–	n/m	125	121	3	–	n/m
Total	$ 2,054	$ 2,089	(2)	$ –	n/m	$ 662	$ 695	(5)	$ –	n/m

Dollars (millions) Three months ended December 31	Manufactured Product Sales Tonnes (thousands)					Manufactured Product Average Net Price per MT				
	Nutrien 2018	Nutrien 2017	% Change	PCS 2017	% Change	Nutrien 2018	Nutrien 2017	% Change	PCS 2017	% Change
POTASH										
North America	731	896	(18)	568	29	$ 242	$ 207	17	$ 214	13
Offshore	2,126	1,631	30	1,340	59	$ 216	$ 168	29	$ 169	28
Sales	2,857	2,527	13	1,908	50	$ 223	$ 182	23	$ 182	23
Cost of Goods Sold						$ (95)	$ (101)	(6)	$ (96)	(1)
Gross Margin						$ 128	$ 81	58	$ 86	49
NITROGEN										
Ammonia	808	801	1	505	60	$ 290	$ 256	13	$ 270	7
Urea	687	583	18	283	143	$ 337	$ 272	24	$ 288	17
Solutions and nitrates	939	986	(5)	795	18	$ 169	$ 151	12	$ 138	22
Sales	2,434	2,370	3	1,583	54	$ 257	$ 217	18	$ 207	24
Cost of Goods Sold						$ (175)	$ (174)	1	$ (167)	5
Gross Margin						$ 82	$ 43	91	$ 40	105
PHOSPHATE AND SULFATE										
Fertilizer	601	629	(4)	534	13	$ 423	$ 348	22	$ 342	24
Industrial and feed	207	205	1	239	(13)	$ 513	$ 485	6	$ 483	6
Sulfate	77	61	26	–	n/m	$ 267	$ 236	13	$ –	n/m
Sales	885	895	(1)	773	14	$ 431	$ 372	16	$ 385	12
Cost of Goods Sold						$ (406)	$ (694)	(41)	$ (782)	(48)
Gross Margin						$ 25	$ (322)	n/m	$ (397)	n/m

n/m = not meaningful



[1] Potash segment EBITDA includes a $1,809 million non-cash impairment.

Highlights of our 2018 fourth quarter compared to the 2017 combined historical Nutrien fourth quarter results and the 2017 PotashCorp fourth quarter results were as follows (direction of arrows refers to impact on comprehensive income and ● means no impact):

	Q4 2018 vs Q4 2017 (Nutrien)	Q4 2018 vs Q4 2017 (PotashCorp)
Retail	↓ Sales volumes for crop nutrients and crop protection were impacted by a shortened application season in the US caused by adverse weather. ↑ Gross margin for crop nutrients was higher due to strong fertilizer prices more than offsetting lower sales volumes.	↑ PotashCorp did not have Retail operations prior to the Merger.
Potash	↑ Sales volumes were up due to strong demand in offshore markets more than offsetting lower North America sales due to adverse weather that postponed fall application. ↑ Sales prices were up due to strong global demand and tight supply. ↑ Costs per tonne were lower due to realized synergies and mine optimization.	↑ Sales volumes were up due to the addition of the Vanscoy Potash mine in the Merger and strong offshore demand. ↑ Sales prices were up due to strong global demand and tight supply. ● Costs per tonne were flat due to realized synergies and mine optimization offsetting the addition of Agrium's operations, higher depreciation on the related PPA adjustments, and shutdowns at certain mines occurring in the fourth quarter in 2018 and in the third quarter in 2017.
Nitrogen	↑ Sales volumes were higher due to improved production rates and stable fall ammonia application in Canada. ↑ Sales prices were up due to tight global supply and higher global feedstock costs. ● Costs per tonne were flat due to higher production volumes and synergy realizations being offset by higher depreciation and amortization from the PPA adjustments.	↑ Sales volumes increased primarily as a result of the Merger. ↑ Sales prices were up due to tight global supply , stable demand and higher global feedstock costs. ↓ Costs per tonne were higher due to higher depreciation and amortization from the PPA adjustments more than offsetting lower average natural gas costs from plants acquired in the Merger.
Phosphate and Sulfate	● Sales volumes were flat as higher ammonium sulfate sales offset lower dry fertilizer sales caused by the shortened application in the US. ↑ Sales prices were up due to higher sulfur and ammonia input costs and a more balanced global supply and demand. ↑ Costs per tonne were down significantly as the impact of higher sulfur and ammonia input costs were more than offset by the non-cash impairment in the prior year.	↑ Sales volumes increased primarily as a result of the Merger. ↑ Sales prices were up due to higher sulfur and ammonia input costs and a more balanced global supply and demand. ↑ Costs per tonne were down significantly as the impact of higher sulfur and ammonia input costs were more than offset by the non-cash impairment in the prior year.
Expenses and income below gross margin	↓ Selling costs in Retail increased due to acquisitions and increased depreciation related to PPA adjustments. ↑ General and administrative costs decreased due primarily to a share-based payment recovery in 2018 compared to share based payment expenses in 2017. ↑ Other expenses decreased (Other income in 2018) primarily due to lower Merger and related costs.	↓ Expenses increased primarily due to the acquisition of Agrium's operations in the Merger. ↓ Selling costs also increased due to Retail acquisitions and increased depreciation related to PPA adjustments from the Merger. ↑ Other expenses decreased (Other income in 2018) primarily due to lower Merger and related costs.
Income tax expense (recovery)	↓ We realized earnings from continuing operations for the three months ended December 31, 2018 compared to a loss from continuing operations for the same period in 2017. Significantly higher earnings were realized in high tax rate jurisdictions in the fourth quarter of 2018 compared to the same period in 2017. Discrete tax recoveries were $4 million in the fourth quarter of 2018 compared to $109 million in the fourth quarter of 2017.	↓ We realized earnings from continuing operations for the three months ended December 31, 2018 compared to a loss from continuing operations for the same period in 2017. Significantly higher earnings were realized in high tax rate jurisdictions in the fourth quarter of 2018 compared to the same period in 2017. Discrete tax recoveries were $4 million in the fourth quarter of 2018 compared to $118 million in the fourth quarter of 2017.
Net earnings from discontinued operations	Combined historical Nutrien information was not prepared for discontinued operations.	↑ Net earnings from discontinued operations were higher primarily due to the gains on sale of our equity investments in SQM and APC.
Other comprehensive loss (OCI)	↓ Other comprehensive loss increased primarily due to a loss on translation of net operations in Canada and Australia due to weaker foreign currencies that were acquired in the Merger and an actuarial loss on defined benefit plans in 2018 (compared to a gain in 2017) more than offsetting a decreased fair value loss on our investments measured at fair value through OCI. (2018 included a loss on Sinofert; 2017 included losses on Sinofert and ICL)	↓ Other comprehensive loss increased primarily due to a loss on translation of net operations in Canada and Australia due to weaker foreign currencies that were acquired in the Merger and an actuarial loss on defined benefit plans in 2018 (compared to a gain in 2017) more than offsetting a decreased fair value loss on our investments measured at fair value through OCI. (2018 included a loss on Sinofert; 2017 included losses on Sinofert and ICL)

Controls and Procedures

Disclosure Controls and Procedures

We maintain disclosure controls and procedures designed to provide reasonable assurance that information required to be disclosed by Nutrien in its annual filings, interim filings (as these terms are defined in National Instrument 52-109 – Certification of Disclosure (NI 52-109) in Issuers' Annual and Interim Filings) and other reports filed or submitted by us under securities legislation is recorded, processed, summarized and reported within the required time periods. Our Chief Executive Officer and Chief Financial Officer, after evaluating the effectiveness of our disclosure controls and procedures as of the end of the period covered by the annual filings, being December 31, 2018, have concluded that, as of such date, our disclosure controls and procedures were effective in providing reasonable assurance that information required to be disclosed by Nutrien in its annual filings, interim filings or other reports filed or submitted by it under securities legislation is (a) recorded, processed, summarized and reported within the time periods specified in the securities legislation, and (b) accumulated and communicated to management, including our Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure.

There are inherent limitations to the effectiveness of any system of disclosure controls and procedures, including the possibility of human error and the circumvention or overriding of the controls and procedures. Accordingly, even effective disclosure controls and procedures can only provide reasonable assurance of achieving their control objectives.

Internal Controls Over Financial Reporting

Management is responsible for establishing and maintaining adequate internal control over financial reporting, as defined in Rules 13a-15(f) and 15d-15(f) under the *Securities Exchange Act of 1934*, as amended, and NI 52-109. Internal control over financial reporting is designed to provide reasonable assurance regarding the reliability of financial reporting and preparation of financial statements for external purposes in accordance with IFRS.

On January 1, 2018, PotashCorp and Agrium combined their businesses in a transaction by way of a plan of arrangement by becoming wholly owned subsidiaries of a new parent company named Nutrien. For the year ended December 31, 2018, the Company has designed internal control over financial reporting for Nutrien, while maintaining the internal control over financial reporting for its subsidiaries, PotashCorp and Agrium.

Under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, we conducted an evaluation of the design and effectiveness of our internal control over financial reporting as of the end of the fiscal year covered by this report based on the framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in Internal Control – Integrated Framework (2013). There was no change in our internal control over financial reporting in 2018 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting. Based on this evaluation, our Chief Executive Officer and Chief Financial Officer concluded that, as at December 31, 2018, Nutrien Ltd. did maintain effective internal control over financial reporting.

The effectiveness of the Company's internal control over financial reporting as at December 31, 2018 was audited by KPMG LLP, as reflected in their report, which is included in this 2018 Annual Report included on page 91.

Forward-Looking Statements

This 2018 Annual Report, including the “Outlook” section of “Management’s Discussion & Analysis of Financial Condition and Results of Operations,” contains and incorporates by reference “forward-looking statements” or “forward-looking information” (within the meaning of the US Private Securities Litigation Reform Act of 1995, and other US federal securities laws and applicable Canadian securities laws) (collectively, “forward-looking statements”) that relate to future events or our future financial performance. These statements can be identified by expressions of belief, expectation or intention, as well as those statements that are not historical fact. These statements often contain words such as “should”, “could”, “expect”, “may”, “anticipate”, “forecast”, “believe”, “intend”, “estimates”, “plans” and similar expressions. These statements are based on certain factors and assumptions as set forth in this Annual Report, including with respect to: foreign exchange rates, expected synergies, expected growth, results of operations, performance, business prospects and opportunities, and effective tax rates. While the Company considers these factors and assumptions to be reasonable based on information currently available, they may prove to be incorrect. Forward-looking statements are subject to risks and uncertainties that are difficult to predict. The results or events set forth in forward-looking statements may differ materially from actual results or events. Several factors could cause actual results or events to differ materially from those expressed in forward-looking statements, including, but not limited to, the following: a number of matters relating to the Merger, including the failure to realize the anticipated benefits of the Merger; the risk that our credit ratings may be downgraded or there may be adverse conditions in the credit markets; any significant impairment of the carrying amount of certain of our assets; variations from our assumptions with respect to foreign exchange rates, expected growth, results of operations, performance, business prospects and opportunities, and effective tax rates; fluctuations in supply and demand in the fertilizer, sulfur and petrochemical markets; changes in competitive pressures, including pricing pressures; risks and uncertainties related to any operating and workforce changes made in response to our industry and the markets we serve, including mine and inventory shutdowns; adverse or uncertain economic conditions and changes in credit and financial markets; economic and political uncertainty around the world; changes in capital markets; the results of sales contract negotiations; unexpected or adverse weather conditions; changes in foreign currency and exchange rates; risks related to reputational loss; the occurrence of a major safety incident; inadequate insurance coverage for a significant liability; inability to obtain relevant permits for our operations; catastrophic events or malicious acts, including terrorism; certain complications that may arise in our mining process, including water inflows; risks and uncertainties related to our international operations and assets; our ownership of non-controlling equity interests in other companies; our prospects to reinvest capital in strategic opportunities and acquisitions; risks associated with natural gas and other hedging activities; security risks related to our information technology systems; imprecision in mineral resource and reserve estimates; costs and availability of transportation and distribution for our raw materials and products, including railcars and ocean freight; changes in, and the effects of, government policies and regulations; earnings and the decisions of taxing authorities which could affect our effective tax rates; increases in the price or reduced availability of the raw materials that we use; our ability to attract, develop, engage and retain skilled employees; strikes or other forms of work stoppage or slowdowns; rates of return on, and the risks associated with, our investments and capital expenditures; timing and impact of capital expenditures; the impact of further innovation; adverse developments in new and pending legal proceedings or government investigations; and violations of our governance and compliance policies. Forward-looking statements are based on certain assumptions and analyses made by us in light of our experience and perception of historical trends, current conditions and expected future developments as well as other factors we believe are appropriate in the circumstances. Readers are cautioned not to place undue reliance on the forward-looking statements which involve known and unknown risks and uncertainties that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. These risks and uncertainties and additional risks and uncertainties can be found in our Annual Information Form for the year ended December 31, 2018 and in our filings with the SEC and the Canadian provincial securities commissions. The purpose of our expected adjusted earnings per share, adjusted EBITDA and EBITDA by segment guidance range is to assist readers in understanding our expected and targeted financial results, and this information may not be appropriate for other purposes. Forward-looking statements in or incorporated into this report are given only as at the date of this report or the document incorporated into this report and the Company disclaims any obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law.

Appendix

Non-IFRS Financial Measures

We use both IFRS and certainnon-IFRS measures to assess performance. Non-IFRS measures are a numerical measure of a company's performance, that either excludes or includes amounts that are not normally excluded or included in the most directly comparable measures calculated and presented in accordance with IFRS. In evaluating these measures, investors should consider that the methodology applied in calculating such measures may differ among companies and analysts.

Management believes the non-IFRS measures provide transparent and useful supplemental information to investors in order that they may evaluate our financial performance using the same measures as management. These non-IFRS financial measures should not be considered as a substitute for, nor superior to, measures of financial performance prepared in accordance with IFRS.

The following section outlines our non-IFRS financial measures, their definitions, why management uses each measure and contains reconciliations to the most directly comparable IFRS measures.

COMBINED HISTORICAL RESULTS OF POTASHCORP AND AGRIUM FOR THE YEAR ENDED DECEMBER 31, 2017

The combined historical information below may differ from the Nutrien pro forma earnings and balance sheet presented in the Business Acquisition Report dated February 20, 2017 (BAR) as the pro forma information presented therein required certain adjustments under applicable securities laws and accounting standards that we believe does not provide as useful a measure as the combined historical financial information. The primary differences in the statement of earnings were that pro forma finance costs were reduced by the amortization of the change in carrying amount of Agrium's debt resulting from the PPA adjustments and the pro forma other expenses were adjusted to remove any Merger-related costs. There were no comparable adjustments in the combined historical financial information. The primary differences in the balance sheet were the pro forma adjustments for the estimated proceeds from the sale of SQM, APC, ICL and Agrium's Conda Idaho phosphate production facility and adjacent phosphate mineral rights at December 31, 2017, while there was no adjustment in the combined historical financial information, and the PPA adjustments in the pro forma information was largely allocated to goodwill as fewer provisional fair value adjustments were known at the time of its preparation.

Most directly comparable IFRS financial measure: As the continuing reporting entity under IFRS, the audited annual financial statements of PotashCorp for the year ended December 31, 2017 are the IFRS comparative figures.

Definition: The combined historical results for Nutrien were calculated by adding the historical IFRS financial statements prepared by PotashCorp and Agrium and then eliminating intercompany transactions and reclassifying line items to conform with our financial statement presentation. This combined historical information does not include, among other things, estimated cost synergies, adjustments related to restructuring or integration activities, adjustments related to the PPA and the impact of discontinued operations.

Why we use the measure and why it is useful to investors: It provides a measure of what the combined results may have been had the Merger been completed on January 1, 2017. Information prepared includes a combined historical balance sheet, combined historical EBITDA by segment and in total, combined historical summary cash flow information and a combined historical summary other comprehensive income.

NUTRIEN COMBINED HISTORICAL SUMMARY CASH FLOW INFORMATION FOR THE YEAR ENDED DECEMBER 31, 2017

Dollars (millions)	Historical PotashCorp	Historical Agrium	Adjustments [1]	Nutrien
Cash provided by operating activities	$ 1,225	$ 1,319	$ 24 [1]	$ 2,568
Cash used in investing activities	(652)	(922)	(20) [1]	(1,594)
Cash used in financing activities	(489)	(335)	–	(824)
Effect of exchange rate changes on cash and cash equivalents	–	(12)	–	(12)
Increase in cash and cash equivalents	$ 84	$ 50	$ 4	$ 138

1 To reclassify legacy Agrium cash used in discontinued operations to match Nutrien's method of presentation.

NUTRIEN COMBINED HISTORICAL SUMMARY OTHER COMPREHENSIVE INCOME FOR THE YEAR ENDED DECEMBER 31, 2017

Dollars (millions)	Historical PotashCorp	Historical Agrium	Nutrien
Other comprehensive income	$ 96	$ 80	$ 176

NUTRIEN COMBINED HISTORICAL BALANCE SHEET AS AT DECEMBER 31, 2017

Dollars (millions)	Historical PotashCorp	Historical Agrium	Adjustments [1]	Nutrien
ASSETS				
Current assets				
Cash and cash equivalents	$ 116	$ 466	$ –	$ 582
Receivables	489	2,406	18 [2]	2,913
Income tax receivables	–	18	(18) [2]	–
Inventories	788	3,321	–	4,109
Prepaid expenses and other current assets	72	1,004	120 [3]	1,196
Other current assets	–	120	(120) [3]	–
	1,465	7,335	–	8,800
Assets held for sale	1,858	105	–	1,963
	3,323	7,440	–	10,763
Non-current assets				
Property, plant and equipment	12,971	7,091	–	20,062
Goodwill	–	2,228	97 [4]	2,325
Other intangible assets	166	518	(97) [4]	587
Investments	30	522	262 [5]	814
Available for sale investments	262	–	(262) [5]	–
Deferred income tax assets	–	85	(85) [6]	–
Other assets	246	58	85 [6]	389
TOTAL ASSETS	$ 16,998	$ 17,942	$ –	$ 34,940
LIABILITIES				
Current liabilities				
Short-term debt	$ 730	$ 867	$ – [7]	$ 1,597
Payables and accrued charges	807	5,206	119 [8, 9, 10]	6,132
Income taxes payable	–	27	(27) [8]	–
Current portion of long-term debt	–	11	– [7]	11
Current portion of derivative instrument liabilities	29	–	(29) [9]	–
Current portion of other provisions	–	63	(63) [10]	–
Deferred income tax liabilities on assets held for sale	36	–	–	36
	1,602	6,174	–	7,776
Non-current liabilities				
Long-term debt	3,711	4,397	–	8,108
Deferred income tax liabilities	2,205	473	–	2,678
Pension and other post-retirement benefit liabilities	440	142	–	582
Asset retirement obligations and accrued environmental costs	651	522	–	1,173
Derivative instrument liabilities	35	–	(35) [11]	–
Other non-current liabilities	51	106	42 [11, 12]	199
TOTAL LIABILITIES	8,695	11,814	7	20,516
SHAREHOLDERS' EQUITY				
Share capital	1,806	1,776	–	3,582
Contributed surplus	230	–	–	230
Accumulated other comprehensive income (loss)	25	(1,116)	–	(1,091)
Retained earnings	6,242	5,461	–	11,703
	8,303	6,121	–	14,424
Non-controlling interests	–	7	(7) [12]	–
TOTAL SHAREHOLDERS' EQUITY	8,303	6,128	(7)	14,424
TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY	$ 16,998	$ 17,942	$ –	$ 34,940

1 The following balances do not reflect the issuance of new shares or the PPA adjustments resulting from the Merger.
2 Reclassified Agrium income tax receivables as part of receivables.
3 Reclassified Agrium other current assets as part of prepaid expenses and other current assets.
4 Reclassified PotashCorp goodwill from intangibles to a separate line item.
5 Combined investments in equity-accounted investees and available for sale.
6 Reclassified Agrium deferred income tax assets as part of other assets.
7 Reclassified PotashCorp current portion of long-term debt as a separate line item.
8 Reclassified Agrium income taxes payable as part of payables and accrued charges.
9 Reclassified PotashCorp current portion of derivative instrument liabilities as part of payables and accrued charges.
10 Reclassified Agrium current portion of other provisions as part of payables and accrued charges.
11 Reclassified PotashCorp derivative instrument liabilities as part of other non-current liabilities.
12 Reclassified Agrium non-controlling interests as part of other non-current liabilities.

NUTRIEN COMBINED HISTORICAL EARNINGS FROM CONTINUING OPERATIONS AND EBITDA FOR THE YEAR ENDED DECEMBER 31, 2017

Dollars (millions)	Retail	Potash	Nitrogen	Phosphate and Sulfate	Others	Eliminations	Nutrien
SALES	$ 12,103	$ 2,391	$ 2,986	$ 1,561	$ –	$ (872)	$ 18,169
Freight, transportation and distribution	–	(334)	(347)	(204)	–		(885)
Cost of goods sold	(9,157)	(1,124)	(2,084)	(1,649)	–	881	(13,133)
GROSS MARGIN	2,946	933	555	(292)	–	9	4,151
Selling expenses	(2,007)	(12)	(31)	(8)	15	–	(2,043)
General and administrative expenses	(100)	(5)	(13)	(8)	(377)	–	(503)
Provincial mining and other taxes	–	(159)	–	–	–	–	(159)
Earnings of equity-accounted investees	9	1	35	–	1	–	46
Other income (expenses)	8	(20)	(25)	(7)	(257)	–	(301)
EARNINGS (LOSS) BEFORE FINANCE COSTS AND INCOME TAXES	856	738	521	(315)	(618)	9	1,191
Finance costs	–	–	–	–	(515)	–	(515)
EARNINGS (LOSS) BEFORE INCOME TAXES	856	738	521	(315)	(1,133)	9	676
Income taxes	–	–	–	–	(20)	–	(20)
NET EARNINGS (LOSS) FROM CONTINUING OPERATIONS	$ 856	$ 738	$ 521	$ (315)	$ (1,153)	$ 9	$ 656
Finance costs	–	–	–	–	515	–	515
Income taxes	–	–	–	–	20	–	20
Depreciation and amortization	289	345	291	240	56	–	1,221
EBITDA	$ 1,145	$ 1,083	$ 812	$ (75)	$ (562)	$ 9	$ 2,412

EBITDA RECONCILIATION TO HISTORICAL	Nutrien
PotashCorp	$ 901
Agrium	1,546
Combined EBITDA	2,447
Adjustments:	
Allocate Retail finance costs	(34)
Other	(1)
NUTRIEN EBITDA	$ 2,412

NUTRIEN COMBINED HISTORICAL RETAIL SEGMENT EBITDA FOR THE YEAR ENDED DECEMBER 31, 2017

Dollars (millions)	Historical PotashCorp	Historical Agrium	Adjustments	Nutrien
SALES				
External	$ –	$ 12,056	$ –	$ 12,056
Intersegment	–	47	–	47
TOTAL SALES	–	12,103	–	12,103
Cost of goods sold	–	(9,157)	–	(9,157)
GROSS MARGIN	–	2,946	–	2,946
Selling expenses	–	(2,007)	–	(2,007)
General and administrative expenses	–	(100)	–	(100)
Earnings of equity-accounted investees	–	9	–	9
Other income (expenses)	–	42	(34) [1]	8
EARNINGS BEFORE FINANCE COSTS AND INCOME TAXES	–	890	(34)	856
Depreciation and amortization	–	289	–	289
EBITDA	$ –	$ 1,179	$ (34)	$ 1,145

1 Finance costs associated with Retail operations will be allocated to the Retail segment, and will be presented in other income (expenses).

NUTRIEN COMBINED HISTORICAL POTASH SEGMENT EBITDA FOR THE YEAR ENDED DECEMBER 31, 2017

Dollars (millions)	Historical PotashCorp	Historical Agrium	Adjustments	Nutrien
SALES				
External	$ 1,868	$ 386	$ 4	$ 2,258
Intersegment	–	133	–	133
TOTAL SALES	1,868	519	4	2,391
Freight, transportation and distribution	(235)	–	(99) [1]	(334)
Cost of goods sold	(848)	(390)	114 [1, 4]	(1,124)
GROSS MARGIN	785	129	19	933
Selling expenses	–	(5)	(7) [4]	(12)
General and administrative expenses	–	(6)	1 [3, 4]	(5)
Provincial mining and other taxes	(151)	–	(8) [2, 4]	(159)
Earnings of equity-accounted investees	–	–	1 [4]	1
Other expenses	–	(13)	(7) [2, 4]	(20)
EARNINGS BEFORE FINANCE COSTS AND INCOME TAXES	634	105	(1)	738
Depreciation and amortization	232	113	–	345
EBITDA	$ 866	$ 218	$ (1)	$ 1,083

1 To separately present legacy Agrium direct and indirect freight costs.
2 To separately present legacy Agrium provincial mining taxes.
3 To reclassify legacy Agrium costs related to business support functions to Others.
4 To allocate legacy PotashCorp all Others segment selling and administrative expenses to segment.

NUTRIEN COMBINED HISTORICAL NITROGEN SEGMENT EBITDA FOR THE YEAR ENDED DECEMBER 31, 2017

Dollars (millions)	Historical PotashCorp	Historical Agrium	Adjustments	Nutrien
SALES				
External	$ 1,395	$ 755	$ 387 [2]	$ 2,537
Intersegment	74	254	121 [2, 4]	449
TOTAL SALES	1,469	1,009	508	2,986
Freight, transportation and distribution	(129)	–	(218) [1]	(347)
Cost of goods sold	(1,046)	(757)	(243) [1, 2, 4]	(2,046)
Cost of intersegment purchases	(38)	–	–	(38)
GROSS MARGIN	256	252	47	555
Selling expenses	–	(12)	(19) [2, 5]	(31)
General and administrative expenses	–	(13)	– [2, 3, 5]	(13)
Earnings of equity-accounted investees	–	–	35 [2, 5]	35
Other expenses	–	(18)	(7) [2, 5]	(25)
EARNINGS BEFORE FINANCE COSTS AND INCOME TAXES	256	209	56	521
Depreciation and amortization	203	79	9 [2, 4]	291
EBITDA	$ 459	$ 288	$ 65	$ 812

1 To separately present legacy Agrium direct and indirect freight costs.
2 To reclassify legacy wholesale other Agrium segment between Nitrogen and Phosphate and Sulfate.
3 To reclassify legacy Agrium costs related to business support functions to Others.
4 To record profit on legacy Agrium transfers of ammonia to Phosphate and Sulfate segment not previously recorded.
5 To allocate legacy PotashCorp all Others segment selling and administrative expenses to segment.

NUTRIEN COMBINED HISTORICAL PHOSPHATE AND SULFATE SEGMENT EBITDA FOR THE YEAR ENDED DECEMBER 31, 2017

Dollars (millions)	Historical PotashCorp	Historical Agrium	Adjustments	Nutrien
SALES				
External	$ 1,284	$ 115	$ (18) [2, 5]	$ 1,381
Intersegment	–	122	58 [2]	180
TOTAL SALES	1,284	237	40	1,561
Freight, transportation and distribution	(173)	–	(31) [1, 5]	(204)
Cost of goods sold	(1,441)	(228)	56 [1, 2, 3, 5]	(1,613)
Cost of intersegment purchases	(36)	–	–	(36)
GROSS MARGIN	(366)	9	65	(292)
Selling expenses	–	(2)	(6) [4]	(8)
General and administrative expenses	–	–	(8) [2, 4]	(8)
Other expenses	–	(3)	(4) [2, 4]	(7)
(LOSS) EARNINGS BEFORE FINANCE COSTS AND INCOME TAXES	(366)	4	47	(315)
Depreciation and amortization	220	17	3 [2, 3]	240
EBITDA	$ (146)	$ 21	$ 50	$ (75)

1 To separately present legacy Agrium direct and indirect freight costs.
2 To reclassify legacy wholesale other Agrium segment between Nitrogen and Phosphate and Sulfate.
3 To record incremental cost on legacy Agrium transfers of ammonia to Phosphate and Sulfate segment not previously recorded.
4 To allocate legacy PotashCorp all Others segment selling and administrative expenses to segment.
5 To reclassify certain phosphate products to Others segment.

NUTRIEN COMBINED HISTORICAL OTHERS SEGMENT AND ELIMINATIONS EBITDA FOR THE YEAR ENDED DECEMBER 31, 2017

Dollars (millions)	Historical PotashCorp	Historical Agrium	Adjustments	Nutrien
SALES				
Intersegment	$ –	$ (696)	$ (176) [1, 2, 9]	$ (872)
TOTAL SALES	–	(696)	(176)	(872)
Cost of goods sold	–	705	176 [1, 2, 9]	881
GROSS MARGIN	–	9	–	9
Selling and administrative expenses	(214)	–	214 [10]	–
Selling expenses	–	17	(2) [10]	15
General and administrative expenses	–	(121)	(256) [4, 5, 10]	(377)
Share-based payments	–	(69)	69 [4]	–
Earnings of equity-accounted investees	121	–	(120) [7, 10]	1
Other expenses	(90)	(127)	(40) [8, 10, 11]	(257)
LOSS BEFORE FINANCE COSTS AND INCOME TAXES	(183)	(291)	(135)	(609)
Finance costs	(238)	(101)	(176) [3, 6]	(515)
Finance costs related to long-term debt	–	(210)	210 [6]	–
LOSS BEFORE INCOME TAXES	(421)	(602)	(101)	(1,124)
Income tax recovery (expense)	180	(203)	3 [7]	(20)
NET LOSS FROM CONTINUING OPERATIONS	(241)	(805)	(98)	(1,144)
Finance costs	238	101	176 [3, 6]	515
Finance costs related to long-term debt	–	210	(210) [6]	–
Income tax (recovery) expense	(180)	203	(3) [7]	20
Depreciation and amortization	37	19	–	56
EBITDA	$ (146)	$ (272)	$ (135)	$ (553)

1 To eliminate sales made from legacy PotashCorp to legacy Agrium.
2 To eliminate incremental sales and cost of goods sold related to ammonia transfers to Phosphate and Sulfate segment.
3 Finance costs associated with Retail operations will be allocated to Retail segment, and presented in other expenses.
4 To reclassify legacy Agrium's share-based payments to general and administrative expenses.
5 To reclassify legacy Agrium costs related to business support functions to Others.
6 To reclassify finance costs related to long-term debt to finance costs.
7 To eliminate the earnings of legacy PotashCorp's investments in SQM and APC.
8 To eliminate the earnings of legacy PotashCorp's investment in ICL.
9 To eliminate legacy PotashCorp intersegment sales between Nitrogen and Phosphate and Sulfate.
10 To allocate legacy PotashCorp all Others segment selling and administrative expenses to segments.
11 To reclassify certain phosphate products to Others segment.

EBITDA, ADJUSTED EBITDA AND POTASH ADJUSTED EBITDA

Most Directly Comparable IFRS financial measure: Net earnings (loss) from continuing operations.

Definition: EBITDA is calculated as net earnings (loss) from continuing operations before finance costs, income taxes and depreciation and amortization. Adjusted EBITDA is calculated as net earnings (loss) from continuing operations before finance costs, income taxes and depreciation and amortization, impairment, Merger and related costs, share-based compensation and defined benefit plans curtailment gain.

Why we use the measure and why it is useful to investors: As a valuation measurement it excludes the effects of items that primarily reflect the impact of long-term investment and financing decisions, rather than the performance of our day-to-day operations, and as a measure of our ability to service debt and to meet other payment obligations.

Dollars (millions)	Nutrien 2018	Nutrien 2017 [1]
Net (loss) earnings from continuing operations	$ (31)	$ 656
Finance costs	538	515
Income tax (recovery) expense	(93)	20
Depreciation and amortization	1,592	1,221
EBITDA	2,006	2,412
Impairment of property, plant and equipment	1,809	305
Merger and related costs	170	178
Share-based compensation	116	92
Defined benefit plans curtailment gain	(157)	–
Adjusted EBITDA	$ 3,944	$ 2,987

	Nutrien 2018	Nutrien 2017
Potash EBITDA	$ (203)	$ 1,083
Impairment of property, plant and equipment	1,809	–
Potash adjusted EBITDA	$ 1,606	$ 1,083

1 Amount presented is the combined historical financial results of PotashCorp and Agrium.

ADJUSTED NET EARNINGS (AND THE RELATED PER SHARE AMOUNTS)

Most Directly Comparable IFRS financial measure: Net (loss) earnings from continuing operations and net (loss) earnings per share.

Definition: Net loss from continuing operations before purchase price allocation, impairment, Merger and related costs, share-based compensation, defined benefit plans curtailment gain and dividend income from discontinued operations net of tax.

Why we use the measure and why it is useful to investors: Focuses on the performance of our day-to-day operations excluding the effects of non-operating items.

	2018		
Dollars (millions), except per share amounts	Increases (Decreases)	Post-Tax	Per Share
Net loss from continuing operations		$ (31)	$ (0.05)
Adjustments:			
Purchase price allocation	$ 211	161	0.26
Impairment of property, plant and equipment	1,809	1,320	2.11
Merger and related costs	170	130	0.21
Share-based compensation	116	89	0.14
Defined benefit plans curtailment gain	(157)	(120)	(0.19)
Dividend income of SQM and APC	156	130	0.21
Adjusted net earnings		$ 1,679	$ 2.69

GROSS MARGIN EXCLUDING DEPRECIATION AND AMORTIZATION PER TONNE

Most Directly Comparable IFRS financial measure: Gross margin per tonne.

Definition: Gross margin less depreciation and amortization per tonne. (Reconciliations are provided on pages 42, 48 and 54.)

Why we use the measure and why it is useful to investors: Focuses on the performance of our day-to-day operations, which excludes the effects of items that primarily reflect the impact of long-term investment and financing decisions.

FREE CASH FLOW

Most Directly Comparable IFRS financial measure: Cash provided by operating activities.

Definition: Cash provided by operating activities less sustaining capital expenditures, cash provided by operating activities from discontinued operations and changes in non-cash operating working capital. Sustaining capital expenditures include the cost of replacements and betterments for our facilities.

Why we use the measure and why it is useful to investors: For evaluation of liquidity and financial strength, and as a component of employee remuneration calculations. It is also useful as an indicator of our ability to service debt, meet other payment obligations and make strategic investments. Free cash flow does not represent residual cash flow available for discretionary expenditures.

Dollars (millions)	2018 Nutrien	2017 Nutrien [1]
Cash provided by operating activities	$ 2,052	$ 2,568
Cash provided by operating activities from discontinued operations	(130)	(200)
Sustaining capital expenditures	(1,085)	(1,018)
Changes in non-cash operating working capital	1,138	(57)
Free cash flow	$ 1,975	$ 1,293

1 Amount presented is the combined historical financial results of PotashCorp and Agrium.

POTASH CASH COPM

Most Directly Comparable IFRS financial measure: Cost of goods sold (COGS).

Definition: Potash COGS for the period excluding depreciation and amortization expense and inventory and other adjustments divided by the production tonnes for the period.

Why we use the measure and why it is useful to investors: To assess operational performance. Cash COPM excludes the effects of production from other periods and long-term investment decisions, supporting a focus on the performance of our day-to-day operations.

Dollars (millions), except per tonne amounts	2018 Nutrien	2017 Nutrien [1]
Total COGS – Potash	$ 1,183	$ 1,124
Change in inventory	(5)	36
Other adjustments	(14)	20
COPM	$ 1,164	$ 1,180
Depreciation and amortization included in COPM	(391)	(378)
Cash COPM	$ 773	$ 802
Production tonnes (tonnes - thousands)	12,842	12,224
Potash cash COPM per tonne	$ 60	$ 66

1 Amount presented is the combined historical financial results of PotashCorp and Agrium.

UREA CONTROLLABLE CASH COPM

Most directly comparable IFRS financial measure: COGS.

Definition: Urea COGS for the Nitrogen segment excluding depreciation and amortization expense, cash COGS for products excluding urea, inventory and other adjustments and urea natural gas and steam costs, divided by the urea production tonnes for the period.

Why we use the measure and why it is useful to investors: To assess operational performance. Cash COPM excludes the effects of production from other periods and long-term investment decisions, supporting a focus on the performance of our day-to-day operations.

Dollars (millions), except per tonne amounts	2018 Nutrien	2017 Nutrien [1]
Total COGS – Nitrogen	$ 2,079	$ 2,084
Nitrogen depreciation and amortization	(429)	(291)
Cash COGS for products other than urea	(1,251)	(1,421)
Urea		
Total cash COGS	$ 399	$ 372
Change in inventory and other adjustments	70	52
Total cash COPM	$ 469	$ 424
Natural gas and steam costs	(221)	(205)
Controllable cash COPM	$ 248	$ 219
Production (tonnes - thousands)	3,422	2,891
Urea controllable cash COPM per tonne	$ 72	$ 76

1 Amount presented is the combined historical financial results of PotashCorp and Agrium.

RETAIL NORMALIZED COMPARABLE STORE SALES

Most directly comparable IFRS financial measure: Retail sales from comparable base as a component of total Retail sales.

Definition: Retail normalized comparable store sales is determined by adjusting prior year comparable store sales for published potash, nitrogen and phosphate benchmark prices and foreign exchange rates used in the current year. We retain sales of closed locations in the comparable base if the closed location is in close proximity to an existing location, unless we plan to exit the market area or are unable to economically or logistically serve it. We do not adjust for temporary closures, expansions or renovations of stores.

Why we use the measure and why it is useful to investors: Evaluate sales growth by adjusting for fluctuations in commodity prices and foreign exchange rates. Included are locations owned by us for more than 12 months.

Dollars (millions), except percentage amounts	2018 Nutrien	2017 Nutrien [1]
Sales from comparable base		
Current period	$ 12,253	$ 11,782
Prior period	12,103	11,766
Comparable store sales (%)	1%	0%
Prior period normalized for benchmark prices and foreign exchange rates	12,363	11,509
Normalized comparable store sales (%)	(1%)	2%

1 Amount presented is the combined historical financial results of PotashCorp and Agrium.

RETAIL AVERAGE WORKING CAPITAL TO SALES

Most directly comparable IFRS financial measure: (Current assets minus current liabilities for Retail) divided by Retail sales.

Definition: Retail average working capital divided by sales for the last four rolling quarters.

Why we use the measure and why it is useful to investors: To evaluate operational efficiency. A lower or higher percentage represents increased or decreased efficiency, respectively.

	Rolling four quarters ended December 31, 2018				
Dollars (millions), except percentage amounts	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Average/Total
Working capital	$ 1,781	$ 3,170	$ 3,633	$ 2,312	$ 2,724
Sales	2,099	6,342	2,175	2,054	12,670
Average working capital to sales					21%

RETAIL CASH OPERATING COVERAGE RATIO

Most directly comparable IFRS financial measure: Retail expenses below gross margin as a percentage of Retail gross margin.

Definition: Retail gross margin less depreciation and amortization, EBIT and Merger-related adjustments, divided by Retail gross margin excluding depreciation and amortization expense in cost of goods sold.

Why we use the measure and why it is useful to investors: To understand the costs and underlying economics of our Retail operations and to assess our Retail operating performance and ability to generate free cash flow.

	Rolling four quarters ended December 31, 2018				
Dollars (millions), except percentage amounts	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Total
Gross margin	$ 408	$ 1,432	$ 533	$ 662	$ 3,035
Depreciation and amortization in cost of goods sold	2	2	1	2	7
Gross margin excluding depreciation and amortization	$ 410	$ 1,434	$ 534	$ 664	$ 3,042
EBIT	(133)	764	(6)	82	707
Depreciation and amortization	123	122	122	132	499
Merger-related adjustments [1]	14	12	6	8	40
Operating expenses excluding depreciation and amortization and Merger-related adjustments	$ 406	$ 536	$ 412	$ 442	$ 1,796

1 Adjusted for the impact of Merger-related presentation adjustments.

Cash operating coverage ratio (%)	59%

ADJUSTED NET DEBT

Most directly comparable IFRS financial measure: Long-term debt.

Definition: Long-term debt less net unamortized fair value adjustments plus short-term debt and current portion of long-term debt.

Why we use the measure and why it is useful to investors: As a component of adjusted net debt to adjusted EBITDA, it is used to evaluate our ability to pay our debts. See note 25 to the financial statements for a reconciliation of adjusted net debt.

Terms

Community Investment	Represents cash disbursements, matching of employee gifts and in-kind contributions of equipment, goods and services and employee volunteerism (on corporate time).
Compound Annual Growth Rate (CAGR)	CAGR is the rate of return that would be required for an investment to grow from its beginning balance to its ending balance assuming the profits were reinvested at the end of each year of the investment's lifespan.
Environmental Incidents	Number of incidents includes release quantities that exceed the US Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) limits, in Potash facilities any release that exceeds Saskatchewan Release Limits (based on the Saskatchewan Environmental Code), non-compliance incidents that exceed $10 thousand in costs to reach compliance or enforcement actions with fines exceeding $1 thousand.
Employee Turnover Rate	The number of permanent employees who left the Company (due to deaths and voluntary and involuntary terminations, and excluding retirements and announced workforce reductions) as a percentage of average total employees during the year. Retirements and terminations of temporary employees are excluded.
Investing Capital	Capital for significant expansions of current operations or to create cost savings (synergies), including capitalized interest. Investing capital excludes capital outlays for business acquisitions and equity-accounted investees.
Net Sales	Sales minus freight, transportation and distribution expenses.
Lost-Time Injury Frequency	Total lost-time injuries for every 200,000 hours worked for all Nutrien employees, contractors and others on site. Calculated as the total lost-time injuries multiplied by 200,000 hours worked divided by the actual number of hours worked.
Merger	The merger of equals transaction between PotashCorp and Agrium completed effective January 1, 2018, pursuant to which PotashCorp and Agrium combined their businesses pursuant to a statutory plan of arrangement under the *Canada Business Corporations Act* and became wholly owned subsidiaries of Nutrien Ltd.
Purchase Price Allocation (PPA)	The allocation of the purchase price in a business combination to the fair values of assets acquired and liabilities assumed. The PPA adjustments impacted net earnings primarily through increased depreciation and amortization and decreased finance costs.
Sustaining Capital	Sustaining capital expenditures are required to sustain operations at existing levels and include major repairs and maintenance and plant turnarounds.
Taxes and Royalties	Includes tax and royalty amounts on an accrual basis calculated as: current income tax expense from continuing and discontinued operations minus investment tax credits and realized excess tax benefit related to share-based compensation plus potash production tax, resource surcharge, royalties, municipal taxes and other miscellaneous taxes.
Total Recordable Injury Frequency	Total recordable injuries for every 200,000 hours worked for all Nutrien employees, contractors and others on site. Calculated as the total recordable injuries multiplied by 200,000 hours worked divided by the actual number of hours worked.
Total Shareholder Return	Return on investment in Nutrien shares from the time the investment is made based on two components: (1) growth in share price and (2) return from reinvested dividend income on the shares.
Working Capital Ratio	Current assets divided by current liabilities.

Exhibit 99.3



Nutrien

2018
Annual Audited Financial Statements

Financial Statements & Notes

Consolidated Statements of

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Management's Responsibility

Management's Responsibility for Financial Reporting

Management's Report on Financial Statements

The accompanying consolidated financial statements and related financial information are the responsibility of Nutrien's management. They have been prepared in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board ("IFRS") and include amounts based on estimates and judgments. Financial information included elsewhere in this report is consistent with the consolidated financial statements.

The consolidated financial statements are approved by the Board of Directors on the recommendation of the audit committee. The audit committee of the Board of Directors is composed entirely of independent directors. The audit committee discusses and analyzes Nutrien's interim condensed consolidated financial statements and Management's Discussion & Analysis ("MD&A") with management before such information is approved by the committee and submitted to securities commissions or other regulatory authorities. The annual consolidated financial statements and MD&A are also analyzed by the audit committee and management and are approved by the Board of Directors.

In addition, the audit committee has the duty to review critical accounting policies and significant estimates and judgments underlying the consolidated financial statements as presented by management, and to approve the fees of our independent registered public accounting firm.

Our independent registered public accounting firm, KPMG LLP, performs an audit of the consolidated financial statements, the results of which are reflected in their report for 2018 included on Page 92. KPMG LLP have full and independent access to the audit committee to discuss their audit and related matters.

Management's Annual Report on Internal Control over Financial Reporting

Management is responsible for establishing and maintaining adequate internal control over financial reporting, as defined in Rules 13a-15(f) and 15d-15(f) of the Exchange Act, as amended, and NI 52-109. Internal control over financial reporting is designed to provide reasonable assurance regarding the reliability of financial reporting and preparation of financial statements for external purposes in accordance with IFRS.

On January 1, 2018, Potash Corporation of Saskatchewan Inc. ("PotashCorp") and Agrium Inc. ("Agrium") combined their businesses in a transaction by way of a plan of arrangement (the "Merger") by becoming wholly owned subsidiaries of a new parent company named Nutrien Ltd. (collectively with its subsidiaries, known as "Nutrien" or the "Company" except to the extent the context otherwise requires). For the year ended December 31, 2018, the Company has designed internal control over financial reporting for Nutrien, while maintaining the internal control over financial reporting for its subsidiaries, PotashCorp and Agrium.

Under our supervision and with the participation of management, the Company conducted an evaluation of the design and effectiveness of our internal control over financial reporting as of the end of the fiscal year covered by this report, based on the framework issued by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO") in Internal Control – Integrated Framework (2013). Based on this evaluation, management concluded that, as of December 31, 2018, Nutrien did maintain effective internal control over financial reporting. The effectiveness of the Company's internal control over financial reporting as at December 31, 2018 has been audited by KPMG LLP, as reflected in their report for 2018 included on page 91.



Chuck Magro
President and Chief Executive Officer
February 20, 2019



Pedro Farah
Chief Financial Officer
February 20, 2019

Report of Independent Registered Public Accounting Firm – 2018

To the Shareholders and the Board of Directors of Nutrien Ltd.

Opinion on Internal Control over Financial Reporting

We have audited Nutrien Ltd. and subsidiaries' (the "Company") internal control over financial reporting as of December 31, 2018, based on criteria established in Internal Control—Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission. In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2018, based on criteria established in Internal Control—Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) ("PCAOB"), the consolidated balance sheet of the Company as of December 31, 2018, the related consolidated statements of earnings, comprehensive income, shareholders' equity, and cash flows for the year ended December 31, 2018, and the related notes (collectively, the consolidated financial statements), and our report dated February 20, 2019 expressed an unqualified opinion on those consolidated financial statements.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Responsibility Report. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that 1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the Company; 2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the Company are being made only in accordance with authorizations of management and directors of the Company; and 3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the Company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

KPMG LLP

Chartered Professional Accountants

Saskatoon and Calgary, Canada
February 20, 2019

Report of Independent Registered Public Accounting Firm – 2018

To the Shareholders and the Board of Directors of Nutrien Ltd.

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated balance sheet of Nutrien Ltd. and subsidiaries (the "Company") as of December 31, 2018, the related consolidated statements of earnings, comprehensive income, changes in shareholders' equity, and cash flows for the year then ended, and the related notes (collectively, the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2018, and the results of its operations and its cash flows for the year then ended, in conformity with International Financial Reporting Standards as issued by the International Accounting Standards Board.

The accompanying consolidated financial statements of Potash Corporation of Saskatchewan Inc. and subsidiaries ("PotashCorp") as of December 31, 2017 and for the year then ended were audited by other auditors, whose report thereon dated February 20, 2018 expressed an unqualified opinion on those consolidated financial statements, before the retrospective reclassification of certain comparative information as well as additional disclosures within the segment and capital management financial statement notes, described in Note 33 to the consolidated financial statements.

We have audited the adjustments described in Note 33 that were applied to restate the December 31, 2017 consolidated financial statements including the retrospective reclassification of certain comparative information as well as additional disclosures within the segment and capital management financial statement notes, to conform to the current year presentation. In our opinion, such adjustments are appropriate and have been properly applied. We were not engaged to audit, review, or apply any procedures to the 2017 consolidated financial statements of PotashCorp other than with respect to the adjustments and, accordingly, we do not express an opinion or any other form of assurance on the 2017 consolidated financial statements taken as a whole.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) ("PCAOB"), the Company's internal control over financial reporting as of December 31, 2018, based on criteria established in Internal Control—Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission, and our report dated February 20, 2019 expressed an unqualified opinion on the effectiveness of the Company's internal control over financial reporting.

Basis for Opinion

These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. Our audit included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audit also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audit provides a reasonable basis for our opinion.

KPMG LLP

Chartered Professional Accountants

We have served as the Company's auditor since our appointment in 2018.

Saskatoon and Calgary, Canada
February 20, 2019

Report of Independent Registered Public Accounting Firm – 2017

To the Shareholders and the Board of Directors of Potash Corporation of Saskatchewan Inc.

Opinion on the Financial Statements

We have audited, before the effects of the adjustments to retrospectively reclassify certain comparative information and to provide additional disclosures to conform to the current year presentation as discussed in Note 33 to the consolidated financial statements, the consolidated statement of financial position of Potash Corporation of Saskatchewan Inc. and subsidiaries ("PotashCorp") as of December 31, 2017, the related consolidated statements of income, comprehensive income, changes in shareholders' equity, and cash flows, for the year ended December 31, 2017, and the related notes (collectively referred to as the "financial statements") (the 2017 financial statements before the effects of the retrospective reclassification and additional disclosures discussed in Note 33 to the financial statements are not presented herein). In our opinion, the 2017 financial statements before the effects of the adjustments to retrospectively reclassify certain comparative information and to provide additional disclosures to conform to the current year presentation as discussed in Note 33 to the financial statements, present fairly, in all material respects, the financial position of PotashCorp as of December 31, 2017, and the results of its operations and its cash flows for the year ended December 31, 2017, in conformity with International Financial Reporting Standards as issued by the International Accounting Standards Board.

We were not engaged to audit, review, or apply any procedures to the adjustments to retrospectively reclassify certain comparative information and to provide additional disclosures to conform to the current year presentation as discussed in Note 33 to the financial statements, and accordingly, we do not express an opinion or any other form of assurance about whether such retrospective adjustments and additional disclosures discussed in Note 33 are appropriate and have been properly applied. Those retrospective adjustments and additional disclosures were audited by other auditors.

Basis for Opinion

These financial statements are the responsibility of PotashCorp's management. Our responsibility is to express an opinion on PotashCorp's financial statements based on our audit. We are a public accounting firm registered with the Public Company Accounting Oversight Board ("PCAOB") and are required to be independent with respect to PotashCorp in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audit included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audit also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audit provides a reasonable basis for our opinion.

Deloitte LLP

Chartered Professional Accountants

Saskatoon, Canada
February 20, 2018

We began serving as PotashCorp's auditor in 1977. In 2018, we became the predecessor auditor.

Consolidated Financial Statements

Consolidated Statements of Earnings

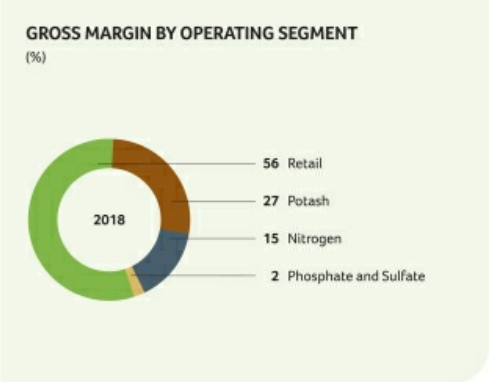
For the years ended December 31		2018	2017 (Note 33)
SALES	Note 4	$ 19,636	$ 4,547
Freight, transportation and distribution	Note 5	(864)	(537)
Cost of goods sold	Note 5	(13,380)	(3,316)
GROSS MARGIN		5,392	694
Selling expenses	Note 5	(2,337)	(29)
General and administrative expenses	Note 5	(539)	(185)
Provincial mining and other taxes	Note 6	(250)	(146)
Impairment of property, plant and equipment	Note 16	(1,809)	–
Other expenses	Note 7	(43)	(125)
EARNINGS BEFORE FINANCE COSTS AND INCOME TAXES		414	209
Finance costs	Note 8	(538)	(238)
LOSS BEFORE INCOME TAXES		(124)	(29)
Income tax recovery	Note 9	93	183
NET (LOSS) EARNINGS FROM CONTINUING OPERATIONS		(31)	154
Net earnings from discontinued operations	Note 10	3,604	173
NET EARNINGS		$ 3,573	$ 327
NET (LOSS) EARNINGS PER SHARE FROM CONTINUING OPERATIONS	Note 11		
Basic		$ (0.05)	$ 0.18
Diluted		$ (0.05)	$ 0.18
NET EARNINGS PER SHARE FROM DISCONTINUED OPERATIONS	Note 11		
Basic		$ 5.77	$ 0.21
Diluted		$ 5.77	$ 0.21
NET EARNINGS PER SHARE FROM CONTINUING AND DISCONTINUED OPERATIONS	Note 11		
Basic		$ 5.72	$ 0.39
Diluted		$ 5.72	$ 0.39
Weighted average shares outstanding for basic earnings per share (“EPS”)	Note 11	624,900,000	840,079,000
Weighted average shares outstanding for diluted EPS	Note 11	624,900,000	840,316,000

(See Notes to the Consolidated Financial Statements)

2018 HIGHLIGHTS

- Merger of Potash Corporation of Saskatchewan Inc. (“PotashCorp”) and Agrium Inc. (“Agrium”) occurred on January 1, 2018. As a result, the 2017 figures throughout are the financial results of PotashCorp only, the accounting acquirer.





Consolidated Statements of Comprehensive Income

For the years ended December 31 (net of related income taxes)	2018	2017 (Note 33)
NET EARNINGS	$ 3,573	$ 327
Other comprehensive (loss) income		
Items that will not be reclassified to net earnings:		
Net actuarial gain on defined benefit plans	54	46
Net fair value (loss) gain on investments [1]	(99)	30
Items that have been or may be subsequently reclassified to net earnings:		
Loss on currency translation of foreign operations	(249)	–
Other	(8)	20
OTHER COMPREHENSIVE (LOSS) INCOME	(302)	96
COMPREHENSIVE INCOME	$ 3,271	$ 423

1 As at December 31, 2018 and 2017, financial instruments measured at fair value through other comprehensive income ("FVTOCI") are comprised of shares in Sinofert Holdings Limited ("Sinofert") and other. The Company's investment in Israel Chemicals Ltd. ("ICL") was classified as held for sale at December 31, 2017 and the divestiture of all equity interests in ICL was completed on January 24, 2018.

(See Notes to the Consolidated Financial Statements)

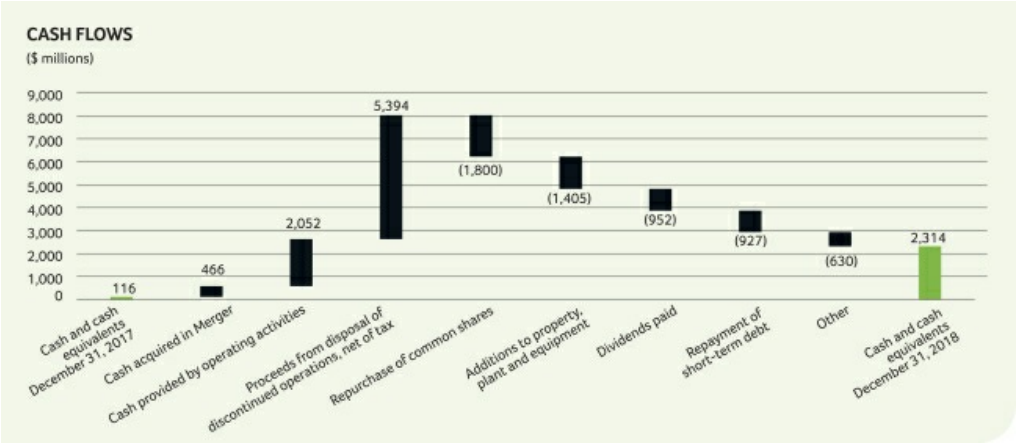
Consolidated Statements of Cash Flows

For the years ended December 31		2018	2017
OPERATING ACTIVITIES			
Net earnings		$ 3,573	$ 327
Adjustments to reconcile net earnings to cash provided by operating activities	Note 12	(383)	826
Changes in non-cash operating working capital	Note 12	(1,138)	72
CASH PROVIDED BY OPERATING ACTIVITIES		2,052	1,225
INVESTING ACTIVITIES			
Cash acquired in Merger	Note 3	466	–
Business acquisitions, net of cash acquired	Note 3	(433)	–
Additions to property, plant and equipment	Note 16	(1,405)	(651)
Proceeds from disposal of discontinued operations, net of tax	Note 10	5,394	–
Purchase of investments		(135)	–
Other		–	(1)
CASH PROVIDED BY (USED IN) INVESTING ACTIVITIES		3,887	(652)
FINANCING ACTIVITIES			
Finance costs on long-term debt		(21)	(1)
(Repayment of) proceeds from short-term debt	Note 22	(927)	341
Repayment of long-term debt	Note 23	(12)	(500)
Dividends paid	Note 24	(952)	(330)
Repurchase of common shares	Note 24	(1,800)	–
Issuance of common shares	Note 24	7	1
CASH USED IN FINANCING ACTIVITIES		(3,705)	(489)
EFFECT OF EXCHANGE RATE CHANGES ON CASH AND CASH EQUIVALENTS		(36)	–
INCREASE IN CASH AND CASH EQUIVALENTS		2,198	84
CASH AND CASH EQUIVALENTS, BEGINNING OF YEAR		116	32
CASH AND CASH EQUIVALENTS, END OF YEAR		$ 2,314	$ 116
Cash and cash equivalents comprised of:			
Cash		$ 1,506	$ 14
Short-term investments		808	102
		$ 2,314	$ 116

(See Notes to the Consolidated Financial Statements)

2018 HIGHLIGHTS

The graph below represents the significant changes in Nutrien's cash flows in 2018.



IN MILLIONS OF US DOLLARS EXCEPT AS OTHERWISE NOTED

Consolidated Statements of Changes in Shareholders' Equity

			Accumulated Other Comprehensive (Loss) Income ("AOCI")						
	Share Capital	Contributed Surplus	Net Fair Value Loss on Investments [1, 2]	Net Actuarial Gain on Defined Benefit Plans [3]	Loss on Currency Translation of Foreign Operations (Note 33)	Other (Note 33)	Total AOCI	Retained Earnings	Total Equity [4]
BALANCE – DECEMBER 31, 2016	$ 1,798	$ 222	$ 43	$ –	$ (2)	$ (66)	$ (25)	$ 6,204	$ 8,199
Net earnings	–	–	–	–	–	–	–	327	327
Other comprehensive income	–	–	30	46	–	20	96	–	96
Dividends declared	–	–	–	–	–	–	–	(335)	(335)
Effect of share-based compensation including issuance of common shares	2	8	–	–	–	–	–	–	10
Shares issued for dividend reinvestment plan	6	–	–	–	–	–	–	–	6
Transfer of net actuarial gain on defined benefit plans	–	–	–	(46)	–	–	(46)	46	–
BALANCE – DECEMBER 31, 2017	$ 1,806	$ 230	$ 73	$ –	$ (2)	$ (46)	$ 25	$ 6,242	$ 8,303
Merger impact (Notes 3 and 11)	15,898	7	–	–	–	–	–	(1)	15,904
Net earnings	–	–	–	–	–	–	–	3,573	3,573
Other comprehensive (loss) income	–	–	(99)	54	(249)	(8)	(302)	–	(302)
Shares repurchased (Note 24)	(998)	(23)	–	–	–	–	–	(831)	(1,852)
Dividends declared	–	–	–	–	–	–	–	(1,273)	(1,273)
Effect of share-based compensation including issuance of common shares	34	17	–	–	–	–	–	–	51
Transfer of net actuarial gain on defined benefit plans	–	–	–	(54)	–	–	(54)	54	–
Transfer of net loss on sale of investment	–	–	19	–	–	–	19	(19)	–
Transfer of net loss on cash flow hedges	–	–	–	–	–	21	21	–	21
BALANCE – DECEMBER 31, 2018	$16,740	$ 231	$ (7)	$ –	$ (251)	$ (33)	$ (291)	$ 7,745	$24,425

1 The Company adopted IFRS 9 "Financial Instruments" in 2018 and reclassified available-for-sale investments as financial instruments measured at FVTOCI.
2 The Company divested its equity interests in the investment in ICL on January 24, 2018. The loss on sale of ICL of $(19) was transferred to retained earnings in 2018. The cumulative net unrealized gain at December 31, 2017 was $4.
3 Any amounts incurred during a period were closed out to retained earnings at each period-end. Therefore, no balance exists at the beginning or end of period.
4 All equity transactions were attributable to common shareholders.

(See Notes to the Consolidated Financial Statements)

Consolidated Balance Sheets

As at December 31		2018	2017 (Note 33)
ASSETS			
Current assets			
Cash and cash equivalents		$ 2,314	$ 116
Receivables	Note 14	3,342	489
Inventories	Note 15	4,917	788
Prepaid expenses and other current assets		1,089	72
		11,662	1,465
Assets held for sale	Note 10	–	1,858
		11,662	3,323
Non-current assets			
Property, plant and equipment	Note 16	18,796	12,971
Goodwill	Note 17	11,431	97
Other intangible assets	Note 17	2,210	69
Investments	Note 21	878	292
Other assets	Note 18	525	246
TOTAL ASSETS		$ 45,502	$ 16,998

(See Notes to the Consolidated Financial Statements)

As at December 31		2018	2017 (Note 33)
LIABILITIES			
Current liabilities			
Short-term debt	Note 22	$ 629	$ 730
Current portion of long-term debt	Note 23	1,003	–
Payables and accrued charges	Note 19	6,703	836
		8,335	1,566
Deferred income tax liabilities on assets held for sale	Note 10	–	36
		8,335	1,602
Non-current liabilities			
Long-term debt	Note 23	7,591	3,711
Deferred income tax liabilities	Note 9	2,907	2,205
Pension and other post-retirement benefit liabilities	Note 28	395	440
Asset retirement obligations and accrued environmental costs	Note 20	1,673	651
Other non-current liabilities		176	86
TOTAL LIABILITIES		21,077	8,695
SHAREHOLDERS' EQUITY			
Share capital	Note 24	16,740	1,806
Contributed surplus		231	230
Accumulated other comprehensive (loss) income		(291)	25
Retained earnings		7,745	6,242
TOTAL SHAREHOLDERS' EQUITY		24,425	8,303
TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY		$ 45,502	$ 16,998

(See Notes to the Consolidated Financial Statements)

Approved by the Board of Directors,



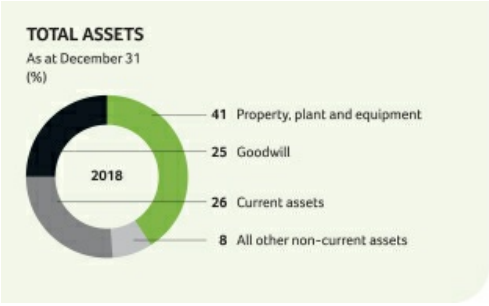
Director



Director

2018 HIGHLIGHTS

- Increase in assets and liabilities primarily relates to the Merger of PotashCorp and Agrium.





NOTE 1 DESCRIPTION OF BUSINESS

Nutrien Ltd. is an integrated ag solutions provider and plays a critical role in helping growers around the globe increase food production in a sustainable manner. The Company's Retail segment supplies key products and services directly to growers – including crop nutrients, crop protection and seed, as well as agronomic and application services. The Company produces the three essential nutrients – potash, nitrogen and phosphate – required to help farmers grow healthier, more abundant crops.

On January 1, 2018, PotashCorp and Agrium combined their businesses in a transaction by way of a plan of arrangement (the "Merger") by becoming wholly owned subsidiaries of a new parent company named Nutrien Ltd. (collectively with its subsidiaries, known as "Nutrien" or "the Company" except to the extent the context otherwise requires).

Nutrien is the world's largest provider of crop inputs and services. The Company is a corporation organized under the laws of Canada and its registered head office is located at Suite 500, 122—1st Avenue South, Saskatoon, Saskatchewan, Canada. As at December 31, 2018, the Company had assets as follows:

Retail

- more than 1,700 retail facilities across the US, Canada, Australia and key areas of South America
- capability to formulate and distribute advanced proprietary crop protection products and nutritionals
- an innovative integrated digital platform for growers and crop consultants

Production (Owned)

Potash

- six operations in the province of Saskatchewan

Nitrogen

- eight production facilities in North America: four in the province of Alberta and one located in each of the states of Texas, Georgia, Louisiana and Ohio
- one large-scale operation in Trinidad
- seven upgrade facilities in North America: three in the province of Alberta and one in each of the states of Washington, Missouri, Georgia and Alabama
- 50 percent investment in Profertil S.A. ("Profertil"), a nitrogen producer based in Argentina
- 26 percent investment in Misr Fertilizers Production Company S.A.E. ("MOPCO"), a nitrogen producer based in Egypt

Phosphate and Sulfate

- two mines and processing plants: one in each of the states of North Carolina and Florida
- a production facility in the province of Alberta
- phosphate feed plants in the states of Illinois, Missouri and Nebraska
- an industrial phosphoric acid plant in the state of Ohio

Others

- investment in Canpotex Ltd. ("Canpotex"), a Canadian potash export, sales and marketing company owned in equal shares by Nutrien and another potash producer
- 22 percent investment in Sinofert, a fertilizer supplier and distributor in China
- a phosphate processing plant in the state of Louisiana permanently shut down in 2018
- one potash operation in the province of New Brunswick that will be permanently shut down

Transportation and Distribution (Leased and Owned)

- leased or owned approximately 400 terminals and warehouses relating to the Company's production operations within North America, some of which have multi-product capability
- leased or owned approximately 15,000 railcars and approximately 31, 000 retail vehicles and application equipment in North America
- ownership in a joint venture that leases a dry bulk fertilizer port terminal in Brazil allowing for timely delivery of product
- leased four vessels for ammonia transportation
- owned one multi-purpose vessel used for molten sulfur and phosphoric acid transportation

NOTE 2 BASIS OF PRESENTATION

These consolidated financial statements have been prepared in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board ("IFRS"). The Company has consistently applied the same accounting policies throughout all periods presented, as if these policies had always been in effect, with the exception of IFRS 9 "Financial Instruments" and IFRS 15 "Revenue from Contracts with Customers" which were adopted effective January 1, 2018. Figures for 2017 and prior reflect the historical operations of PotashCorp, the accounting acquirer. The financial statements and related notes of Nutrien in 2018 and beyond reflect the operations of Nutrien.

These consolidated financial statements were authorized by the Board of Directors for issue on February 20, 2019.

Where an accounting policy is applicable to a specific note to the statements, the policy is described within that note, with the related financial disclosures by major caption as noted in the table included on page 89. Certain of the Company's accounting policies that relate to the financial statements as a whole, as well as estimates and judgments it has made and how they affect the amounts reported in the consolidated financial statements, are disclosed in Note 32. New standards and amendments or interpretations that were either effective and applied by the Company during 2018 or that were not yet effective are described in Note 32. Sensitivity analyses included throughout the notes should be used with caution as the changes are hypothetical and not reflective of future performance. The sensitivities have been calculated independently of changes in other key variables. Changes in one factor may result in changes in another, which could amplify or reduce certain sensitivities. These consolidated financial statements were prepared under the historical cost basis, except for items that IFRS requires to be measured at fair value.

NOTE 3 BUSINESS COMBINATIONS

The Company's business combinations include the Merger between PotashCorp and Agrium and the acquisition of Retail businesses, including farm centers in North America and Australia, digital agriculture, proprietary products and agricultural services. Assets acquired and liabilities assumed are measured at fair value.

Accounting Policies

- The acquisition method is followed.
- Consideration is measured at the aggregate of the fair values of assets transferred, liabilities incurred or assumed, and equity instruments issued in exchange for control of the acquiree at the acquisition date.
- The acquisition date is the date the Company obtains control over the acquiree.
- Identifiable assets acquired and liabilities assumed are generally measured at fair value.
- Acquisition-related costs are recognized in net earnings as incurred.
- The excess of total consideration for each acquisition plus non-controlling interest in the acquiree, over the fair value of the identifiable net assets acquired, is recorded as goodwill.

Accounting Estimates and Judgments

- Purchase price allocation involves judgment in identifying assets acquired and liabilities assumed and estimation of their fair values.
- Judgment is required to determine which entity is the acquirer in a merger of equals. In identifying PotashCorp as the acquirer, the companies considered the voting rights of all equity instruments, the intended corporate governance structure of the combined company, the intended composition of senior management of the combined company and the size of each of the companies. In assessing the size of each of the companies, the companies evaluated various metrics. No single factor was the sole determinant in the overall conclusion that PotashCorp is the acquirer for accounting purposes; rather, all factors were considered in arriving at the conclusion.

Merger

As described in Note 1, PotashCorp and Agrium combined their businesses in a merger of equals. Benefits of the Merger include operating synergies, primarily from the distribution and retail integration, production and expense optimization, and procurement savings.

Agrium was a retail distributor of agricultural crop inputs, providing growers with fertilizer, crop protection products, seed, services and solutions. Agrium was also one of the largest manufacturers of fertilizer in the world, producing and marketing all three major crop nutrients – nitrogen, potash and phosphate.

On January 1, 2018, the acquisition date, shareholders of PotashCorp received 0.400 common shares of Nutrien for each PotashCorp share held, and shareholders of Agrium received 2.230 common shares of Nutrien for each Agrium share held. The exchange ratios represent the respective closing share prices of each company's common shares at market close on the New York Stock Exchange ("NYSE") on August 29, 2016, the last trading day prior to when the companies announced that they were in preliminary discussions regarding a merger of equals, which is consistent with the weighted average prices through that date. The outstanding share-based compensation awards of PotashCorp and Agrium were replaced by Nutrien share-based compensation awards with substantially equivalent terms after adjusting for the applicable exchange ratio (refer to Note 29). Merger and related costs of $170 in 2018 were included in other expenses (2017 – $84).

The purchase price was determined based on the number of Agrium shares outstanding and its trading price on December 29, 2017. The share price reflects market participants' assumptions of the fair value of Agrium as a going concern, which exceeds the fair value of the assets acquired and liabilities assumed. This resulted in the recognition of goodwill in the amount of $11,185, none of which is deductible for income tax purposes. The value of goodwill is primarily attributable to: (a) the location and scale of the Retail distribution network; (b) the proximity of the nitrogen operations to sources of low-cost natural gas; (c) cost synergies associated with the reduction of selling, general and administrative expenses, in addition to the optimization of the rail fleet, distribution and logistics, and procurement; and (d) the assembled workforce, mostly related to the employees in the Retail distribution network.

Management completed an assessment in identifying and measuring all the assets acquired and liabilities assumed prior to the recognition of goodwill. This assessment included a thorough review of all internal and external sources of information available on circumstances that existed at the acquisition date. The Company engaged independent valuation experts to assist in determining the fair value of certain assets acquired and liabilities assumed and related deferred income tax impacts.

The final values that were allocated to Agrium's assets and liabilities as at January 1, 2018 based upon fair values were as follows:

Cash and cash equivalents	$ 466
Receivables [1]	2,600
Inventories	3,303
Prepaid expenses and other current assets	1,124
Assets held for sale [2]	95
Property, plant and equipment [3]	7,459
Goodwill [4]	11,185
Other intangible assets [4]	2,348
Investments	528
Other assets [5]	198
Total assets	29,306
Short-term debt	867
Payables and accrued charges [6]	5,239
Long-term debt	4,941
Deferred income tax liabilities	934
Pension and other post-retirement benefit liabilities	142
Asset retirement obligations and accrued environmental costs [6]	1,094
Other non-current liabilities	79
Total liabilities	13,296
Net assets (consideration for the Merger)	$ 16,010

1 Includes trade receivables with gross contractual amount of $2,247, of which $80 are considered to be uncollectible.
2 Relates to the assets held at the Company's Conda Phosphate operations and North Bend nitric acid operations. The sale was completed on January 12, 2018.
3 Refer to Note 16 for detailed information of property, plant and equipment acquired.
4 Refer to Note 17 for detailed information on other intangible assets acquired and the allocation of goodwill to groups of cash generating units ("CGUs").
5 Includes deferred income tax assets of $158.
6 Refer to Note 20 for detailed information of asset retirement obligations and accrued environmental costs acquired. Included in payables and accrued charges is $39 related to the current portion of asset retirement obligations and accrued environmental costs.

The significant fair value considerations included in the allocation of purchase price are discussed below:

Property, Plant and Equipment

The fair value was primarily determined using a market approach for land and certain types of personal property, and a replacement cost approach for the remaining property, plant and equipment. The market approach for land and certain types of personal property represents a sales comparison that measures the value of an asset through an analysis of sales and offerings of comparable assets. The replacement cost approach used for all other depreciable property, plant and equipment measures the value of an asset by estimating the cost to acquire or construct comparable assets and adjusts for age and condition of the asset.

Other Intangible Assets
Other intangible assets primarily consist of acquired customer relationships, brands, proprietary technology, trademarks and trade names. The fair value of customer-related assets was determined using the excess earnings method, an income approach. In determining the fair value of customer relationships, a segment of customers was identified where the sales from these customers are driven by factors such as relationships with the Company and its employees and, as such, fair value was associated with customer relationships. Segmenting customers is a matter of judgment and includes factors such as the size of the customer and customer behavior patterns.

Long-Term Debt
The fair value of debentures was determined based on comparable debt instruments with similar maturities, adjusted where necessary to Agrium's credit spread, based on information published by financial institutions.

Asset Retirement Obligations and Accrued Environmental Costs
Asset retirement obligations for phosphate sites are expected to be paid over the next 68 years, while asset retirement obligations for potash and nitrogen sites are expected to be paid after that time. The fair value for environmental costs was determined using a decision-tree approach of future costs and a risk premium to capture the compensation sought by risk-averse market participants for bearing the uncertainty inherent in the cash flows of the liability. Accrued environmental costs are expected to be paid over a period extending up to 30 years and were discounted using a credit adjusted risk-free rate.

Financial Information Related to the Acquired Operations of Agrium

The following table provides "gross sales" and "net earnings from continuing operations before income taxes":

	2018
Summary results of acquired operations of Agrium[1]	
Sales	$ 14,551
Net earnings from continuing operations before income taxes	$ 546

1 Results of acquired operations included in the Company's consolidated statements of earnings for 2018.

Retail Acquisitions

During the year, the Retail segment acquired 53 farm centers in North America and Australia and companies operating within the digital agriculture, proprietary products and agricultural services business. Benefits of the acquisitions include expansion of geographical coverage for the sale of crop input products, increased customer base and workforce, continued growth in the digital agricultural field and synergies between Nutrien and the acquired businesses.

The values allocated to the acquired assets and assumed liabilities based upon fair values were as follows as at December 31:

	2018
Working capital	$ 116
Property, plant and equipment	107
Goodwill [1]	197
Other intangible assets	8
Other non-current assets	14
Other non-current liabilities	(9)
Total consideration	$ 433

1 Goodwill was calculated as the difference between the amount of consideration transferred and the net identifiable assets acquired. Goodwill resulting from the acquisition is attributed to the assembled workforce, value of potential increase in customer base and synergies between Nutrien and the acquired companies.

	2018
Financial information related to business acquisitions[1]	
Sales from date of acquisition	$ 213
Net earnings from continuing operations before income taxes from date of acquisition	$ 10

1 Estimated annual sales and earnings before finance costs, income taxes, and depreciation and amortization if acquisitions occurred at the beginning of the year are approximately $441 and $42, respectively.

On February 5, 2019, the Company announced the planned acquisition of Actagro, LLC, a developer, manufacturer and marketer of environmentally sustainable soil and plant health products and technologies for an estimated purchase price of $340. Closing of the transaction is subject to US regulatory approval and is expected to be completed in the first half of 2019.

NOTE 4 SEGMENT INFORMATION

The Company has four reportable operating segments: Retail, Potash, Nitrogen, and Phosphate and Sulfate. The Retail segment distributes crop nutrients, crop protection products, seed and merchandise, and provides services directly to growers through a network of farm centers in North and South America and Australia. The Potash, Nitrogen, and Phosphate and Sulfate segments are differentiated by the chemical nutrient contained in the products that each produces.

Accounting Policies

Operating Segments

Prior to the Merger, the Company identified the Chief Executive Officer as the Chief Operating Decision Maker ("CODM") under IFRS and used gross margin to measure the segments' profit or loss. The operating segments were limited to the following: Potash, Nitrogen and Phosphate. The changes in the structure of the Company's internal organization as a result of the Merger caused the composition of the operating segments to change as well as who the Company identified to be the CODM.

Post-Merger, the Company identified the Executive Leadership Team ("ELT"), comprised of officers at the Executive Vice President level and above, as the CODM. The CODM uses net (loss) earnings before finance costs, income taxes, and depreciation and amortization ("EBITDA") to measure performance and allocate resources to the operating segments. The CODM believes EBITDA to be an important measure as it excludes the effects of items that primarily reflect the impact of long-term investment and financing decisions, rather than the performance of the Company's day-to-day operations.

In 2019, the Company's CODM reassessed product groupings and decided to evaluate the performance of sulfate products as part of the Nitrogen segment, rather than the Phosphate and Sulfate segment; therefore, future comparative figures will be restated for the change in the composition of the segments, which will result in an increase in the Nitrogen segment and a decrease in the Phosphate and Sulfate segment. For the year ended December 31, 2018, this change will be approximately $121, $42, and $69 in sales, gross margin and EBITDA, respectively.

Revenue

The Company recognizes revenue when it transfers control over a good or service to a customer.

Retail	Potash, Nitrogen, and Phosphate and Sulfate
Transfer of control for the sale of goods	
At the point in time when the product is: • purchased at the Company's Retail farm center or • delivered and accepted by customers at their premises	At the point in time when the product is: • loaded for shipping or • delivered to the customer
Transfer of control for services	
When the promised service is rendered	When the promised service is rendered

Retail

Sales revenue consists primarily of:

- Crop nutrients – sales of dry and liquid macronutrient products which include nitrogen, potash and phosphate, proprietary liquid micronutrient products and nutrient application services;
- Crop protection products – sales of various third-party supplier and proprietary products designed to maintain crop quality and manage plant diseases, weeds, and other pests;

Accounting Estimates and Judgments

Operating Segments

Judgment is used in determining the composition of the reportable segments based on factors including risks and returns, internal organization, and internal reports reviewed by the CODM.

Certain expenses are allocated across segments based on an appropriate basis such as production capacities or historical trends.

Revenue

For product sales which contain volume rebates, revenue is recognized to the extent that it is highly probable that significant reversals will not occur using the most likely method and accumulated experience.

Returns and incentives are estimated based on historical and forecasted data, contractual terms and current conditions. Due to the nature of goods and services sold, any single estimate would have only a negligible impact on revenue recognition.

Accounting Policies

- Seed – various third-party supplier seed brands and proprietary seed product lines;
- Merchandise – sales of fencing, feed supplements, livestock-related animal health products, storage and irrigation equipment, and other products; and
- Services and other revenues – sales of product application, soil and leaf testing, crop scouting and precision agriculture services, financial services and livestock marketing.

Provisions for returns, trade discounts and rebates are deducted from sales revenue.

Potash, Nitrogen, and Phosphate and Sulfate

The Company manufactures and sells potash, nitrogen, and phosphate and sulfate products. While agriculture is the Company's primary market, it also produces products for animal nutrition and industrial uses.

The Company's sales revenue is recorded and measured based on the "freight on board" mine, plant, warehouse or terminal price specified in the contract (except for certain vessel sales or specific product sales that are shipped and recorded on a delivered basis), which reflects the consideration the Company expects to be entitled to in exchange for the goods or services, net of any variable consideration (e.g., any trade discounts or estimated volume rebates). Where volume rebates are provided for in customer contracts, the Company estimates revenue at the earlier of the most likely amount of consideration expected to be received or when the consideration becomes fixed. The Company's customer contracts may provide certain product quality specification guarantees but do not generally provide for refunds or returns.

Sales prices are based on North American and International benchmark market prices which are variable and subject to global supply and demand, and competitive factors.

	Potash	Nitrogen	Phosphate and Sulfate
Products	• North American – primarily granular • Offshore (International) – primarily granular and standard	• Ammonia, urea, urea ammonium nitrate, and industrial grade ammonium nitrate	• Solid fertilizer, liquid fertilizer, industrial products and feed products
Sales prices impacted by	• North American prices referenced at delivered prices (including transportation and distribution costs) • International prices referenced at the mine site (excluding transportation and distribution costs)	• Global energy costs and supply	• Global ammonia and sulfur costs and supply

Other

The Company does not provide general warranties. Intersegment sales are made under terms that approximate market value. Transportation costs are generally recovered from the customer through sales pricing.

Seasonality in the Company's business results from increased demand for products during planting season. Crop input sales are generally higher in spring and fall crop input application seasons. Crop nutrient inventories are normally accumulated leading up to each application season. The Company's cash collections generally occur after the application season is complete while customer prepayments are concentrated in December and January.

Accounting Estimates and Judgments

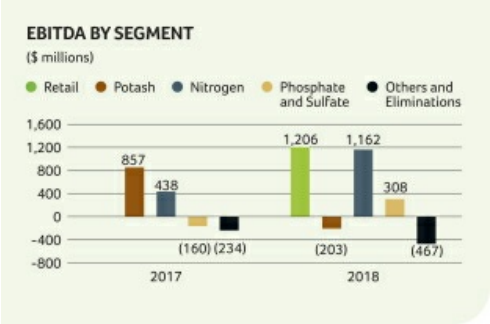
Supporting Information

Financial information on each of these segments is summarized in the following tables:

2018	Retail	Potash	Nitrogen	Phosphate and Sulfate	Others	Eliminations	Consolidated
Sales – third party	$12,620	$ 2,796	$ 2,651	$ 1,569	$ –	$ –	$ 19,636
– intersegment	50	220	566	328	–	(1,164)	–
Sales – total	12,670	3,016	3,217	1,897	–	(1,164)	19,636
Freight, transportation and distribution	–	(349)	(358)	(230)	–	73	(864)
Net sales	12,670	2,667	2,859	1,667	–	(1,091)	
Cost of goods sold	(9,635)	(1,183)	(2,079)	(1,539)	–	1,056	(13,380)
Gross margin	3,035	1,484	780	128	–	(35)	5,392
Selling expenses	(2,303)	(14)	(32)	(10)	22	–	(2,337)
General and administrative expenses	(100)	(10)	(20)	(9)	(400)	–	(539)
Provincial mining and other taxes	–	(244)	(3)	(1)	(2)	–	(250)
Impairment of property, plant and equipment (Note 16)	–	(1,809)	–	–	–	–	(1,809)
Other income (expenses)	75	(14)	8	(6)	(106)	–	(43)
Earnings (loss) before finance costs and income taxes	707	(607)	733	102	(486)	(35)	414
Depreciation and amortization	499	404	429	206	54	–	1,592
EBITDA [1]	$ 1,206	$ (203)	$ 1,162	$ 308	$ (432)	$ (35)	$ 2,006
Assets [2]	$17,964	$11,710	$10,009	$ 2,783	$3,678	$ (642)	$ 45,502

1 EBITDA is a non-IFRS measure calculated as net (loss) earnings from continuing operations before finance costs, income taxes, and depreciation and amortization. Nutrien uses EBITDA as a supplemental measure. Generally, this measure is a numerical measure of a company's performance, that either excludes or includes amounts that are not normally excluded or included in the most directly comparable measure calculated and presented in accordance with IFRS. In evaluating this measure, investors should consider that the methodology applied in calculating this measure may differ among companies and analysts. The Company uses both IFRS and certain non-IFRS measures to assess performance. Management believes the non-IFRS measures provide useful supplemental information to investors in order that they may evaluate Nutrien's financial performance using the same measures as management. Management believes that, as a result, the investor is afforded greater transparency in assessing the financial performance of the Company. This non-IFRS financial measure should not be considered as a substitute for, nor superior to, measures of financial performance prepared in accordance with IFRS.

2 Included in the Nitrogen and Retail segments are $428 and $208 relating to equity-accounted investees, respectively, as described in Note 21.



NOTE 4 SEGMENT INFORMATION CONTINUED

2017	Potash	Nitrogen	Phosphate and Sulfate	Others	Eliminations	Consolidated
Sales – third party	$1,868	$ 1,395	$ 1,284	$ –	$ –	$ 4,547
– intersegment	–	74	–	–	(74)	–
Sales – total	1,868	1,469	1,284	–	(74)	4,547
Freight, transportation and distribution	(235)	(129)	(173)	–	–	(537)
Net sales	1,633	1,340	1,111	–	(74)	
Cost of goods sold [1]	(829)	(1,084)	(1,477)	–	74	(3,316)
Gross margin	804	256	(366)	–	–	694
Selling expenses	(7)	(14)	(6)	(2)	–	(29)
General and administrative expenses	(7)	(4)	(4)	(170)	–	(185)
Provincial mining and other taxes	(146)	–	–	–	–	(146)
Other expenses	(19)	(3)	(4)	(99)	–	(125)
Earnings (loss) before finance costs and income taxes	625	235	(380)	(271)	–	209
Depreciation and amortization	232	203	220	37	–	692
EBITDA	$ 857	$ 438	$ (160)	$ (234)	$ –	$ 901
Assets [2]	$9,756	$ 2,577	$ 1,938	$2,727	$ –	$ 16,998

1 Included in the Phosphate and Sulfate segment is $305 of impairment of property, plant and equipment as described in Note 16.
2 Included in the total assets relating to the Others segment is $1,858 relating to the investments held for sale as described in Note 10.

Financial information by geographic area is summarized in the following tables:

	Country of Origin					
2018	**United States**	**Canada**	**Australia**	**Trinidad**	**Other**	**Consolidated**
Sales to customers outside the Company						
United States	$ 10,488	$ 1,249	$ –	$ 153	$ 1	$ 11,891
Canada	208	2,582	–	–	–	2,790
Australia	2	–	1,679	–	–	1,681
Canpotex [1]	–	1,657	–	–	–	1,657
Mexico	70	–	–	15	–	85
Trinidad	9	–	–	181	–	190
Argentina	9	–	–	–	378	387
Brazil	38	–	–	–	74	112
Colombia	9	–	–	42	–	51
Other Latin America	20	–	–	59	92	171
India	151	–	–	–	–	151
Europe	11	58	67	93	83	312
Other	22	–	100	32	4	158
	$ 11,037	$ 5,546	$ 1,846	$ 575	$ 632	$ 19,636
Non-current assets [2]	$ 14,501	$17,100	$ 607	$ 570	$ 621	$ 33,399

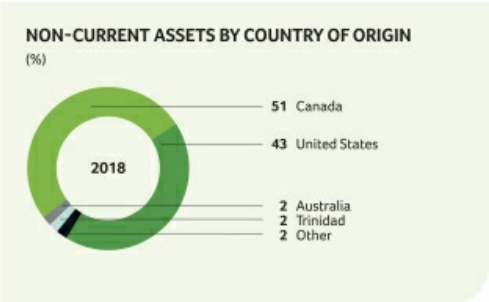
1 As described in Note 1, Canpotex executed offshore marketing, sales and distribution functions for certain of the Company's products. Canpotex's 2018 sales volumes were made to: Latin America 33%, China 18%, India 10%, Other Asian markets 31%, other markets 8% (Note 30).
2 Includes non-current assets other than financial instruments, deferred tax assets and post-employment benefit assets.

NOTE 4 SEGMENT INFORMATION CONTINUED

	Country of Origin				
2017	United States	Canada	Trinidad	Other	Consolidated
Sales to customers outside the Company					
United States	$ 1,657	$ 784	$ 274	$ –	$ 2,715
Canada	194	95	–	–	289
Canpotex [1]	–	988	–	–	988
Mexico	76	–	9	–	85
Trinidad	–	–	132	–	132
Brazil	26	1	–	–	27
Colombia	12	–	36	–	48
Other Latin America	26	–	42	–	68
India	97	–	7	–	104
Other	10	–	81	–	91
	$ 2,098	$ 1,868	$ 581	$ –	$ 4,547
Non-current assets [2]	$ 3,259	$ 9,501	$ 554	$ 6	$ 13,320

1 Canpotex's 2017 sales volumes were made to: Latin America 30%, China 18%, India 12%, Other Asian markets 33%, other markets 7% (Note 30).
2 Includes non-current assets other than financial instruments, deferred tax assets and post-employment benefit assets.





The Company disaggregated revenue from contracts with customers by product line or geographic location for each reportable segment to show how the nature, amount, timing and uncertainty of revenue and cash flows are affected by economic factors.

	Year Ended December 31,	
Retail sales by product line	2018	2017
Crop nutrients	$ 4,577	$ –
Crop protection products	4,862	–
Seed	1,687	–
Merchandise	734	–
Services and other	810	–
	$ 12,670	$ –
Manufactured Potash sales by geography		
North America	$ 1,359	$ 878
Offshore [1]	1,657	990
	$ 3,016	$ 1,868

1 Relates primarily to Canpotex (Note 30).

	Year Ended December 31,	
Nitrogen sales by product line	2018	2017
Manufactured Product		
Ammonia	$ 1,061	$ 628
Urea	979	330
Solutions and nitrates	729	478
Other nitrogen and purchased products	448	33
	$ 3,217	$ 1,469
Phosphate and Sulfate sales by product line		
Manufactured Product		
Fertilizer	$ 1,141	$ 739
Industrial and Feed	469	537
Ammonium sulfate	96	–
Other phosphate and purchased products	191	8
	$ 1,897	$ 1,284

NOTE 5 NATURE OF EXPENSES

Accounting Policies

Cost of goods sold represents the cost of purchasing products for resale and costs primarily incurred at, and charged to, producing facilities.

The primary components of selling and general and administrative expenses are compensation, other employee costs, depreciation and amortization, other operating leases, and fleet fuel, repairs and maintenance.

Supporting Information

Expenses by nature were comprised of:

	Cost of Goods Sold		Other		Total	
	2018	2017 (Note 33)	2018	2017 (Note 33)	2018	2017 (Note 33)
Purchased and produced raw materials and product for resale [1]	$ 11,145	$ 1,724	$ –	$ –	$ 11,145	$ 1,724
Depreciation and amortization	1,038	655	554	37	1,592	692
Employee costs [2]	713	563	1,236	113	1,949	676
Freight (direct and indirect)	303	–	631	372	934	372
Impairment of property, plant and equipment (Note 16)	–	305	–	–	–	305
Offsite warehouse costs [3]	–	–	69	47	69	47
Railcar and vessel costs [3]	–	–	131	102	131	102
Merger and related costs	–	–	170	84	170	84
Other operating leases	38	–	110	–	148	–
Fleet fuel, repairs and maintenance	–	–	183	–	183	–
Other	143	69	699	121	842	190
Total	$ 13,380	$ 3,316	$ 3,783	$ 876	$ 17,163	$ 4,192
Expenses included in:						
Freight, transportation and distribution					$ 864	$ 537
Cost of goods sold					13,380	3,316
Selling expenses					2,337	29
General and administrative expenses					539	185
Other expenses					43	125

1 Significant expenses include: contract services, supplies, energy, fuel, purchases of raw material (natural gas – feedstock, sulfur, ammonia and reagents) and product for resale (crop nutrients and protection products, and seed).
2 Includes employee benefits and share-based compensation. In 2018, employee costs also include a $157 gain on curtailment of defined benefit pension and other post-retirement benefit plans (“Defined Benefit Plans Curtailment Gain”) as described in Note 28.
3 Includes expenses relating to operating leases.

NOTE 6 PROVINCIAL MINING AND OTHER TAXES

Under Saskatchewan provincial legislation, the Company is subject to resource taxes, including the potash production tax and the resource surcharge.

	2018	2017 (Note 33)
Saskatchewan potash production tax	$ 160	$ 95
Saskatchewan resource surcharge and other	90	51
	$ 250	$ 146

NOTE 7 OTHER EXPENSES

	2018	2017 (Note 33)
Merger and related costs	$ (170)	$ (84)
Defined Benefit Plans Curtailment Gain (Note 28)	157	–
Foreign exchange gain (loss)	10	(21)
Other expenses	(40)	(20)
	$ (43)	$ (125)

NOTE 8 FINANCE COSTS

	2018	2017
Interest expense		
Short-term debt	$ 129	$ 9
Long-term debt	372	206
Unwinding of discount on asset retirement obligations (Note 20)	51	17
Interest on net defined benefit pension and other post-retirement plan obligations (Note 28)	15	19
Borrowing costs capitalized to property, plant and equipment	(12)	(11)
Interest income	(17)	(2)
	$ 538	$ 238

Borrowing costs capitalized to property, plant and equipment in 2018 were calculated by applying an average capitalization rate of 4.4 percent (2017 – 4.4 percent) to expenditures on qualifying assets.

See Note 12 for interest paid.

NOTE 9 INCOME TAXES

This note explains the Company's income tax recovery and tax-related balances within the consolidated financial statements. The deferred tax section provides information on expected future tax payments.

Accounting Policies

The Company operates in a specialized industry and in several tax jurisdictions. As a result, its income is subject to various rates of taxation. Taxation on items recognized in the consolidated statements of earnings, other comprehensive income ("OCI") or contributed surplus is recognized in the same location as those items.

Taxation on (loss) earnings is comprised of current and deferred income tax.

Current income tax is:

- the expected tax payable on the taxable earnings for the year;
- calculated using rates enacted or substantively enacted at the dates of the consolidated balance sheets in the countries where the Company's subsidiaries, held for sale investees and equity-accounted investees operate and generate taxable earnings; and
- inclusive of any adjustment to income tax payable or recoverable in respect of previous years.

Deferred income tax is:

- recognized using the liability method;
- based on temporary differences between financial statements' carrying amounts of assets and liabilities and their respective income tax bases; and
- determined using tax rates that have been enacted or substantively enacted by the dates of the consolidated balance sheets and are expected to apply when the related deferred income tax asset is realized or the deferred income tax liability is settled.

Uncertain income tax positions are accounted for using the standards applicable to current income tax liabilities and assets, i.e., both liabilities and assets are recorded when probable and measured at the amount expected to be paid to (recovered from) the taxation authorities using the Company's best estimate of the amount.

Deferred income tax is not accounted for:

- with respect to investments in subsidiaries and equity-accounted investees where the Company is able to control the reversal of the temporary difference and that difference is not expected to reverse in the foreseeable future; and
- if arising from initial recognition of an asset or liability in a transaction, other than a business combination, that at the time of the transaction affects neither accounting nor taxable profit or loss.

The realized and unrealized excess tax benefits from share-based payment arrangements are recognized in contributed surplus as current and deferred tax, respectively.

Deferred income tax assets are reviewed at each balance sheet date and amended to the extent that it is no longer probable that the related tax benefit will be realized.

Income tax assets and liabilities are offset when:

For current income taxes, the Company has:

- a legally enforceable right to offset the recognized amounts [1] ; and
- the intention to settle on a net basis or realize the asset and settle the liability simultaneously.

For deferred income taxes:

- the Company has a legally enforceable right to set off current tax assets against current tax liabilities; and
- they relate to income taxes levied by the same taxation authority on either: 1) the same taxable entity; or 2) different taxable entities intending to settle current tax liabilities and assets on a net basis, or realize assets and settle liabilities simultaneously in each future period. [2]

1 For income taxes levied by the same taxation authority and the authority permits the Company to make or receive a single net payment or receipt.
2 In which significant amounts of deferred tax liabilities or assets expected are to be settled or recovered.

Accounting Estimates and Judgments

Estimates and judgments to determine the Company's taxes are impacted by:

- the breadth of the Company's operations; and
- global complexity of tax regulations.

The final taxes paid, and potential adjustments to tax assets and liabilities, are dependent upon many factors including:

- negotiations with taxation authorities in various jurisdictions;
- outcomes of tax litigation; and
- resolution of disputes arising from federal, provincial, state and local tax audits.

Estimates and judgments are used to recognize the amount of deferred tax assets, which:

- includes the probability that future taxable profit will be available to use deductible temporary differences, and could be reduced if projected earnings are not achieved or increased if earnings previously not projected become probable.

NOTE 9 INCOME TAXES CONTINUED

Supporting Information

Income Taxes included in Net (Loss) Earnings from Continuing Operations

The provision for income taxes differs from the amount that would have resulted from applying the Canadian statutory income tax rates to (loss) earnings before income taxes as follows:

	2018	2017
(Loss) earnings before income taxes		
Canada	$ (1,195)	$ 123
United States	619	(271)
Trinidad	98	95
Australia	96	–
Other	258	24
	$ (124)	$ (29)
Canadian federal and provincial statutory income tax rate	27%	27%
Income tax at statutory rates	$ 33	$ 8
Adjusted for the effect of:		
Impact of foreign tax rates (US, Trinidad, Australia and other)	58	(25)
Production-related deductions	15	14
Non-taxable income	10	–
Foreign accrual property income	(15)	(3)
Impact of tax rate changes	–	187
Other	(8)	2
Income tax recovery included in net (loss) earnings from continuing operations	$ 93	$ 183

Total income tax recovery, included in net (loss) earnings from continuing operations, was comprised of the following:

	2018	2017
Current income tax		
Tax expense for current year	$ (195)	$ (70)
Adjustments in respect of prior years	15	(20)
Total current income tax expense	(180)	(90)
Deferred income tax		
Origination and reversal of temporary differences	283	69
Adjustments in respect of prior years	(12)	20
Impact of tax rate changes	–	187
Other	2	(3)
Total deferred income tax recovery	273	273
Income tax recovery included in net (loss) earnings from continuing operations	$ 93	$ 183

Income Tax Balances

Income tax balances within the consolidated balance sheets as at December 31 were comprised of the following:

Income Tax Assets (Liabilities)	Balance Sheet Location	2018	2017
Current income tax assets			
Current	Receivables (Note 14)	$ 248	$ 24
Long-term	Other assets (Note 18)	36	64
Deferred income tax assets	Other assets (Note 18)	216	18
Total income tax assets		$ 500	$ 106
Current income tax liabilities			
Current	Payables and accrued charges (Note 19)	$ (47)	$ (16)
Non-current	Other non-current liabilities	(64)	(43)
Deferred income tax liabilities	Deferred income tax liabilities	(2,907)	(2,205)
Total income tax liabilities		$ (3,018)	$ (2,264)

NOTE 9 INCOME TAXES CONTINUED

Deferred Income Taxes

In respect of each type of temporary difference, unused tax loss and unused tax credit, the amounts of deferred tax assets and liabilities recognized in the consolidated balance sheets as at December 31 and the amount of the deferred tax recovery (expense) recognized in net (loss) earnings from continuing operations were:

	Deferred Income Tax Assets (Liabilities)		Deferred Income Tax Recovery (Expense) Recognized in Net Earnings	
	2018	2017	**2018**	2017
Deferred income tax assets				
Asset retirement obligations and accrued environmental costs	$ 412	$ 120	$ (11)	$ (56)
Tax loss and other carryforwards	261	13	198	(105)
Pension and other post-retirement benefit liabilities	130	124	(44)	(22)
Long-term debt	110	–	(10)	–
Receivables	58	–	3	–
Inventories	54	4	13	(2)
Derivatives	17	13	(15)	–
Other assets	57	11	(18)	(11)
Deferred income tax liabilities				
Property, plant and equipment	(3,218)	(2,441)	132	472
Goodwill and other intangible assets	(546)	(17)	31	–
Other liabilities	(26)	(14)	(6)	(3)
	$ (2,691)	$ (2,187)	$ 273	$ 273

Reconciliation of net deferred income tax liabilities:

	2018	2017
Balance, beginning of year	$ (2,187)	$ (2,453)
Merger impact (Note 3)	(776)	–
Income tax recovery recognized in net (loss) earnings from continuing operations	273	273
Income tax recovery recognized in net earnings from discontinued operations	17	–
Income tax charge recognized in OCI	(22)	(43)
Reclassified as held for sale	–	36
Other	4	–
Balance, end of year	$ (2,691)	$ (2,187)

Amounts and expiry dates of unused tax losses and unused tax credits as at December 31, 2018 were:

	Amount	**Expiry Date**
Unused operating losses	$ 1,083	2020 – Indefinite
Unused capital losses	$ 795	Indefinite
Unused investment tax credits	$ 46	2019 – 2037

The unused tax losses and credits with no expiry dates can be carried forward indefinitely.

As at December 31, 2018, the Company had $932 of tax losses for which it did not recognize deferred tax assets.

The Company has determined that it is probable that all recognized deferred tax assets will be realized through a combination of future reversals of temporary differences and taxable income.

The aggregate amount of temporary differences associated with investments in subsidiaries and equity-accounted investees, for which deferred tax liabilities have not been recognized, as at December 31, 2018 was $8,710 (2017 – $5,252).

NOTE 10 DISCONTINUED OPERATIONS

Held for Sale and Discontinued Operations

Accounting Policies

The Company classifies assets and liabilities as held for sale if it is highly probable that the carrying value will be recovered through a sale transaction within one year rather than through continuing use.

Discontinued operations represent a component of the Company's business that either has been disposed of, or is classified as held for sale, and represents a separate major line of business or geographic area of operations or is a part of a single coordinated plan to dispose of a separate major line of business or geographical area of operations.

The Company's significant policies include:

- cessation of equity accounting for associates and joint ventures at the date the investments were classified as held for sale;
- measurement of assets at the lower of carrying amount and fair value less costs to sell, with the exception of financial assets measured at FVTOCI;
- unrealized gains and losses on remeasurement of investments measured at FVTOCI are recorded, net of related income taxes, to OCI;
- dividends received are recorded on the consolidated statements of earnings; and
- the comparative statements of earnings and OCI are restated as if the operation had been discontinued from the start of the comparative year.

Accounting Estimates and Judgments

Expected cost to sell the investments requires estimation, which is based on several factors such as historical trends of similar types of investments sold, the percentage of investments held relative to the total shares in circulation and the type of the investment.

Judgment involves determining:

- whether the highly probable standard is met and the date when equity accounting ceases; and
- if the business component for sale or disposal meets the criteria of a discontinued operation.

The Company's investments in SQM, ICL and APC were classified as held for sale and as discontinued operations in December 2017, due to regulatory requirements to dispose of these investments in connection with the Merger.

As of December 31, 2018, the Company completed all required divestitures and retained no residual interests as outlined below:

For the year ended December 31, 2018	Proceeds [1]	Gain (Loss) on Sale	Gain (Loss) on Sale Net of Income Taxes	AOCI	Net Earnings and Retained Earnings
Shares in SQM	$ 5,126	$ 4,278	$ 3,366	$ –	$ 3,366
Shares in ICL	685	(19)	(19)	(19)	–
Shares in APC	501	121	126	–	126
Conda Phosphate operations	98	–	–	–	–
Total Sale	$ 6,410	$ 4,380	$ 3,473	$ (19)	$ 3,492

1 Proceeds are net of commissions.

NOTE 10 DISCONTINUED OPERATIONS CONTINUED

Supporting Information

Assets and liabilities held for sale as at December 31, 2017 were comprised of:

	2017
ASSETS	
Investments in SQM and APC	$ 1,146
Investment in ICL	708
Current tax asset	4
Assets held for sale	$ 1,858
LIABILITIES	
Payables and accrued charges	$ –
Deferred income tax liabilities	36
Liabilities on assets held for sale	$ 36

Net earnings from discontinued operations for the years ended December 31 were as follows:

	2018	2017 [1]
Gain on disposal of investments in SQM and APC	$ 4,399	$ –
Dividend income of SQM, APC and ICL [2]	156	24
Share in earnings of SQM and APC [2]	–	151
Income tax expense [3]	(951)	(2)
Net earnings from discontinued operations	$ 3,604	$ 173

1 Share of earnings, dividend income and income tax recovery pertaining to these investments were reclassified from loss before income taxes and income tax recovery to net earnings from discontinued operations on the consolidated statements of earnings.

2 The Company's investments in SQM and APC were classified as discontinued operations in the later part of 2017 and, as a result, equity accounting in respect of these investments ceased.

3 For 2018, income tax (expense) recovery is comprised of $(912) relating to the disposals of SQM shares, including the repatriation of the net proceeds, and $(39) relating to earnings from discontinued operations ($(18) for the planned repatriation of the remaining excess cash available in Chile, $(26) for the repatriation of dividend income received from SQM and $5 relating to APC).

Cash flows from discontinued operations for the year ended December 31 were as follows:

	2018	2017
Cash provided by operating activities		
Dividends from discontinued operations	$ 156	$ 176
Income tax related to the disposal of discontinued operations	(26)	–
Dividends from discontinued operations, net of tax	$ 130	$ 176
Cash provided by investing activities		
Proceeds from disposal of discontinued operations [1]	$ 6,371	$ –
Income tax related to the disposal of discontinued operations	(977)	–
Proceeds from disposal of discontinued operations, net of tax	$ 5,394	$ –

1 Excludes a receivable of $39 to be collected in 2019.

NOTE 11 NET EARNINGS PER SHARE

Basic net earnings per share provides a measure of the interests of each ordinary common share in the Company's performance over the year. Diluted net earnings per share adjusts basic net earnings per share for the effects of all dilutive potential common shares.

	2018 [1]	2017
WEIGHTED AVERAGE NUMBER OF COMMON SHARES	624,900,000	840,079,000
Dilutive effect of stock options [2]	–[3]	199,000
Dilutive effect of share-settled performance share units ("PSUs") [4]	–[3]	38,000
Weighted average number of diluted common shares	624,900,000	840,316,000

1 The number of shares, stock options and share-settled PSUs reflect the Merger. Refer to Note 3 for details.
2 Diluted effect of stock options assumes exercise of all stock options with exercise prices at or below the average market price for the year would increase the denominator, and the denominator would be decreased by the number of shares that the Company could have repurchased if it had assumed proceeds from the exercise of stock options to repurchase them on the open market at the average share price for the year.
3 The diluted weighted average share calculations excluded an additional 658,000 stock options and 137,000 equity-settled PSUs due to their anti-dilutive effect.
4 Diluted effect of PSUs assumes the denominator would be increased by the total of the additional share-settled PSUs that could be issued if vesting criteria are achieved.

NOTE 11 NET EARNINGS PER SHARE CONTINUED

Options excluded from the calculation of diluted net earnings per share due to the option exercise prices being greater than the average market price of common shares were as follows:

	2018	2017
Number of options excluded	5,721,656	12,304,351
Performance option plan years fully excluded	2009-2015	2008-2015, 2017
Stock option plan years fully excluded	2015, 2018	–

NOTE 12 CONSOLIDATED STATEMENTS OF CASH FLOWS

Accounting Policy

Highly liquid investments with a maturity of three months or less from the date of purchase are considered to be cash equivalents.

Supporting Information

For the years ended December 31	2018	2017
		(Note 33)
RECONCILIATION OF CASH PROVIDED BY OPERATING ACTIVITIES		
Net earnings	$ 3,573	$ 327
Adjustments to reconcile net earnings to cash provided by operating activities		
Gain on sale of investments in SQM and APC	(4,399)	–
Income tax related to the sale of the investment in SQM	977	–
Depreciation and amortization	1,592	692
Impairment of property, plant and equipment (Note 16)	1,809	305
Share-based compensation (Note 29)	116	11
Recovery of deferred income tax	(290)	(273)
Other long-term liabilities and miscellaneous	(188)	91
Subtotal of adjustments	(383)	826
CHANGES IN NON-CASH OPERATING WORKING CAPITAL		
Receivables	(153)	47
Inventories	(887)	(10)
Prepaid expenses and other current assets	561	(13)
Payables and accrued charges	(659)	48
Subtotal of changes in non-cash operating working capital	(1,138)	72
CASH PROVIDED BY OPERATING ACTIVITIES	$ 2,052	$ 1,225
SUPPLEMENTAL CASH FLOWS DISCLOSURES		
Interest paid	$ 507	$ 198
Income taxes paid	$ 1,155	$ 83

The following is a summary of changes in liabilities arising from financing activities:

	Short-Term Debt and Current Portion of Long-Term Debt [1]	Long-Term Debt	Total
Balance – December 31, 2017	$ 730	$ 3,711	$ 4,441
Debt acquired in Merger (Note 3)	878	4,930	5,808
Cash flows [1]	(927)	(12)	(939)
Reclassifications	1,023	(1,023)	–
Foreign currency translation and other non-cash changes	(72)	(15)	(87)
Balance – December 31, 2018	$ 1,632	$ 7,591	$ 9,223
Balance – December 31, 2016	$ 884	$ 3,707	$ 4,591
Cash flows [1]	(159)	(1)	(160)
Non-cash changes	5	5	10
Balance – December 31, 2017	$ 730	$ 3,711	$ 4,441

1 Cash inflows and cash outflows arising from short-term debt transactions are presented on a net basis.

NOTE 13 FINANCIAL INSTRUMENTS AND RELATED RISK MANAGEMENT

Outlined below are the Company's financial instruments, related risk management objectives, policies and exposure, sensitivity and monitoring strategies to financial risks.

Accounting Policies

Financial instruments are classified and measured as follows:

	Fair Value Through Profit or Loss ("FVTPL")	FVTOCI	Financial Assets and Liabilities at Amortized Cost [1]
Instrument type	Cash and cash equivalents and derivatives	Equity investments not held for trading	Receivables, short-term debt, payables and accrued charges, long-term debt, other long-term debt instruments
Measurement	Fair value	Fair value	Amortized cost
Fair value gains and losses	Profit or loss	OCI [2]	–
Interest and dividends	Profit or loss	Profit or loss	Profit or loss: effective interest rate
Impairment of assets	–	–	Profit or loss
Foreign exchange	Profit or loss	OCI	Profit or loss
Transaction costs	Profit or loss	OCI	Included in cost of instrument

1 Amortized cost is applied if the objective of the business model for the instrument or group of instruments is to hold the asset to collect the contractual cash flows and the contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest.

2 For equity investments not held for trading, the Company may make an irrevocable election at initial recognition to recognize changes in fair value through OCI rather than profit or loss. The Company made this election for its investments in ICL, Sinofert and certain equity investments as the investments are held for strategic purposes.

Accounting Estimates and Judgments

Judgment is required to determine whether the right to offset is legally enforceable.

For derivatives or embedded derivatives, the most significant area of judgment is whether the contract can be settled net. This is one of the criteria used to determine whether a contract for a nonfinancial asset is considered a derivative and accounted for as such. Judgment is also applied in determining whether an embedded derivative is closely related to the host contract, in which case bifurcation and separate accounting are not necessary.

Accounting Policies

Financial instruments are recognized at trade date when the Company commits to purchase or sell the asset. Financial assets are derecognized when the rights to receive cash flows from the investments have expired or the Company has transferred them, and all the risks and rewards of ownership have been substantially transferred.

Derivatives are used to lock in commodity prices and exchange rates. For designated and qualified cash flow hedges:

- the effective portion of the change in the fair value of the derivative is accumulated in OCI;
- when the hedged forecast transaction occurs, the related gain or loss is removed from AOCI and included in the cost of inventory;
- the hedging gain or loss included in the cost of inventory is recognized in earnings when the product containing the hedged item is sold or becomes impaired; and
- the ineffective portions of hedges are recorded in net earnings in the current period.

The Company also assesses whether the natural gas derivatives used in hedging transactions are expected to be or were highly effective, both at the hedge's inception and on an ongoing basis, in offsetting changes in fair values of hedged items. Hedge effectiveness related to the Company's New York Mercantile Exchange ("NYMEX") natural gas hedges is assessed on a prospective and retrospective basis using regression analyses. The Company's Alberta Energy Company ("AECO") natural gas hedges are assessed using a qualitative assessment. Potential sources of ineffectiveness are changes in timing of forecast transactions, changes in volume delivered or changes in credit risk of the Company or the counterparty.

Financial assets and financial liabilities are offset and the net amount is presented in the consolidated balance sheets when the Company:

- currently has a legally enforceable right to offset the recognized amounts; and
- intends either to settle on a net basis, or to realize the assets and settle the liabilities simultaneously.

See Note 32 for discussion related to the policies, estimates and judgments for fair value measurements.

Accounting Estimates and Judgments

Supporting Information

Financial Risks

The Company is exposed in varying degrees to a variety of financial risks from its use of financial instruments: credit risk, liquidity risk and market risk. The source of risk exposure and how each is managed are outlined below.

Credit Risk

The Company's exposure to credit risk on its cash and cash equivalents, receivables (excluding taxes) and derivative instrument assets is the carrying amount of each instrument on the consolidated balance sheets.

Maximum exposure to credit risk as at December 31:

	2018	2017
Cash and cash equivalents	$ 2,314	$ 116
Receivables [1]	3,094	465
Other current assets – derivatives	5	7
Other non-current assets – derivatives	–	3
	$ 5,413	$ 591

1 Excluding income tax receivable.

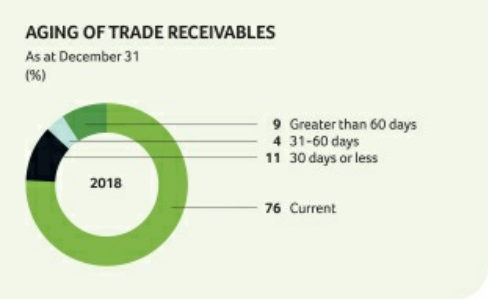
Credit risk is managed through policies applicable to the following assets:

	Acceptable Minimum Counterparty Credit Ratings	Exposure Thresholds by Counterparty	Daily Counterparty Settlement Based on Prescribed Credit Thresholds	Counterparties to Contracts are Investment-Grade Quality
Cash and Cash Equivalents	X	X		
Natural Gas Derivatives	X		X	X
Foreign Currency Derivatives	X			

Credit risk on trade receivables for the Company's Retail, Potash, Nitrogen, and Phosphate and Sulfate segments is managed through a credit management program whereby:

- credit approval policies and procedures are in place to guide the granting of credit to new customers as well as its continued extension to existing customers;
- existing customer accounts are reviewed every 12-24 months, depending on the credit limit amounts;
- credit is extended to international customers based upon an evaluation of both customer and country risk;
- the credit period on sales is generally 15 and 30 days for wholesale fertilizer customers, 30 days for industrial and feed customers, 30-90 days for Retail customers and up to 180 days for select export sales customers; and
- credit agency reports, where available, and an assessment of other relevant information such as current financial statements and/or credit references are used before assigning credit limits to customers. Those that fail to meet specified benchmark creditworthiness may transact with the Company on a prepayment basis or provide another form of credit support that the Company approves.

The Company's trade receivables include a concentration in Retail operations in Australia for advances to the customers to purchase crop inputs and livestock. The Company mitigates risk in these receivables by obtaining security over livestock. In the Company's Retail operations in Western Canada, credit risk in accounts receivable is mitigated through an agency agreement with a Canadian financial institution wherein the financial institution provides credit to qualifying customers to assist in financing their crop input purchases. Through the agency agreement, which expires in 2021, customers have loans directly with the financial institution while the Company has only a limited recourse involvement to the extent of an indemnification of the financial institution for 52 percent of its future bad debts to a maximum of 5 percent of the qualified customer loans. Outstanding customer credit with the financial institution was $571 at December 31, 2018, which is not recognized in the Company's consolidated balance sheets. Historical indemnification losses on this arrangement have been negligible, and the average aging of the customer loans with the financial institution is current.



Liquidity Risk

Liquidity risk arises from the Company's general funding needs and the management of its assets, liabilities and optimal capital structure. The Company manages its liquidity risk to maintain sufficient liquid financial resources to fund its operations and meet its commitments and obligations in a cost-effective manner. In managing its liquidity risk, the Company has access to a range of funding options. It has established an external borrowing policy with the following objectives:

- maintain an optimal capital structure;
- maintain investment-grade credit ratings that provide ease of access to the debt capital and commercial paper markets;
- maintain sufficient short-term credit availability; and
- maintain long-term relationships with a sufficient number of high-quality and diverse lenders.

The table below outlines the Company's available credit facilities as at December 31, 2018.

	Total Amount	Amount Outstanding and Committed	Amount Available
Unsecured revolving term credit facility	$ 4,500	$ 391	$ 4,109
Uncommitted revolving demand facility	500	–	500
Accounts receivable securitization program	500	–	500
Other credit facilities	520	238	282

The following maturity analysis of the Company's financial liabilities and gross settled derivative contracts (for which the cash flows are settled simultaneously) is based on the expected undiscounted contractual cash flows from the date of the consolidated balance sheets to the contractual maturity date.

2018	Carrying Amount of Liability as at December 31	Contractual Cash Flows	Within 1 Year	1 to 3 Years	3 to 5 Years	Over 5 Years
Short-term debt [1]	$ 629	$ 629	$ 629	$ –	$ –	$ –
Payables and accrued charges [2]	4,695	4,695	4,695	–	–	–
Current portion of long-term debt and Long-term debt[1]	8,594	12,818	1,362	1,121	1,583	8,752
Derivatives	71	72	44	19	9	–
	$ 13,989	$ 18,214	$ 6,730	$ 1,140	$ 1,592	$ 8,752

1 Contractual cash flows include contractual interest payments related to debt obligations. Interest rates on variable rate debt are based on prevailing rates as at December 31, 2018. Disclosures regarding offsetting of certain debt obligations are provided below.

2 Excludes non-financial liabilities and includes trade payables of approximately $500 paid in January 2019 through an arrangement whereby a supplier sold the right to receive payment to a financial institution.

Market Risk

Market risks, where financial instrument fair values can fluctuate due to changes in market prices, include foreign exchange risk, interest rate risk and price risk (related to commodity and equity securities).

Foreign Exchange Risk

To manage foreign exchange risk (primarily related to Canadian operating and capital expenditures, certain subsidiaries denominated in currencies other than the functional currency of an operation, taxes and dividends), the Company may enter into foreign currency derivatives. Treasury risk management policies allow such exposures to be hedged within certain prescribed limits for both forecast operating and capital expenditures. The risk management policy is to manage the earnings impact that could occur from a reasonably possible strengthening or weakening of the US dollar. The foreign currency derivatives are not currently designated as hedging instruments for accounting purposes. The Company had no material exposure to foreign exchange risk that could affect the Company's net earnings as at December 31, 2018 and 2017.

Interest Rate Risk

Fluctuations in interest rates impact the future cash flows and fair values of various financial instruments.

Interest rate risk on debt is addressed by:

- using a portfolio of fixed and floating rate instruments;
- aligning current and long-term assets with demand and fixed-term debt;
- monitoring the effects of market changes in interest rates; and
- using interest rate swaps, if desired.

Related to interest rate risk on investments in marketable securities, the Company's primary objectives are to:

- ensure the security of principal amounts invested;
- provide for an adequate degree of liquidity; and
- achieve a satisfactory return.

Treasury risk management policies specify investment parameters including eligible types of investment, maximum maturity dates, maximum exposure by counterparty and minimum credit ratings.

The Company had no material exposure to interest rate risk on its financial instruments and earnings as at December 31, 2018 and 2017.

Price Risk

Commodity price risk exists on the Company's natural gas derivative instruments. Its natural gas strategy is to diversify its forecast gas volume requirements, including a portion of annual requirements purchased at spot market prices, a portion at fixed prices (up to 10 years) and a portion indexed to the market price of ammonia. Its objective is to acquire a reliable supply of natural gas feedstock and fuel on a location-adjusted, cost-competitive basis.

Price risk also exists for exchange-traded equity securities measured at FVTPL or FVTOCI. The Company had no material exposure to price risk on its financial instruments as at December 31, 2018 and 2017.

Fair Value

Estimated fair values for financial instruments are designed to approximate amounts for which the instruments could be exchanged in a current arm's-length transaction between knowledgeable, willing parties. The valuation policies and procedures for financial reporting purposes are determined by the Company's finance department.

Financial instruments included in the consolidated balance sheets are measured either at fair value or amortized cost. The tables below explain the valuation methods used to determine the fair value of each financial instrument and its associated level in the fair value hierarchy.

Financial Instruments Measured at Fair Value	Fair Value Method
Cash and cash equivalents	Carrying amount (approximation to fair value assumed due to short-term nature)
Equity securities	Closing bid price of the common shares as at the balance sheet date
Debt securities	Closing bid price of the debt (Level 2) as at the balance sheet date
Foreign currency derivatives not traded in an active market	Quoted forward exchange rates (Level 2) as at the balance sheet date

NOTE 13 FINANCIAL INSTRUMENTS AND RELATED RISK MANAGEMENT CONTINUED

Financial Instruments Measured at Fair Value	Fair Value Method
Foreign exchange forward contracts, swaps and options and natural gas swaps not traded in an active market	A discounted cash flow model [1] Market comparison [2]

1 Inputs included contractual cash flows based on prices for natural gas futures contracts, fixed prices and notional volumes specified by the swap contracts, the time value of money, liquidity risk, the Company's own credit risk (related to instruments in a liability position) and counterparty credit risk (related to instruments in an asset position). Futures contract prices used as inputs in the model were supported by prices quoted in an active market and therefore categorized in Level 2.
2 Inputs include current market and contractual prices, forward pricing curves, quoted forward prices, basis differentials, volatility factors and interest rates and therefore categorized in Level 2.

Financial Instruments Measured at Amortized Cost	Fair Value Method
Receivables, short-term debt and payables and accrued charges	Carrying amount (approximation to fair value assumed due to short-term nature)
Long-term debt	Quoted market prices (Level 1 or 2 depending on the market liquidity of the debt)
Other long-term debt instruments	Carrying amount

The following table presents the Company's fair value hierarchy for financial assets and financial liabilities carried at fair value on a recurring basis or measured at amortized costs:

		Fair Value Measurements at Reporting Dates Using:	
2018	Carrying Amount of Asset (Liability) as at December 31	Quoted Prices in Active Markets for Identical Assets (Level 1) [1]	Significant Other Observable Inputs (Level 2) [1]
Financial instruments measured at fair value on a recurring basis			
Derivative instrument assets	$ 5	$ –	$ 5
Other current financial assets – marketable securities [2]	97	12	85
Investments at FVTOCI [3]	186	186	–
Derivative instrument liabilities	(71)	–	(71)
Financial instruments measured at amortized cost			
Cash and cash equivalents	$ 2,314	$ –	$ 2,314
Current portion of long-term debt			
Senior notes and debentures [4]	(995)	–	(1,009)
Fixed and floating rate debt	(8)	–	(8)
Long-term debt			
Senior notes and debentures [4]	(7,569)	(1,004)	(6,177)
Fixed and floating rate debt	(22)	–	(22)
2017			
Derivative instrument assets			
Natural gas derivatives	$ 9	$ –	$ 9
Investments at FVTOCI [3]	970	970	–
Derivative instrument liabilities			
Natural gas derivatives	(64)	–	(64)
Long-term debt			
Senior notes [4]	(3,707)	(490)	(3,555)

1 During the period ended December 31, 2018, there were no transfers between Level 1 and Level 2 for financial instruments measured at fair value. The Company's policy is to recognize transfers at the end of the reporting period.
2 Marketable securities consist of equity and fixed income securities. The Company determines the fair value of equity securities based on the bid price of identical instruments in active markets. The Company values fixed income securities using quoted prices of instruments with similar terms and credit risk.
3 Investments at FVTOCI are comprised of shares in Sinofert and other (Note 21) (2017 – ICL, Sinofert and other). The Company's investment in ICL was sold during 2018 (Note 10).
4 Carrying amount of liability includes net unamortized debt issue costs.

	2018			2017		
Financial assets (liabilities)	Gross	Offset	Net Amounts Presented	Gross	Offset	Net Amounts Presented
Derivative instrument assets						
Natural gas derivatives [1]	$ 31	$ (27)	$ 4	$ 11	$ (2)	$ 9
Derivative instrument liabilities						
Natural gas derivatives [2]	(92)	26	(66)	(74)	10	(64)
Other long-term debt instruments [3]	(150)	150	–	(150)	150	–
	$ (211)	$ 149	$ (62)	$ (213)	$ 158	$ (55)

1 Cash margin deposits of $NIL (2017 – $(1)) were held related to legally enforceable master netting arrangements.
2 Cash margin deposits of $18 (2017 – $38) were placed with counterparties related to legally enforceable master netting arrangements.
3 Back-to-back loan arrangements that are not subject to any financial test covenants but are subject to certain customary covenants and events of default, including, for other long-term debt, an event of default for non-payment or other debt in excess of $25. Non-compliance with such covenants could result in accelerated payment of the related debt. The Company was in compliance with these covenants as at December 31, 2018.

Natural gas derivatives outstanding:

	2018				2017			
	Notional [1]	Maturities	Average Contract Price [2]	Fair Value of Assets (Liabilities)	Notional [1]	Maturities	Average Contract Price [2]	Fair Value of Assets (Liabilities)
Natural gas								
NYMEX swaps	22	2019 – 2022	$ 4.26	$ (35)	27	2018 – 2022	$ 4.89	$ (54)
AECO swaps [3]	26	2019	$ 1.92	$ (25)	–	–	–	$ –

1 In millions of British thermal units (“MMBtu”).
2 US dollars per MMBtu.
3 AECO swaps are only included in 2018 as a result of the Merger as described in Note 3.

NOTE 14 RECEIVABLES

Trade accounts receivable mainly consist of amounts owed to Nutrien by its customers, the largest individual customer being the related party, Canpotex.

Accounting Policies

Trade accounts receivable are recognized initially at fair value and subsequently measured at amortized cost less provision for impairment of trade accounts receivable. When a trade account receivable is uncollectible, it is written off against the provision. Subsequent recoveries of amounts previously written off are credited to the consolidated statements of earnings.

Vendors may offer various incentives to purchase products for resale. Vendor rebates and prepay discounts are accounted for as a reduction of the prices of the suppliers’ products. Rebates based on the amount of materials purchased reduce cost of goods sold as inventory is sold. Rebates are offset based on sales volumes to cost of goods sold if the rebate has been earned based on sales volumes of products.

Rebates that are probable and can be reasonably estimated are accrued. Rebates that are not probable or estimable are accrued when certain milestones are achieved. Rebates not covered by binding agreements or published vendor programs are accrued when conclusive documentation of right of receipt is obtained.

Accounting Estimates and Judgments

Determining when amounts are deemed uncollectible requires judgment.

Estimation of rebates can be complex in nature as vendor arrangements are diverse. The amount of the accrual is determined by analyzing and reviewing historical trends to apply negotiated rates to estimated and actual purchase volumes. Estimated amounts accrued throughout the year could also be impacted if actual purchase volumes differ from projected volumes.

NOTE 14 RECEIVABLES CONTINUED

Supporting Information

	December 31, 2018	December 31, 2017
Trade accounts – third parties	$ 2,628	$ 314
– Canpotex (Note 30)	208	82
Less provisions for impairment of trade accounts receivable	(90)	(6)
	2,746	390
Rebates	169	–
Income taxes (Note 9)	248	24
Other non-trade accounts	179	75
	$ 3,342	$ 489

NOTE 15 INVENTORIES

Inventories consist of Retail inventory (crop nutrients, crop protection products, seed and merchandise products) and products from the Potash, Nitrogen, and Phosphate and Sulfate segments in varying stages of the production process.

Accounting Policies

Inventories are valued monthly at the lower of cost and net realizable value. Costs are allocated to inventory using the weighted average cost method and include: direct acquisition costs, direct costs related to units of production and a systematic allocation of fixed and variable production overhead, as applicable.

Net realizable value is based on:

For products purchased for resale, finished products, intermediate products and raw materials

- selling price of the finished product (in ordinary course of business);
- less the estimated costs of completion; and
- less the estimated costs to make the sale.

For materials and supplies

- replacement cost.

A writedown is recognized if carrying amount exceeds net realizable value and may be reversed if the circumstances which caused it no longer exist.

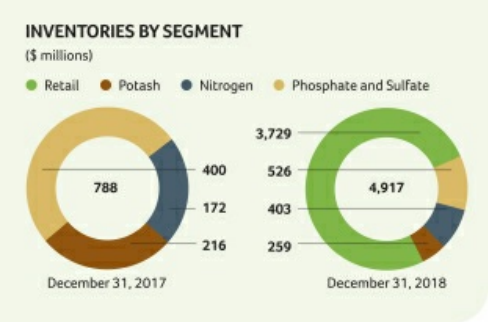
Accounting Estimates and Judgments

Judgment is used to allocate production overhead to inventories and to determine net realizable value, including the appropriate measure and inputs of a combination of interrelated demand and supply variables.

Supporting Information

	December 31, 2018	December 31, 2017
Purchased for resale	$ 3,545	$ –
Finished products	501	260
Intermediate products	218	202
Raw materials	275	62
Materials and supplies	378	264
	$ 4,917	$ 788

Inventories expensed to cost of goods sold during the year was $13,083 (2017 – $2,791).



NOTE 16 PROPERTY, PLANT AND EQUIPMENT

The majority of the Company's tangible assets are the buildings, machinery and equipment used to produce or distribute its products and render its services. These assets are depreciated over their estimated useful lives.

Accounting Policies

Property, plant and equipment (which include certain mine development costs, pre-stripping costs and assets under construction) are carried at cost less accumulated depreciation and any recognized impairment loss.

Cost includes all expenditures directly attributable to bringing the asset to the location and installing it in working condition for its intended use, including:

- additions to, and betterments and renewals of, existing assets;
- borrowing costs incurred during construction using a capitalization rate based on the weighted average interest rate of the Company's outstanding debt; and
- a reduction for income derived from the asset during construction.

Each component of an item of property, plant and equipment with a cost that is significant in relation to the item's total cost is depreciated separately. When the cost of replacing part of an item of property, plant and equipment is capitalized, the carrying amount of the replaced part is derecognized. The cost of major inspections and overhauls is capitalized and depreciated over the period until the next major inspection or overhaul. Maintenance and repair expenditures that do not improve or extend productive life are expensed in the period incurred.

Environmental costs related to current operations are also capitalized if:

- property life is extended;
- capacity is increased;
- contamination from future operations is mitigated or prevented; or
- related to legal or constructive asset retirement obligations.

Accounting Estimates and Judgments

Judgment involves determining:

- costs, including income or expenses derived from an asset under construction, that are eligible for capitalization;
- timing to cease cost capitalization, generally when the asset is capable of operating in the manner intended by management, but also considering the circumstances and the industry in which the asset is to be operated, normally predetermined by management with reference to such factors as productive capacity;
- the appropriate level of componentization (for individual components for which different depreciation methods or rates are appropriate);
- repairs and maintenance that qualify as major inspections and overhauls; and
- useful life over which such costs should be depreciated.

Certain property, plant and equipment directly related to the Potash, Nitrogen, and Phosphate and Sulfate segments are depreciated using the units-of-production method based on the shorter of estimates of reserves or service lives. Pre-stripping costs are depreciated on a units-of-production basis over the ore mined from the mineable acreage stripped. Land is not depreciated. The remaining assets are depreciated on a straight-line basis.

The following estimated useful lives have been applied to the majority of property, plant and equipment assets as at December 31, 2018:

	Useful Life Range (years)	Weighted Average Useful Life (years) [1]
Land improvements	5 to 80	35
Buildings and improvements	2 to 60	38
Machinery and equipment	1 to 80	25

1 Weighted by carrying amount as at December 31, 2018.

Estimated useful lives, expected patterns of consumption, depreciation method and residual values are reviewed at least annually with the effect of any changes in estimate being accounted for on a prospective basis.

Uncertainties are inherent in estimating reserve quantities, particularly as they relate to assumptions regarding future prices, the geology of the Company's mines, the mining methods used, and the related costs incurred to develop and mine its reserves. Changes in these assumptions could result in material adjustments to reserve estimates, which could result in impairments or changes to depreciation expense in future periods.

Accounting policies, estimates and judgments related to impairment of long-lived assets are described in Note 32.

Supporting Information

	Land and Improvements	Buildings and Improvements	Machinery and Equipment	Mine Development Costs	Assets Under Construction	Total
Carrying amount – December 31, 2017	$ 612	$ 4,184	$ 6,744	$ 979	$ 452	$ 12,971
Merger impact (Note 3)	396	2,695	4,042	–	326	7,459
Other acquisitions	10	31	66	–	–	107
Additions	41	61	327	42	975	1,446
Disposals	(3)	(14)	(30)	–	–	(47)
Transfers	10	30	538	18	(596)	–
Foreign currency translation	(9)	(16)	(15)	–	(7)	(47)
Other adjustments	–	44	(6)	10	(7)	41
Depreciation	(33)	(195)	(1,032)	(65)	–	(1,325)
Impairment	(6)	(776)	(752)	(275)	–	(1,809)
Carrying amount – December 31, 2018	$ 1,018	$ 6,044	$ 9,882	$ 709	$ 1,143	$ 18,796
Balance as at December 31, 2018 comprised of:						
Cost	$ 1,294	$ 7,617	$ 16,806	$ 1,954	$ 1,143	$ 28,814
Accumulated depreciation	(276)	(1,573)	(6,924)	(1,245)	–	(10,018)
Carrying amount	$ 1,018	$ 6,044	$ 9,882	$ 709	$ 1,143	$ 18,796
Carrying amount – December 31, 2016	$ 618	$ 4,212	$ 6,859	$ 1,027	$ 602	$ 13,318
Additions	–	–	9	88	528	625
Transfers	63	71	521	(21)	(634)	–
Other adjustments	–	–	5	15	–	20
Depreciation	(19)	(83)	(487)	(98)	–	(687)
Impairment	(50)	(16)	(163)	(32)	(44)	(305)
Carrying amount – December 31, 2017	$ 612	$ 4,184	$ 6,744	$ 979	$ 452	$ 12,971
Balance as at December 31, 2017 comprised of:						
Cost	$ 868	$ 4,837	$ 12,000	$ 1,985	$ 452	$ 20,142
Accumulated depreciation	(256)	(653)	(5,256)	(1,006)	–	(7,171)
Carrying amount	$ 612	$ 4,184	$ 6,744	$ 979	$ 452	$ 12,971

Depreciation of property, plant and equipment was included in the following:

	December 31, 2018	December 31, 2017
Freight, transportation and distribution	$ 15	$ –
Cost of goods sold	1,016	668
Selling expenses	259	–
General and administrative expenses	35	–
	1,325	668
Depreciation recorded in inventory	46	19
	$ 1,371	$ 687



NOTE 16 PROPERTY, PLANT AND EQUIPMENT CONTINUED

After a strategic portfolio review was completed in 2018, it was determined the New Brunswick Potash operations would no longer be part of the Company's medium-term or long-term strategic plans. As a result, the New Brunswick Potash operations will be taken out of care and maintenance and permanently shut down. The decision was considered a significant change in the expected manner of use and the related assets were moved from the Potash cash-generating unit ("CGU") to the New Brunswick CGU. Indicators of impairment were identified, and the Company conducted an impairment assessment of the New Brunswick CGU where the estimated recoverable amount was determined to be $50, based on fair value less costs of disposal ("FVLCD"). Since the estimated recoverable amount was lower than the carrying value, an impairment loss of $1,809 ($1,320 net of tax) was recorded in the Potash segment. The estimated recoverable amount was determined to be the salvage value of the assets based on the estimated fair market value of similar used assets and past experience, a Level 3 fair value measurement. There were no reversals of impairment in 2018.

In 2017, an impairment loss of $305 ($234, net of tax) was recognized in costs of goods sold under the Phosphate and Sulfate segment. This was primarily due to an indicator of impairment identified in the White Springs and Feed Plants CGU, as a result of reduced efficiency of conversion of rock to finished product, shifts in production mix and deteriorating price expectations. The White Springs and Feed Plants CGU had a recoverable amount of $96 at December 31, 2017 based on value in use. The recoverable amount was calculated using an after-tax discount rate of 8 percent based on the estimated weighted average cost of capital of a listed entity with similar assets.

NOTE 17 GOODWILL AND OTHER INTANGIBLE ASSETS

Intangible assets, including goodwill, are identifiable, represent future economic benefits and are controlled by the Company. Goodwill is not amortized but is subject to annual impairment review.

Accounting Policies

Goodwill is carried at cost, is not amortized, and represents the excess of the cost of an acquisition over the fair value of the Company's share of the net identifiable assets of the acquired subsidiary at the date of acquisition.

An intangible asset is recognized when it is:

- reliably measurable;
- identifiable (separable or arises from contractual rights);
- probable that expected future economic benefits will flow to the Company; and
- controllable by the Company.

Amortization is recognized in net earnings as an expense related to the function of the intangible asset.

The following expenses are not recognized as an asset:

- costs to maintain software programs; and
- development costs that do not meet the capitalization criteria.

Accounting Estimates and Judgments

Goodwill is allocated to CGUs or groups of CGUs for impairment testing based on the level at which it is monitored by management, and not at a level higher than an operating segment. The allocation is made to those CGUs or groups of CGUs expected to benefit from the business combination in which the goodwill arose.

Judgment is applied in determining when expenditures are eligible for capitalization as intangible assets.

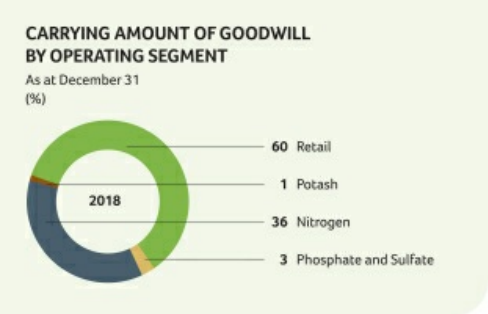
Estimation is applied to determine expected useful lives used in the straight-line amortization of intangible assets with finite lives.

The following estimated useful lives have been applied to finite-lived intangible assets as at December 31, 2018:

	Useful Life Range (years)
Customer relationships	6 to 15
Technology	3 to 7
Trade names [1]	10 to 20
Other	1 to 30

1 Certain trade names have indefinite useful lives as there are no regulatory, legal, contractual, cooperative, economic or other factors that limit their useful lives.

Useful lives are reviewed, and adjusted if appropriate, at least annually.



Supporting Information

Following is a reconciliation of intangible assets:

	Goodwill	Customer Relationships [2]	Technology	Trade Names	Other	Total Other Intangibles
Carrying amount – December 31, 2017	$ 97	$ –	$ –	$ –	$ 69	$ 69
Merger impact (Note 3)	11,185	1,708	44	122	474	2,348
Other acquisitions (Note 3)	197	1	–	–	7	8
Additions	–	–	79	–	19	98
Disposals	–	–	–	–	(27)	(27)
Foreign currency translation	(48)	(20)	1	(4)	(6)	(29)
Amortization [1]	–	(135)	(7)	(28)	(87)	(257)
Carrying amount – December 31, 2018	$ 11,431	$ 1,554	$ 117	$ 90	$ 449	$ 2,210
Balance as at December 31, 2018 comprised of:						
Cost	$ 11,438	$ 1,691	$ 124	$ 118	$ 586	$ 2,519
Accumulated amortization	(7)	(137)	(7)	(28)	(137)	(309)
Carrying amount	$ 11,431	$ 1,554	$ 117	$ 90	$ 449	$ 2,210
Carrying amount – December 31, 2016	$ 97	$ –	$ –	$ –	$ 83	$ 83
Additions	–	–	–	–	1	1
Amortization [1]	–	–	–	–	(15)	(15)
Carrying amount – December 31, 2017	$ 97	$ –	$ –	$ –	$ 69	$ 69
Balance as at December 31, 2017 comprised of:						
Cost	$ 104	$ –	$ –	$ –	$ 123	$ 123
Accumulated amortization	(7)	–	–	–	(54)	(54)
Carrying amount	$ 97	$ –	$ –	$ –	$ 69	$ 69

1 Amortization of $225 was included in selling expenses during the year ended December 31, 2018 (2017 – $NIL).
2 The remaining amortization period of customer relationships at December 31, 2018, was approximately 8 years.

Goodwill Impairment Testing

Goodwill by groups of CGUs as at December 31 is as follows:

	2018	2017
Retail	$ 6,882	$ –
Potash	154	–
Nitrogen	4,097	97
Phosphate and Sulfate	298	–
	$ 11,431	$ 97

The Company performed its annual impairment test on goodwill during the fourth quarter and did not identify any impairment.

In calculating the recoverable amount for goodwill, the Company used the FVLCD methodology based on discounted cash flows (five-year projections and a terminal year thereafter) and incorporated assumptions an independent market participant would apply. The Company adjusted discount rates for each group of CGUs for the risk associated with achieving its forecasts (five-year projections) and for the currency in which the Company expects to generate cash flows. FVLCD is a Level 3 measurement. The Company uses its market capitalization and comparative market multiples to corroborate discounted cash flow results.

The key assumptions with the greatest influence on the calculation of the recoverable amounts are the discount rates, terminal growth rates and cash flow forecasts for each group of CGUs as derived from the Company's strategic plan. These key assumptions were based on historical data from internal sources as well as industry and market trends. For each group of CGUs, terminal growth rates used and corresponding breakeven discount rates per annum that equate the recoverable amount to the carrying amount are as follows:

	Terminal Growth Rate	Breakeven Discount Rate
Retail	2.5%	8.3%
Potash	2.5%	13.1%
Nitrogen	2.0%	12.8%
Phosphate and Sulfate	2.0%	11.2%

For Retail, sensitivities of the key assumptions are as follows:

	Percentage Point Change	Change in Recoverable Amount
Discount rate	+0.1%	$ (365)
	-0.1%	381
Terminal growth rate	+0.1%	$ 320
	-0.1%	(307)
Forecasted EBITDA over forecast period	+5.0%	$ 1,488
	-5.0%	(1,477)

NOTE 18 OTHER ASSETS

Other assets as at December 31 were comprised of:

	2018	2017
Deferred income tax assets (Note 9)	$ 216	$ 18
Ammonia catalysts – net of accumulated amortization of $79 (2017 – $61)	81	42
Long-term income tax receivable (Note 9)	36	64
Accrued pension benefit asset (Note 28)	27	24
Other – net of accumulated amortization of $38 (2017 – $35)	165	98
	$ 525	$ 246

NOTE 19 PAYABLES AND ACCRUED CHARGES

Trade and other payables and accrued charges mainly consist of amounts owed to suppliers and prepayments made by customers planning to purchase the Company's products for the upcoming growing season.

Payables and accrued charges as at December 31 were comprised of:

	2018	2017
Trade accounts	$ 3,053	$ 255
Customer prepayments	1,625	–
Dividends	526	84
Accrued compensation	425	98
Current portion of asset retirement obligations and accrued environmental costs (Note 20)	156	72
Accrued interest	105	33
Current portion of share-based compensation (Note 29)	87	13
Current portion of derivatives	45	29
Income taxes (Note 9)	47	16
Current portion of pension and other post-retirement benefits (Note 28)	13	35
Other payables and other accrued charges	621	201
	$ 6,703	$ 836

NOTE 20 ASSET RETIREMENT OBLIGATIONS AND ACCRUED ENVIRONMENTAL COSTS

A provision is an estimated liability with uncertainty over the timing or amount that will be paid. The most significant asset retirement and environmental remediation provisions relate to costs to restore potash and phosphate sites to their original, or another specified, condition.

Accounting Policies

Provisions are:

- recognized for present legal or constructive obligations arising from past events where a future outflow of resources is probable, provided that amount can be reliably estimated;
- measured at the present value of the cash flow expected to be required to settle the obligation; and
- reviewed at the end of each reporting period for any changes, including the discount rate, foreign exchange rate and amount or timing of the underlying cash flows, and adjusted against the carrying amount of the provision and any related asset; otherwise, it is recognized in net earnings.

A gain or loss may be incurred upon settlement of the liability.

As a result of the Merger, the Company recognized contingent liabilities, which represents additional environmental costs that are present obligations of the Company although cash outflows of resources are not probable. These contingent liabilities are subsequently measured at the higher of the amount initially recognized and the best estimate of the expenditures to be incurred.

Asset retirement obligations and accrued environmental costs include:

- reclamation and restoration costs at the Company's potash and phosphate mining operations, including management of materials generated by mining and mineral processing, such as various mine tailings and gypsum;
- land reclamation and revegetation programs;
- decommissioning of underground and surface operating facilities;
- general cleanup activities aimed at returning the areas to an environmentally acceptable condition; and
- post-closure care and maintenance.

Accounting Estimates and Judgments

Estimates for provisions take into account:

- most provisions will not be settled for a number of years;
- environmental laws and regulations and interpretations by regulatory authorities could change or circumstances affecting the Company's operations could change, either of which could result in significant changes to current plans; and
- the nature, extent and timing of current and proposed reclamation and closure techniques in view of present environmental laws and regulations.

It is reasonably possible that the ultimate costs could change in the future and that changes to these estimates could have a material effect on the Company's financial statements.

The Company uses appropriate technical resources, including outside consultants, to develop specific site closure and post-closure plans in accordance with the requirements of the various jurisdictions in which it operates. Other than certain land reclamation programs, settlement of the obligations is typically correlated with mine life estimates.

The pre-tax risk-free discount rate and expected cash flow payments for asset retirement obligations and accrued environmental costs at December 31, 2018 were as follows:

	Asset Retirement Obligations		Accrued Environmental Costs	
	Risk-Free Rate (%) [1]	Cash Flow Payments (years) [2]	Risk-Free Rate (%) [1]	Cash Flow Payments (years)
Potash sites	3.64 – 5.00	52 – 430	n/a	n/a
Phosphate sites	1.60 – 5.43	1 – 483	2.08 – 4.27	1 – 30
Other	1.22 – 6.50	1 – 49	2.05 – 4.27	1 – 30

1 Risk-free discount rates reflect current market assessments of the time value of money and the risks specific to the timing and jurisdiction of the obligation.
2 Time frame in which payments are expected to principally occur from December 31, 2018, with the majority of phosphate payments taking place over the next 80 years. Changes in years can result from changes to the mine life and/or changes in the rate of tailing volumes.

n/a = not applicable

Sensitivity of asset retirement obligations and accrued environmental costs to changes in the discount rate on the recorded liability as at December 31, 2018 was as follows:

			Discount Rate	
	Undiscounted Cash Flows	Discounted Cash Flows	+0.5%	-0.5%
Asset retirement obligations			$ (88)	$ 88
Potash sites	$ 675 [1]	$ 130		
Phosphate sites	1,636	1,125		
Other	101	40		
Accrued environmental costs			(12)	15
Phosphate sites	321	246		
Other	318	288		

1 Represents total undiscounted cash flows in the first year of decommissioning for operating sites and cash flows for all years for sites that were or would be permanently shut down. For operating sites, excludes subsequent years of tailings dissolution, fine tails capping, tailings management area reclamation, post reclamation activities and monitoring, and final decommissioning, which are estimated to take an additional 90-375 years.

Supporting Information

Following is a reconciliation of asset retirement and environmental restoration obligations:

	Asset Retirement Obligations	Accrued Environmental Costs	Total
Balance – December 31, 2017	$ 702	$ 21	$ 723
Merger impact [1]	608	525	1,133
Recorded in earnings	64	12	76
Capitalized to property, plant and equipment	9	–	9
Settled during the year	(57)	(12)	(69)
Foreign currency translation	(31)	(12)	(43)
Balance – December 31, 2018	$ 1,295	$ 534	$ 1,829
Balance as at December 31, 2018 comprised of:			
Current liabilities			
Payables and accrued charges (Note 19)	$ 122	$ 34	$ 156
Non-current liabilities			
Asset retirement obligations and accrued environmental costs	$ 1,173	$ 500	$ 1,673

1 Asset retirement obligations of $201 and accrued environmental costs of $376 represent contingent liabilities recognized as a result of the Merger. Refer to Note 3.

NOTE 21 INVESTMENTS

Nutrien holds interests in associates and joint ventures, the most significant being Canpotex, MOPCO, Profertil and Agrichem. The Company's most significant investment accounted for as FVTOCI is Sinofert.

Accounting Policies

Investments in Equity-Accounted Investees

Investments in which the Company exercises significant influence (but does not control) or has joint control (as joint ventures) are accounted for using the equity method. Significant influence is the power to participate in the financial and operating policy decisions of the investee, commonly referred to as associates.

The Company's significant policies include:

Significant Policy	Statement of Comprehensive Income	Investment
Proportionate share of net earnings (loss) adjusted for any fair value adjustments at acquisition date and differences in accounting policies	Net earnings (loss)	Increase (decrease)
Gain (loss) on disposal	Net earnings (loss)	Increase (decrease)
Proportionate share of post-acquisitions movements in OCI (loss)	OCI (loss)	Increase (decrease)
Impairment (loss) reversal [1]	Net earnings (loss)	Increase (decrease)
Dividends received	–	(Decrease)

1 An impairment test is performed when there is objective evidence of impairment, such as significant adverse changes in the environment in which the equity-accounted investee operates or a significant or prolonged decline in the fair value of the investment below its carrying amount.

Investments at FVTOCI

The fair value of investments designated as FVTOCI is recorded in the consolidated balance sheets, with unrealized gains and losses, net of related income taxes, recorded in AOCI.

The Company's significant policies include:

- the cost of investments sold is based on the weighted average method; and
- realized gains and losses on these investments remain in OCI, but the cumulative balance can be transferred to another equity reserve, such as retained earnings.

Accounting Estimates and Judgments

Investments in Equity-Accounted Investees and Investments at FVTOCI

Judgment is necessary in determining:

- when significant influence exists; and
- if objective evidence of impairment exists for equity-accounted investees and, if so, the amount of impairment.

NOTE 21 INVESTMENTS CONTINUED

Supporting Information

Equity-accounted investees and investments at FVTOCI as at December 31 were comprised of:

Name	Principal Activity	Principal Place of Business and Incorporation	Proportion of Ownership Interest and Voting Rights Held		Carrying Amount	
			2018	2017	**2018**	2017
EQUITY-ACCOUNTED INVESTEES						
MOPCO [1]	Nitrogen Producer	Egypt	26%	–%[3]	$ 236	$ –
Profertil	Nitrogen Producer	Argentina	50%	–%[3]	192	–
Canpotex	Marketing & Logistics	Canada	50%[2]	33%	–	–
Agrichem [4]	Fertilizer Producer & Marketer	Brazil	80%	–%	103	–
Other associates and joint ventures					161	30
Total equity-accounted investees					$ 692	$ 30
INVESTMENTS AT FVTOCI						
Sinofert [5]	Fertilizer Supplier & Distributor	China/Bermuda	22%	22%	$ 180	$ 258
Other			–%	–%	6	4
Total investments at FVTOCI					$ 186	$ 262

1 The Company has representation on the MOPCO Board of Directors providing significant influence over MOPCO. The Company recorded its share of MOPCO's earnings on a one-quarter lag, adjusted for any material transactions for the current quarter, as the financial statements of MOPCO are not available on the date of issuance of the Company's financial statements. Future conditions, including those related to MOPCO in Egypt, which has been subject to political instability and civil unrest, may restrict the Company's ability to obtain dividends from MOPCO. The Company is also exposed to currency risk related to fluctuations in the Egyptian pound against the US dollar.
2 Upon closing of the Merger on January 1, 2018 as described in Note 3, the classification of the investment changed from an associate to a joint venture.
3 Investments in MOPCO and Profertil were acquired as part of the Merger as described in Note 3.
4 As contractually agreed, the Company has joint control with the other shareholder of Agrichem. Subsequent to 2018, the Company acquired the remaining interest in Agrichem making it a wholly owned subsidiary that will be consolidated.
5 The Company's 22 percent ownership of Sinofert does not constitute significant influence as the Company does not have any representation on the Board of Directors of Sinofert. The Company elected for this investment to be accounted for as FVTOCI.

Additional financial information of the Company's proportionate interest in equity-accounted investees for the years ended December 31 was as follows:

	Associates		Joint Ventures	
	2018	2017	**2018**	2017
Earnings from continuing operations and net earnings	$ 24	$ –	$ 16	$ 9
Other comprehensive income	–	–	–	–
Total comprehensive income	$ 24	$ –	$ 16	$ 9

NOTE 22 SHORT-TERM DEBT

The Company uses its $4.5 billion commercial paper program for its short-term cash requirements. The commercial paper program is backstopped by an unsecured revolving term credit facility. Short-term facilities are renegotiated periodically.

Short-term debt as at December 31 was comprised of:

	2018	2017
Commercial paper	$ 391	$ 730
Other credit facilities [1]	238	–
	$ 629	$ 730

1 Credit facilities are unsecured and consist of US dollar-denominated debt of $153, euro-denominated debt of $22 and debt of $63 in other currency denominations.

The amount available under the commercial paper program is limited to the availability of backup funds under the unsecured revolving term credit facility. As at December 31, 2018, the Company was authorized to issue commercial paper up to $4,500 (2017 – $2,500). The Company also had other facilities available from which it could draw short-term debt, including a $500 uncommitted revolving demand facility, a $500 accounts receivable securitization program (limit is reduced to $300 from January to March each year), and $520 of other facilities mostly denominated in foreign currencies.

During 2018, the legacy $75 unsecured line of credit was replaced with the $500 uncommitted revolving credit facility.

Principal covenants and events of default under the $4,500 unsecured revolving term credit facility are described in Note 23.

Under the accounts receivable securitization program, the Company sells certain trade receivables to a special purchase vehicle, which is a consolidated entity within the Company. The Company controls and retains substantially all of the risks and rewards of the receivables sold to the special purchase vehicle. Should the Company wish to draw funds under the program, the sold accounts receivable balances may be used as capacity for collateralized borrowings from a third-party financial institution. At December 31, 2018, no loan drawdowns were made from this program.

NOTE 23 LONG-TERM DEBT

The Company's sources of borrowing for funding purposes are primarily senior notes, debentures and long-term credit facilities. The Company has access to the capital markets through its base shelf prospectus.

Accounting Policy

Issue costs of long-term debt obligations are capitalized to long-term obligations and are amortized to expense over the term of the related liability using the effective interest method.

NOTE 23 LONG-TERM DEBT CONTINUED

Supporting Information

Long-term debt as at December 31 was comprised of:

	Rate of Interest	Maturity	2018	2017
Senior notes [1]				
Notes issued 2009	6.500%	May 15, 2019	$ 500	$ 500
Notes issued 2009	4.875%	March 30, 2020	500	500
Notes issued 2014	3.625%	March 15, 2024	750	750
Notes issued 2015	3.000%	April 1, 2025	500	500
Notes issued 2016	4.000%	December 15, 2026	500	500
Notes issued 2006	5.875%	December 1, 2036	500	500
Notes issued 2010	5.625%	December 1, 2040	500	500
Debentures [1]				
Debentures issued 2008	6.750%	January 15, 2019	500	–
Debentures issued 2012	3.150%	October 1, 2022	500	–
Debentures issued 2013	3.500%	June 1, 2023	500	–
Debentures issued 2015	3.375%	March 15, 2025	550	–
Debentures issued 1997	7.800%	February 1, 2027	125	–
Debentures issued 2015	4.125%	March 15, 2035	450	–
Debentures issued 2006	7.125%	May 23, 2036	300	–
Debentures issued 2010	6.125%	January 15, 2041	500	–
Debentures issued 2013	4.900%	June 1, 2043	500	–
Debentures issued 2014	5.250%	January 15, 2045	500	–
Other			30	–
			8,205	3,750
Add net unamortized fair value adjustments [2]			444	–
Less net unamortized debt issue costs			(55)	(43)
			8,594	3,707
Less current maturities			(1,008)	–
Less current portion of net unamortized fair value adjustments [2]			(1)	–
Add current portion of net unamortized debt issue costs			6	4
			(1,003)	4
			$ 7,591	$ 3,711

1 Each series of senior notes and debentures is unsecured and has no sinking fund requirements prior to maturity. Each series is redeemable and has various provisions that allow redemption prior to maturity, at the Company's option, at specified prices.
2 Associated with the Merger on January 1, 2018.

During 2018, the Company exchanged an aggregate of $7,578 of legacy companies' senior notes and debentures for the same amount of new notes issued by Nutrien (the "Nutrien Notes"). The Nutrien Notes have interest rates and maturities identical to those of the applicable exchanged series of senior notes or debentures. A small portion of senior notes and debentures, excluding the 7.800 percent debentures due in 2027 (the "2027 debentures"), were not exchanged and remain obligations of the issuing subsidiary. The indentures governing these remaining subsidiary senior notes and debentures have been amended to remove certain covenants and events of default provisions. In addition, none of the 2027 debentures were exchanged but debt holders consented to amend the financial reporting covenant in the indenture governing the 2027 debentures to allow the Company's financial reports, rather than reports of the issuing subsidiary, to satisfy its financial reporting obligations thereunder.

The Nutrien Notes have various provisions that allow for redemption prior to maturity, at the Company's option, at specified prices. The Company is subject to certain customary covenants including limitation on liens, merger and change of control covenants, and customary events of default. The Company was in compliance with these covenants as at December 31, 2018.

NOTE 23 LONG-TERM DEBT CONTINUED

The debt exchange is accounted for as a modification of debt without substantial modification of terms as the financial terms of the Nutrien Notes were identical to senior notes and debentures and there is no substantial difference between the present value of cash flows under the Nutrien Notes compared to the notes and debentures. Accordingly, there is no gain or loss on the exchange. The transaction costs from the debt exchange of $19 were recorded to the carrying amount of the long-term debt and will be amortized over the life of the Nutrien Notes.

Details of the Company's credit facility was as follows:

	2018	2017
Credit facility	$4,500 – maturity April 10, 2023 [1]	$3,250 – maturity May 31, 2021 $250 – maturity May 31, 2020
Borrowings outstanding	$ NIL	$ NIL
Commercial paper outstanding, backstopped by the credit facility (Note 22)	$ 391	$ 730

1 Subject to extensions, at the request of Nutrien, which shall not exceed five years.

During 2018, the Company replaced the legacy $3,500 unsecured revolving credit facility and the legacy $2,500 multi-jurisdictional unsecured revolving credit facility with a new Nutrien $4,500 unsecured revolving term credit facility ("Nutrien Credit Facility"). Principal covenants and events of default under the Nutrien Credit Facility include a debt to capital ratio of less than or equal to 0.65:1 and other customary events of default and covenant provisions. Non-compliance with such covenants could result in accelerated repayment and/or termination of the credit facility. The Company was in compliance with all covenants as at December 31, 2018.

NOTE 24 SHARE CAPITAL

Authorized

The Company is authorized to issue an unlimited number of common shares without par value and an unlimited number of preferred shares. The common shares are not redeemable or convertible. The preferred shares may be issued in one or more series with rights and conditions to be determined by the Board of Directors. No preferred shares have been issued.

Issued

	Number of Common Shares (Pre-Merger)	Number of Common Shares (Post-Merger)	Consideration
Balance – December 31, 2017 (Pre-Merger)	840,223,041		
Conversion ratio	0.40		
PotashCorp shares converted to Nutrien shares		336,089,216	$ 1,806
Agrium shares – December 31, 2017 (Pre-Merger)	138,165,765		
Conversion ratio	2.23		
Agrium shares converted to Nutrien shares		308,109,656	15,898
Fractional shares cancelled [1]		(1,399)	–
Balance – January 1, 2018 (Post-Merger)		644,197,473	17,704
Issued under option plans and share-settled plans		670,201	34
Repurchased		(36,332,197)	(998)
Balance – December 31, 2018		608,535,477	$ 16,740

1 No fractional shares of Nutrien were issued. Each PotashCorp shareholder and Agrium shareholder that would otherwise have been entitled to receive a fraction of a Nutrien share received, in lieu thereof, a cash amount, without interest, determined by reference to the volume weighted average trading price of Nutrien shares on the Toronto Stock Exchange on the first five trading days on which such shares traded on such exchange following January 2, 2018.

Share Repurchase Program

On February 20, 2018, the Company's Board of Directors approved a share repurchase program of up to 5 percent of the Company's outstanding common shares over a one-year period through a normal course issuer bid. On December 14, 2018, the normal course issuer bid was increased to permit the repurchase of up to 8 percent of the Company's outstanding common shares. Purchases of common shares commenced on February 23, 2018 and will expire on the earlier of February 22, 2019, the date on which the Company has acquired the maximum number of common shares allowable or the date on which the Company determines not to make any further repurchases.

NOTE 24 SHARE CAPITAL CONTINUED

On February 20, 2019, the Company's Board of Directors approved the renewal of the share repurchase program of up to 5 percent of the Company's outstanding common shares over a one-year period through a normal course issuer bid.

Purchases under the normal course issuer bid will be made through open market purchases at market price as well as by other means as may be permitted by applicable securities regulatory authorities, including private agreements.

The following table summarizes the Company's share repurchases:

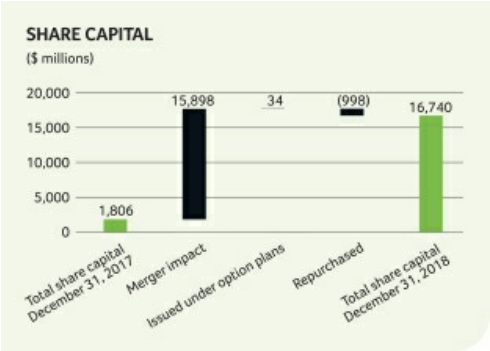
	2018
Common shares repurchased for cancellation	36,332,197
Average price per share	$ 50.97
Repurchase resulting in a reduction of:	
Share capital	$ 998
Contributed surplus [1]	23
Retained earnings [1]	831
Total Cost	$ 1,852

1 The excess of net cost over the average book value of the shares.

As of February 20, 2019, an additional 5,933,135 common share were repurchased for cancellation at a cost of $297 and an average price per share of $50.10.

Dividends Declared

During 2018, the Company declared a dividend of $0.40 per share for the three months ended March 31, June 30 and September 30. During the three months ended December 31, 2018, two dividends of $0.43 per share were declared. The first declared dividend of $0.43 per share was payable January 17, 2019 to shareholders of record December 31, 2018, and the second declared dividend of $0.43 per share is payable April 18, 2019 to shareholders of record on March 29, 2019.



NOTE 25 CAPITAL MANAGEMENT

The objective of Nutrien's capital allocation policy is to balance between the return of capital to shareholders, improvement in the efficiency of the Company's existing assets, and delivery on the Company's growth opportunities, while maintaining a strong balance sheet and flexible capital structure to optimize the cost of capital at an acceptable level of risk. Nutrien's goal is to pay a stable and growing dividend with a target payout that represents 40 to 60 percent of free cash flow after sustaining capital through the agricultural cycle.

The Company monitors its capital structure and, based on changes in economic conditions, may adjust the structure by adjusting the amount of dividends paid to shareholders, repurchasing shares, issuing new shares, issuing new debt or retiring existing debt.

The Company uses a combination of short-term and long-term debt to finance its operations. It typically pays floating rates of interest on short-term debt and credit facilities, and fixed rates on Nutrien Notes.

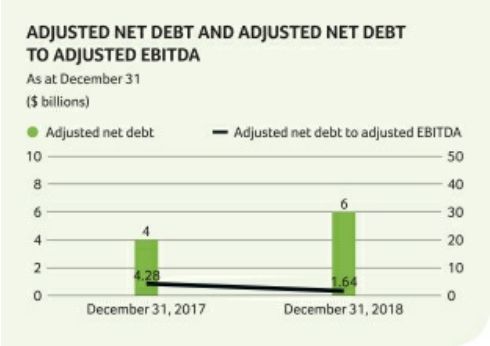
NOTE 25 CAPITAL MANAGEMENT CONTINUED

Adjusted net debt and adjusted shareholders' equity are included as components of the Company's capital structure. The calculation of adjusted net debt, adjusted shareholders' equity and adjusted capital is set out in the following table:

	2018	2017
Short-term debt	$ 629	$ 730
Current portion of long-term debt	1,003	–
Long-term debt	7,591	3,711
Total debt	9,223	4,441
Cash and cash equivalents	(2,314)	(116)
Net debt	6,909	4,325
Unamortized fair value adjustments	(444)	–
Adjusted net debt	6,465	4,325
Total shareholders' equity	24,425	8,303
Accumulated other comprehensive (income) loss	291	(25)
Adjusted shareholders' equity	24,716	8,278
Adjusted capital	$ 31,181	$ 12,603

The Company monitors the following ratios:

	2018	2017 (Note 33)
Ratios		
Adjusted net debt to adjusted EBITDA	1.64	4.28
Adjusted EBITDA to adjusted finance costs	8.15	4.75
Adjusted net debt to adjusted capital	20.7%	34.3%



Other components of ratios above are calculated as follows:

	2018	2017 (Notes 33)
Net (loss) earnings from continuing operations	$ (31)	$ 154
Finance costs	538	238
Income taxes	(93)	(183)
Depreciation and amortization	1,592	692
EBITDA	2,006	901
Impairment of property, plant and equipment	1,809	–
Merger and related costs	170	84
Share-based compensation	116	26
Defined Benefit Plans Curtailment Gain	(157)	–
Adjusted EBITDA	$ 3,944	$ 1,011

	2018	2017
Finance costs	$ 538	$ 238
Unwinding of discount on asset retirement obligations	(51)	(17)
Borrowing costs capitalized to property, plant and equipment	12	11
Interest on net defined benefit pension and other post-retirement plan obligations	(15)	(19)
Adjusted finance costs	$ 484	$ 213

The Company maintains a base shelf prospectus, which permits issuance through April 2020 in Canada and the United States, of common shares, debt, and other securities up to $11,000. Issuance of securities under the base shelf prospectus requires filing a prospectus supplement and is subject to the availability of funding in capital markets. During the year ended December 31, 2018, the Company filed a prospectus supplement to exchange $8,175 of the senior notes of PotashCorp and debentures of Agrium – for the Nutrien Notes issued by the Company, as discussed in Note 23.

NOTE 26 COMMITMENTS

A commitment is an agreement that is enforceable and legally binding to make a payment in the future for the purchase of goods or services. These amounts are not recorded in the consolidated balance sheets since the Company has not yet received the goods or services from the supplier. The amounts below are what the Company is committed to pay based on current expected contract prices.

Accounting Policies

Leases entered into are classified as either finance or operating leases. Leases that transfer substantially all of the risks and rewards of ownership of property to the Company are accounted for as finance leases. They are capitalized at the commencement of the lease at the lower of the fair value of the leased property and the present value of the minimum lease payments. Property acquired under a finance lease is depreciated over the shorter of the period of expected use on the same basis as other similar property, plant and equipment and the lease term.

Leases in which a significant portion of the risks and rewards of ownership are retained by the lessor are classified as operating leases. Rental payments under operating leases are expensed in net earnings on a straight-line basis over the period of the lease.

Refer to Note 32 for details pertaining to the impact of the adoption of IFRS 16 in 2019.

Accounting Estimates and Judgments

Judgment is required in considering a number of factors to ensure that leases to which the Company is party are classified appropriately as operating or financing. Such factors include whether the lease term is for the major part of the asset's economic life and whether the present value of minimum lease payments amounts to substantially all of the fair value of the leased asset.

As at December 31, 2018, substantially all of the leases to which the Company is party have been classified as operating leases.

Supporting Information

Lease Commitments

The Company has various long-term operating lease agreements for land, buildings, port and distribution facilities, equipment, ocean-going transportation vessels, railcars, vehicles and application equipment. The majority of lease agreements are renewable at the end of the lease period at market rates. Rental expenses for operating leases for the year ended December 31, 2018 were $301 (2017 – $87).

Purchase Commitments

In 2018, the Company entered into a new long-term natural gas purchase agreement in Trinidad, which will commence January 1, 2019 and is set to expire December 31, 2023. The contract provides for prices that vary primarily with ammonia market prices, and annual escalating floor prices. The commitments included in the following table are based on floor prices and minimum purchase quantities.

Profertil has long-term gas contracts denominated in US dollars and expiring in 2019, which account for approximately 100 percent of Profertil's gas requirements. YPF S.A., the Company's joint venture partner in Profertil, supplies approximately 70 percent of the gas under these contracts. Commitments include the Company's proportionate share of this joint venture.

The Carseland facility has a power co-generation agreement, expiring on December 31, 2026, which provides the Company 60 megawatt-hours of power per hour. The price for the power is based on a fixed charge adjusted for inflation and a variable charge based on the cost of natural gas provided to the facility for power generation.

Agreements for the purchase of sulfur for use in the production of phosphoric acid provide for specified purchase quantities and prices based on market rates at the time of delivery. Commitments included in the following table are based on expected contract prices.

As part of the agreement to sell the Conda Phosphate operations ("CPO"), the Company entered into long-term strategic supply and offtake agreements which extend to 2023. Under the terms of the supply and offtake agreements, the Company will supply 100 percent of the ammonia requirements of CPO and purchase 100 percent of the monoammonium phosphate ("MAP") product produced at CPO. The MAP production is estimated at 330,000 tonnes per year.

Capital Commitments

The Company has various long-term contractual commitments related to the acquisition of property, plant and equipment, the latest of which expires in 2022. The commitments included in the following table are based on expected contract prices.

Other Commitments

Other commitments consist principally of pipeline capacity, technology service contracts, throughput and various rail and vessel freight contracts, the latest of which expires in 2026, and mineral lease commitments, the latest of which expires in 2038.

NOTE 26 COMMITMENTS CONTINUED

Minimum future commitments under these contractual arrangements were as follows at December 31, 2018:

	Operating Leases	Long-term debt, Principal and Estimated Interest	Purchase Commitments	Capital Commitments	Other Commitments	Total
Within 1 year	$ 216	$ 1,341	$ 1,364	$ 37	$ 114	$ 3,072
1 to 3 years	316	1,112	949	18	123	2,518
3 to 5 years	212	1,576	945	2	61	2,796
Over 5 years	343	8,689	138	–	20	9,190
Total	$ 1,087	$ 12,718	$ 3,396	$ 57	$ 318	$ 17,576

NOTE 27 GUARANTEES

Accounting Policies

Guarantees are not recognized in the consolidated balance sheets, but are disclosed and include contracts or indemnifications that contingently require the Company to make payments to the guaranteed party based on:

- changes in an underlying;
- another entity's failure to perform under an agreement; and
- failure of a third party to pay its indebtedness when due.

Guarantees are recorded by the Company and recognized as a financial instrument in the consolidated balance sheets when any of the triggering events above result in the Company becoming primarily liable to the contract.

Supporting Information

In the normal course of business, the Company provides indemnification agreements to counterparties in transactions such as purchase and sale contracts, service agreements, director/officer contracts and leasing transactions. The terms of these indemnification agreements:

- may require the Company to compensate counterparties for costs incurred as a result of various events, including environmental liabilities and changes in (or in the interpretation of) laws and regulations, or as a result of litigation claims or statutory sanctions that may be suffered by a counterparty as a consequence of the transaction;
- will vary based upon the contract, the nature of which prevents the Company from making a reasonable estimate of the maximum potential amount that it could be required to pay to counterparties; and
- have not historically resulted in the Company making any significant payments and, as at December 31, 2018, no amounts have been accrued in the consolidated financial statements (except for accruals relating to the underlying potential liabilities).

Various commitments (such as railcar leases) related to a certain investee have been directly guaranteed by the Company under certain agreements with third parties. The Company would be required to perform on these guarantees in the event of default by the guaranteed parties. No material loss is anticipated by reason of such agreements and guarantees. In relation to significant guarantees, the Company has guaranteed the gypsum stack capping, closure and post-closure obligations of its wholly owned subsidiaries, PCS Phosphate Company, Inc. ("PCS Phosphate") in White Springs, Florida and PCS Nitrogen Inc. ("PCS Nitrogen") in Geismar, Louisiana, respectively, pursuant to the financial assurance regulatory requirements in those states. In addition to the foregoing guarantees associated with US mining operations, the Company has guaranteed the performance of certain remediation obligations of PCS Joint Venture, Ltd., a wholly owned subsidiary, at the Lakeland, Florida and Moultrie, Georgia sites.

The Company has accrued costs associated with the retirement of long-lived tangible assets in the consolidated financial statements to the extent that a legal or constructive liability to retire such assets exists. See Note 20 for details.

The Company expects to be able to satisfy all applicable credit support requirements without disrupting normal business operations.

NOTE 28 PENSION AND OTHER POST-RETIREMENT BENEFITS

The Company offers pension and other post-retirement benefits to qualified employees: defined benefit pension plans; defined contribution pension plans; and health, disability, dental and life insurance (referred to as other defined benefit) plans. Substantially all employees participate in at least one of these plans.

Accounting Policies

For employee retirement and other defined benefit plans:

- accrued liabilities are recorded net of plan assets;
- costs including current and past service costs, gains or losses on curtailments and settlements, and remeasurements are actuarially determined on a regular basis using the projected unit credit method; and
- past service cost is recognized in net earnings at the earlier of when i) a plan amendment or curtailment occurs; or ii) related restructuring costs or termination benefits are recognized.

Remeasurements, recognized directly in OCI in the period they occur, are comprised of actuarial gains and losses, return on plan assets (excluding amounts included in net interest) and the effect of the asset ceiling (if applicable).

When a plan amendment occurs before a settlement, the Company recognizes past service cost before any gain or loss on settlement.

Defined contribution plan costs are recognized in net earnings for services rendered by employees during the period.

Accounting Estimates and Judgments

Estimates and judgments are required to determine discount rates, health care cost trend rates, projected salary increases, retirement age, longevity and termination rates. These assumptions are determined by management and are reviewed annually by the Company's independent actuaries.

The Company's discount rate assumption is impacted by:

- the weighted average interest rate at which each pension and other post-retirement plan liability could be effectively settled at the measurement date;
- country specific rates; and
- the use of a yield curve approach.[1]

1 Based on the respective plans' demographics, expected future pension benefits and medical claims, payments are measured and discounted to determine the present value of the expected future cash flows. The cash flows are discounted using yields on high-quality AA-rated non-callable bonds with cash flows of similar timing where there is a deep market for such bonds. Where the Company does not believe there is a deep market for such bonds (such as for terms in excess of 10 years in Canada), the cash flows are discounted using a yield curve derived from yields on provincial bonds rated AA or better to which a spread adjustment is added to reflect the additional risk of corporate bonds.

The significant assumptions used to determine the benefit obligations and expense for the Company's significant plans as at and for the year ended December 31 were as follows:

	Pension		Other	
	2018	2017	**2018**	2017
Assumptions used to determine the benefit obligations[1] :				
Discount rate, %	4.22	3.65	4.17	3.65
Rate of increase in compensation levels, %	4.75	5.00	n/a	n/a
Medical cost trend rate – assumed, %	n/a	n/a	6.10 – 4.50[2]	5.60 – 4.50[2]
Medical cost trend rate – year reaches ultimate trend rate	n/a	n/a	2037	2037
Mortality assumptions[3]				
Life expectancy at 65 for a male member currently at age 65	20.6	20.7	20.4	20.0
Life expectancy at 65 for a female member currently at age 65	22.8	22.7	22.8	22.4
Average remaining service period of active employees (years)	9.7	9.0	5.1	12.2
Average duration of the defined benefit obligations[4] (years)	13.7	15.7	15.1	19.0

1 The current year's expense is determined using the assumptions that existed at the end of the previous year.
2 The Company assumed a graded medical cost trend rate starting at 6.10 percent in 2018, moving to 4.50 percent by 2037 (2017 – starting at 5.60 percent, moving to 4.50 percent by 2037).
3 Based on actuarial advice in accordance with the latest available published tables, adjusted where appropriate to reflect future longevity improvements for each country.
4 Weighted average length of the underlying cash flows.

n/a = not applicable

Of the most significant assumptions, a change in discount rates has the greatest potential impact on the Company's pension and other post-retirement benefit plans, with sensitivity to change as follows:

	Change in Assumption	2018 Benefit Obligations	2018 Expense in Income Before Income Taxes	2017 Benefit Obligations	2017 Expense in Income Before Income Taxes
As reported		$ 1,797	$ (87)	$ 1,831	$ 75
Discount rate	1.0 percentage point $	271	24	326	20
	1.0 percentage point #	(218)	(22)	(251)	(18)

Supporting Information

Description of Defined Benefit Pension Plans

The Company sponsors defined benefit pension plans as follows:

	Plan Type	Contributions
United States	• non-contributory; • guaranteed annual pension payments for life; • benefits generally depend on years of service and compensation level in the final years leading up to age 65;	• made to meet or exceed minimum funding requirements of the Employee Retirement Income Security Act of 1974 ("ERISA") and associated Internal Revenue Service regulations and procedures.
Canada	• benefits available starting at age 55 at a reduced rate; and • plans provide for maximum pensionable salary and maximum annual benefit limits.	• made to meet or exceed minimum funding requirements based on provincial statutory requirements and associated federal taxation rules.
Supplemental Plans in US and Canada for Senior Management	• non-contributory; • unfunded; and • supplementary pension benefits.	• provided for by charges to earnings sufficient to meet the projected benefit obligations; and • payments to plans are made as plan payments to retirees occur.

The Company's defined benefit pension plans discussed above are funded with separate funds that are legally separated from the Company and administered through an employee benefits or management committee in each country, which is composed of employees of the Company. The employee benefits or management committee is required by law to act in the best interests of the plan participants and, in the US and Canada, is responsible for the governance of the plans, including setting certain policies (e.g., investment and contribution) of the funds. The current investment policy for each country's plans generally does not include any asset/liability matching strategies or currency hedging strategies. Plan assets held in trusts are governed by local regulations and practice in each country, as is the nature of the relationship between the Company and the trustees and their composition.

Description of Other Post-Retirement Plans

The Company provides health care plans for certain eligible retired employees in the US, Canada and Trinidad. Eligibility for these benefits is generally based on a combination of age and years of service at retirement. Certain terms of the plans include:

- coordination with government-provided medical insurance in each country;
- certain unfunded cost-sharing features such asco-insurance, deductibles and co-payments – benefits subject to change;
- for certain plans, maximum lifetime benefits;
- at retirement, the employee's spouse and certain dependent children may be eligible for coverage;
- benefits are self-insured and are administered through third-party providers; and
- generally, retirees contribute towards annual cost of the plans.

The Company provides non-contributory life insurance plans for certain retired employees who meet specific age and service eligibility requirements.

Risks

The defined benefit pension and other post-retirement plans expose the Company to broadly similar actuarial risks. The most significant risks as discussed below include investment risk, interest rate risk, longevity risk and salary risk. These plans are not exposed to any other significant, unusual or specific risks.

Investment Risk

A deficit will be created if plan assets underperform the discount rate used in the defined benefit obligation valuation. To mitigate investment risk, the Company employs:

- a total return on investment approach whereby a diversified mix of equities and fixed income investments is used to maximize long-term return for a prudent level of risk; and
- risk tolerance established through careful consideration of plan liabilities, plan funded status and corporate financial condition.

Other assets such as private equity and hedge funds are not used at this time. The Company's policy is not to invest in commodities, precious metals, mineral rights, bullions, or collectibles. Investment risk is measured and monitored on an ongoing basis through quarterly investment portfolio reviews, annual liability measurements and periodic asset/liability studies.

Interest Rate Risk
A decrease in bond interest rates will increase the pension liability; however, this is generally expected to be partially offset by an increase in the return on the plan's debt investments.

Longevity Risk
An increase in life expectancy of plan participants will increase the plan's liability.

Salary Risk
An increase in the salary of the plan's participants will increase the plan's liability.

Financial Information

Movements in the pension and other post-retirement benefit assets (liabilities)

	Obligation	Plan Assets	Net
Balance – December 31, 2017	$ (1,831)	$ 1,380	$ (451)
Merger impact [1]	(347)	205	(142)
Components of defined benefit expense recognized in earnings			
Current service cost for benefits earned during the year	(67)	–	(67)
Interest (expense) income	(77)	62	(15)
Past service cost, including curtailment gains and settlements[2]	157	–	157
Foreign exchange rate changes and other	39	(27)	12
Subtotal of components of defined benefit expense recognized in earnings	52	35	87
Remeasurements of the net defined benefit liability recognized in OCI during the year			
Actuarial gain arising from:			
Changes in financial assumptions	210	–	210
Changes in demographic assumptions	11	–	11
Loss on plan assets (excluding amounts included in net interest)	–	(149)	(149)
Subtotal of remeasurements	221	(149)	72
Cash flows			
Contributions by plan participants	(6)	6	–
Employer contributions	–	53	53
Benefits paid	114	(114)	–
Subtotal of cash flows	108	(55)	53
Balance – December 31, 2018 [3]	$ (1,797)	$ 1,416	$ (381)
Balance comprised of:			
Non-current assets			
Other assets (Note 18)			$ 27
Current liabilities			
Payables and accrued charges (Note 19)			$ (13)
Non-current liabilities			
Pension and other post-retirement benefit liabilities			$ (395)

1 The Company acquired Agrium's pension and other post-retirement benefit obligations, representing the fair values at the acquisition date as described in Note 3.
2 In 2018, as part of the Company's continuous assessment of its operations, participation in certain company defined benefit pension and other post-retirement benefit plans was suspended and/or discontinued effective January 1, 2020 based on age and years of service. As a result, the Company recognized a Merger-related Defined Benefit Plans Curtailment Gain of $157.
3 Obligations arising from funded and unfunded pension plans are $(1,466) and $(331), respectively. Other post-retirement benefit plans have no plan assets and are unfunded.

NOTE 28 PENSION AND OTHER POST-RETIREMENT BENEFITS CONTINUED

	Obligation	Plan Assets	Net
Balance – December 31, 2016	$ (1,698)	$ 1,246	$ (452)
Components of defined benefit expense recognized in earnings	(131)	56	(75)
Remeasurements of the net defined benefit liability recognized in OCI during the year	(57)	123	66
Cash flows	55	(45)	10
Balance – December 31, 2017 [1]	$ (1,831)	$ 1,380	$ (451)
Balance comprised of:			
Non-current assets			
Other assets (Note 18)			$ 24
Current liabilities			
Payables and accrued charges (Note 19)			$ (35)
Non-current liabilities			
Pension and other post-retirement benefit liabilities			$ (440)

1 Obligations arising from funded and unfunded pension plans are $(1,445) and $(386), respectively. Other post-retirement benefit plans have no plan assets and are unfunded.

Plan Assets

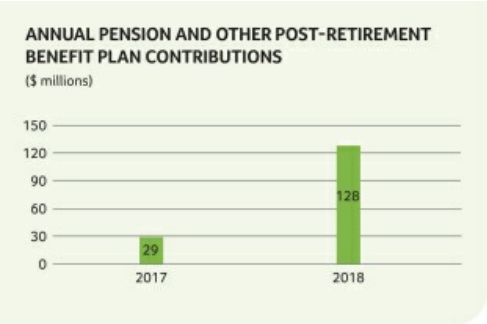
The fair value of plan assets of the Company's defined benefit pension plans, by asset category, was as follows as at December 31:

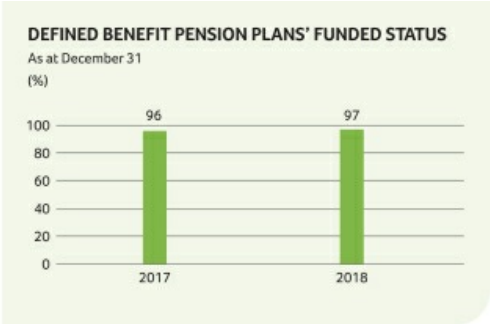
	2018			2017		
	Quoted Prices in Active Markets for Identical Assets (Level 1)	Other (Level 2 & 3)	Total	Quoted Prices in Active Markets for Identical Assets (Level 1)	Other (Level 2 & 3)	Total
Cash and cash equivalents	$ 6	$ 54	$ 60	$ 13	$ 33	$ 46
Equity securities and equity funds						
US	454	65	519	565	2	567
International	175	65	240	151	29	180
Debt securities [1]	187	329	516	190	244	434
International balanced fund	–	97	97	–	173	173
Other	(25)	9	(16)	(20)	–	(20)
Total pension plan assets	$ 797	$ 619	$ 1,416	$ 899	$ 481	$ 1,380

1 Debt securities included US securities of 52 percent (2017 – 62 percent), International securities of 31 percent (2017 – 18 percent) and Mortgage-backed securities of 17 percent (2017 – 20 percent).

Letters of credit secured certain of the Canadian unfunded defined benefit plan liabilities as at December 31, 2018.

The Company expects to contribute approximately $97 to all pension and post-retirement plans during 2019. Total contributions recognized as expense under all defined contribution plans for 2018 was $75 (2017 – $19).





NOTE 29 SHARE-BASED COMPENSATION

The Company has share-based compensation plans for eligible employees and directors as part of their remuneration package, including Stock Options, PSUs, Restricted Share Units ("RSUs") and Deferred Share Units ("DSUs"). In addition, in connection with the completion of the Merger, the Company assumed the legacy compensation plans and outstanding awards of PotashCorp and Agrium, which include Stock Options, PSUs, RSUs and Stock Appreciation Rights ("SARs").

Accounting Policies

The accounting for share-based compensation plans is fair value-based.

The grant date is the date the Company and the employee have a shared understanding of the terms and conditions of the arrangement, at which time the Company confers on the employee the right to cash equity instruments, provided the specified vesting conditions, if any, are met.

For those awards with performance conditions that determine the number of options or units to which employees will be entitled, measurement of compensation cost is based on the Company's best estimate of the outcome of the performance conditions.

For plans settled through the issuance of equity:

- fair value for stock options is determined on grant date using the Black-Scholes-Merton option-pricing model;
- fair value for PSUs is determined on grant date by projecting the outcome of performance conditions;
- compensation expense is recorded over the period the plans vest (corresponding increase to contributed surplus);
- forfeitures are estimated throughout the vesting period based on past experience and future expectations, and adjusted upon actual vesting; and
- when exercised, the proceeds and amounts recorded in contributed surplus are recorded in share capital.

For plans settled in cash:

- a liability is recorded based on the fair value of the awards each period;
- expense accrues from the grant date over the vesting period; and
- fluctuations in fair value of the award and related compensation expense are recognized in the period the fluctuation occurs.

Accounting Estimates and Judgments

Judgment involves determining:

- the grant date; and
- the fair value of share-based compensation awards at the grant date.

Estimation involves determining:

- stock option-pricing model assumptions as described in the weighted average assumptions table below;
- forfeiture rate for options granted;
- projected outcome of performance conditions for PSUs, including the relative ranking of the Company's total shareholder return, including expected dividends, compared with a specified peer group using a Monte Carlo simulation option-pricing model and the outcome of the Company's synergies relative to the target; and
- the number of dividend equivalent units expected to be earned.

PSUs vest based on the achievement of performance conditions over a three-year performance cycle. Changes to vesting assumptions may change based on non-market vesting conditions at the end of each reporting period.

RSUs are not subject to performance conditions and vest at the end of the three-year vesting period.

Changes to vesting assumptions are reflected in earnings immediately for compensation cost already recognized.

NOTE 29 SHARE-BASED COMPENSATION CONTINUED

Supporting Information

During the year ended December 31, 2018, the Company issued stock options under its 2018 stock option plan, PSUs and RSUs under its 2018 PSU/RSU plan and DSUs under its 2018 DSU plan, in each case to eligible employees and directors. In 2018, the outstanding legacy share-based compensation plans of PotashCorp and Agrium were also assumed by, and settled in or with reference to shares of, Nutrien on the basis of the exchange ratios described in Note 3.

As at December 31, 2018, the Company had the following awards available to be granted under the 2018 stock option plan, the 2018 PSU/RSU plan and the 2018 DSU plan:

Plan Features

Form of Payment	Eligibility	Granted	Vesting Period	Maximum Term	Settlement
Stock Options	Officers and eligible employees	Annually	25% per year over four years	10 years	Shares
PSUs 1	Officers and other eligible employees	Annually	On third anniversary of grant date	n/a	Cash
RSUs 2	Eligible employees	Annually	On third anniversary of grant date	n/a	Cash
DSUs	Non-executive directors	At the discretion of the Board of Directors	Fully vest upon grant	n/a	In cash on director's departure from Board of Directors

1 PSUs granted vest based on total shareholder return over a three-year performance cycle, compared to average total shareholder return of a peer group of companies over the same period. The value of each PSU granted is based on the average closing price of the Company's common shares on the NYSE during the last month of the three-year cycle.
2 RSUs granted are not subject to performance conditions and vest at the end of the three-year period.

n/a= not applicable

In addition, as at December 31, 2018, the Company had the following awards outstanding under one or more assumed legacy plans of PotashCorp and/or Agrium under which no new awards will be granted:

Plan Features

Form of Payment	Vesting Period	Maximum Term	Settlement
Stock Options	25% per year over four years 1 On third anniversary of grant date 2	10 years	Shares
PSUs 3,4	On third anniversary of grant date	n/a	Cash /Shares
RSUs 5	On third anniversary of grant date	n/a	Cash
SARs 6	25% per year over four years	10 years	Cash

1 Under the assumed legacy Agrium stock option plan.
2 Under the assumed legacy PotashCorp long-term incentive plan and performance option plans.
3 Under the assumed legacy PotashCorp long-term incentive plan, PSUs granted in 2017 and 2016 were comprised of three tranches, with each tranche vesting based on achievement of a combination of performance metrics over separate performance periods ranging from one to three years and such PSUs will be settled in shares for grantees who are subject to the Company's share ownership guidelines and in cash for all other grantees.
4 Under the assumed legacy Agrium long-term incentive plan, PSUs granted in 2017 and 2016 vest over a three-year performance cycle based on the achievement of performance metrics and will be settled in cash.
5 Under the assumed legacy Agrium long-term incentive plan, RSUs granted in 2017 and 2016 are not subject to performance conditions, vest at the end of the three-year period and will be settled in cash.
6 Under the assumed legacy Agrium SARs plan, effective January 1, 2015, tandem stock appreciation rights ("TSARs") were no longer issued to eligible officers and employees. TSARs granted in Canada prior to January 1, 2015 have similar terms and vesting conditions to SARs and also provide the holder with the ability to choose between (a) receiving the price of the Company's shares on the date of exercise in excess of the exercise price of the right and (b) receiving common shares by paying the exercise price of the right. The Company's past experience and future expectation is that substantially all option holders will elect to exercise their options as a SAR, surrendering their options and receiving settlement in cash. TSARs are included with the SARs disclosure.

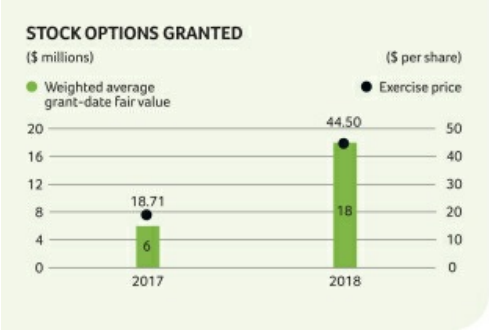
n/a= not applicable

NOTE 29 SHARE-BASED COMPENSATION CONTINUED

The weighted average fair value of stock options granted was estimated as of the date of the grant using the Black-Scholes-Merton option-pricing model. The weighted average grant date fair value of stock options per unit granted in 2018 was $9.71. The weighted average assumptions for both legacy companies by year of grant that impacted current year results are as follows:

		Year of Grant	
Assumptions	Based On	2018	2017 [1]
Exercise price per option	Quoted market closing price [2]	$ 44.50	$ 46.47
Expected annual dividend yield	Annualized dividend rate [3]	3.58%	2.93%
Expected volatility	Historical volatility [4]	29%	28%
Risk-free interest rate	Zero-coupon government issues [5]	2.79%	1.95%
Average expected life of options	Historical experience	7.5 years	6.2 years

1 The weighted average assumptions used by both legacy companies were presented due to the multi-year impact on share-based compensation expense.
2 Of common shares on the last trading day immediately preceding the date of the grant.
3 As of the date of grant.
4 Of the Company's stock over a period commensurate with the expected life of the option.
5 Implied yield available on equivalent remaining term at the time of the grant.





The exercise price is not less than the quoted market closing price of the Company's common shares on the last trading day immediately preceding the date of the grant, and an option's maximum term is 10 years. In general, options granted under assumed legacy PotashCorp performance option plans vested according to a schedule based on legacy PotashCorp's three-year average excess consolidated cash flow return on investment over the weighted average cost of capital.

A summary of the status of the stock option plans as at December 31, 2018 and 2017 and changes during the years ending on those dates is as follows:

	Number of Shares Subject to Option			Weighted Average Exercise Price		
	2018 (Pre-Merger)	2018 (Post-Merger)	2017	2018 (Pre-Merger)	2018 (Post-Merger)	2017
PotashCorp outstanding, beginning of year	17,170,654		19,470,014	$ 32.24		$ 31.15
PotashCorp shares converted to Nutrien shares (Conversion ratio 0.40)		6,868,262			$ 80.60	
Agrium outstanding shares—beginning of year	1,380,868			100.08		
Agrium shares converted to Nutrien shares (Conversion ratio 2.23)		3,079,321			44.88	
Balance – beginning of year		9,947,583	19,470,014		$ 69.54	$ 31.15
Granted		1,875,162	1,482,829		44.50	18.71
Exercised		(647,331)	(22,100)		42.86	17.78
Forfeited or cancelled		(1,793,077)	(1,221,314)		82.84	34.55
Expired		(338,100)	(2,538,775)		154.94	20.06
Outstanding, end of year		9,044,237	17,170,654		$ 58.41	$ 32.24

The aggregate grant-date fair value of all stock options granted during 2018 was $18. The average share price during 2018 was $51.80 per share.

NOTE 29 SHARE-BASED COMPENSATION CONTINUED

The following table summarizes information about stock options outstanding as at December 31, 2018 with expiry dates ranging from May 2019 to February 2028:

	Options Outstanding			Options Exercisable	
Range of Exercise Prices	Number	Weighted Average Remaining Life in Years	Weighted Average Exercise Price	Number	Weighted Average Exercise Price
$ 37.00 to $ 41.00	2,064,621	7	$ 38.59	966,606	$ 38.22
$ 44.00 to $ 52.00	3,996,110	8	46.88	1,542,489	48.75
$ 64.00 to $ 75.00	834,091	4	71.57	834,091	71.57
$ 80.00 to $ 88.00	959,275	4	82.30	959,275	82.30
$ 91.00 to $110.00	1,040,300	4	99.04	1,040,300	99.04
$130.00 to $131.00	149,840	2	130.78	149,840	130.78
	9,044,237	7	$ 58.41	5,492,601	$ 68.01

Other Plans

The Company offers its 2018 DSU plan to non-employee directors, which allows each to choose to receive, in the form of DSUs, all or a percentage of the director's fees, which would otherwise be payable in cash. Each DSU fully vests upon award but is distributed only when the director has ceased to be a member of the Board. Vested units are settled in cash based on the common share price at that time. As at December 31, 2018, the total number of DSUs held by participating directors was 456,848.

For all plans, share-based awards granted in 2018 and outstanding as at December 31, 2018 were:

	Units Granted	Units Outstanding
Stock Options	1,875,162	9,044,237
PSUs	619,799	1,752,281
RSUs	437,474	889,005
DSUs	61,062	456,848
SARs	–	2,388,402

Compensation expense for all employee and director share-based compensation plans was as follows:

	2018	2017
Stock Options	$ 23	$ 7
PSUs	83	16
RSUs	14	–
DSUs	–	3
SARs	(4)	–
	$ 116	$ 26

NOTE 30 RELATED PARTY TRANSACTIONS

The Company has a number of related parties with the most significant being Canpotex, key management personnel and post-employment benefit plans.

Accounting Policies

A person or entity is considered a related party if it is:

- an associate or joint venture of Nutrien;
- a member of key management personnel, consisting of the Company's directors and executives as disclosed in the Company's 2018 Annual Information Form;
- a post-employment benefit plan for the benefit of Nutrien employees; or
- a person that has significant influence over Nutrien.

Supporting Information

Sale of Goods

The Company sells potash from its Canadian mines for use outside Canada and the US exclusively to Canpotex. Sales are at prevailing market prices and are settled on normal trade terms. Sales to Canpotex for the year ended December 31, 2018 were $1,657 (2017 – $988). Canpotex's proportionate sales volumes by geographic area are shown in Note 4.

The receivable outstanding from Canpotex is shown in Note 14 and arose from sale transactions described above. It is unsecured and bears no interest. There are no provisions held against this receivable.

NOTE 30 RELATED PARTY TRANSACTIONS CONTINUED

Key Management Personnel Compensation
Compensation to key management personnel was comprised of:

	2018	2017
Salaries and other short-term benefits	$ 19	$ 14
Share-based compensation	53	9
Post-employment benefits	3	3
Termination benefits [1]	23	–
	$ 98	$ 26

1 Primarily includes costs incurred with respect to departure of five key management personnel in 2018 following completion of the Merger.

Transactions with Post-Employment Benefit Plans
Disclosures related to the Company's post-employment benefit plans are shown in Note 28.

NOTE 31 CONTINGENCIES AND OTHER MATTERS

Contingent liabilities, which are not recognized in the consolidated financial statements but may be disclosed, are possible obligations as a result of uncertain future events outside the control of the Company, or present obligations not recognized because the amount cannot be sufficiently measured or payment is not probable.

Accounting Policies

Generally, a contingent liability arises from past events and is:

- a possible obligation whose existence will be confirmed only by one or more uncertain future events or non-events outside the control of the Company; or
- a present obligation not recognized because it is not probable an outflow of resources will be required to settle the obligation, or a reliable estimate of the amount cannot be made.

Contingent liabilities are not recognized in the financial statements but are disclosed unless the possibility of an outflow of resources embodying economic benefits is remote. Where the Company is jointly and severally liable for an obligation, the part of the obligation that is expected to be met by other parties is treated as a contingent liability.

Accounting Estimates and Judgments

The following judgments are required to determine the Company's exposure to possible losses and gains related to environmental matters and other various claims and lawsuits pending:

- prediction of the outcome of uncertain events (i.e., being virtually certain, probable, remote or undeterminable);
- determination of whether recognition or disclosure in the consolidated financial statements is required; and
- estimation of potential financial effects.

Where no amounts are recognized, such amounts are contingent and disclosure may be appropriate. While the amount disclosed in the consolidated financial statements may not be material, the potential for large liabilities exists and, therefore, these estimates could have a material impact on the Company's consolidated financial statements.

Supporting Information

Canpotex
Nutrien is a shareholder in Canpotex, which markets Canadian potash outside of Canada and the United States. Should any operating losses or other liabilities be incurred by Canpotex, the shareholders have contractually agreed to reimburse it for such losses or liabilities in proportion to each shareholder's productive capacity. Through December 31, 2018, there were no such operating losses or other liabilities.

Mining Risk
The risk of underground water inflows and other underground risks is insured on a limited basis, subject to insurance market availability.

Legal and Other Matters
The Company is engaged in ongoing site assessment and/or remediation activities at a number of facilities and sites, and anticipated costs associated with these matters are added to accrued environmental costs in the manner described in Note 20.

Environmental Remediation

The Company has established provisions for environmental site assessment and/or remediation matters to the extent that expenses associated with those matters are considered likely to be incurred by the Company. Except for the uncertainties described below, the Company does not believe that its future obligations with respect to these matters are reasonably likely to have a material adverse effect on its consolidated financial statements.

Legal matters with significant uncertainties include the following:

- The US Environmental Protection Agency ("EPA") has an ongoing enforcement initiative directed at the phosphate industry related to the scope of an exemption for mineral processing wastes under the US Resource Conservation and Recovery Act ("RCRA"). This initiative affects the Conda Phosphate plant previously owned by Nu-West Industries, Inc. ("Nu-West"), a wholly owned subsidiary of Agrium, and the Nutrien phosphoric acid facilities in Aurora, North Carolina; Geismar, Louisiana; and White Springs, Florida. All of these facilities received US EPA notices of violation ("NOVs") that remain outstanding for alleged violations of RCRA and various other environmental laws. Notwithstanding the sale of the Conda Phosphate operations in January of 2018, Nu-West remains responsible for environmental liabilities attributable to its historic activities and for resolution of the NOVs. All of the facilities have been and continue to be involved in ongoing discussions with the US EPA, the US Department of Justice ("DOJ") and the related state agencies to resolve these matters. Due to the nature of the allegations, Nutrien is uncertain as to how the matters will be resolved. Based on settlements with other members of the phosphate industry, Nutrien expects that a resolution could involve any or all of the following: 1) penalties, which Nutrien currently believes will not be material; 2) modification of certain operating practices; 3) capital improvement projects; 4) providing financial assurance for the future closure, maintenance and monitoring costs for the phosphogypsum stack system; and, 5) addressing findings resulting from RCRA section 3013 site investigations undertaken voluntarily in response to the NOVs.
- In August 2015, the US EPA finalized amendments to the hazardous air pollutant emission standards for phosphoric acid manufacturing and phosphate fertilizer production ("Final Rule"). Required emissions testing at the Company's Aurora facility in 2016 indicated alleged exceedances of the mercury emission limits that were established by the Final Rule. The Company has communicated with the relevant agencies about this issue and petitioned the US EPA to reconsider the mercury emission limits. The facility also entered into an agreed order with the North Carolina Department of Environmental Quality in November 2016 to resolve the alleged mercury exceedances and provide a plan and schedule for evaluating alternative compliance strategies. Given the pending legal issues and the Company's evaluation of alternative compliance strategies, the resulting cost of compliance with the various provisions of the Final Rule cannot be predicted with reasonable certainty at this time.
- The Company operates in countries which are parties to the Paris Agreement adopted in December 2015 pursuant to the United Nations Framework Convention on Climate Change. Each country that is a party to the Paris Agreement submitted an Intended Nationally Determined Contribution ("INDC") toward the control of greenhouse gas emissions. The impacts on the Company's operations of these INDCs and other national and local efforts to limit or tax greenhouse gas emissions cannot be determined with any certainty at this time.

In addition, various other claims and lawsuits are pending against the Company in the ordinary course of business. While it is not possible to determine the ultimate outcome of such actions at this time, and inherent uncertainties exist in predicting such outcomes, it is the Company's belief that the ultimate resolution of such actions is not reasonably likely to have a material adverse effect on its consolidated financial statements.

The breadth of the Company's operations and the global complexity of tax regulations require assessments of uncertainties and judgments in estimating the taxes it will ultimately pay. The final taxes paid are dependent upon many factors, including negotiations with taxing authorities in various jurisdictions, outcomes of tax litigation and resolution of disputes arising from federal, provincial, state and local tax audits. The resolution of these uncertainties and the associated final taxes may result in adjustments to the Company's tax assets and tax liabilities.

The Company owns facilities that have been either permanently or indefinitely shut down. It expects to incur nominal annual expenditures for site security and other maintenance costs at certain of these facilities. Should the facilities be dismantled, certain other shutdown-related costs may be incurred. Such costs are not expected to have a material adverse effect on the Company's consolidated financial statements and would be recognized and recorded in the period in which they are incurred.

NOTE 32 ACCOUNTING POLICIES, ESTIMATES AND JUDGMENTS

Accounting Policies, Estimates and Judgments

The following table discusses the significant accounting policies, estimates, judgments and assumptions, in addition to those disclosed elsewhere in these consolidated financial statements, that the Company has adopted and made and how they affect the amounts reported in the consolidated financial statements. Certain of the Company's policies involve accounting estimates and judgments because they require the Company to make subjective or complex judgments about matters that are inherently uncertain and because of the likelihood that materially different amounts could be reported under different conditions or using different assumptions.

Topic	Accounting Policies	Accounting Estimates and Judgments
Principles of Consolidation	These consolidated financial statements include the accounts of the Company and entities controlled by it (its subsidiaries). Control is achieved by having each of: • power over the investee to direct the relevant activities of the investee; • exposure, or rights, to variable returns from involvement with the investee; and • the ability for the Company to use its power over the investee to affect the amount of the Company's returns. The existence and effect of potential voting rights that are currently exercisable or convertible are considered when assessing whether the Company controls another entity. Subsidiaries are fully consolidated from the date on which control is transferred to the Company. They are deconsolidated from the date that control ceases.	Judgment involves: • assessing control, including if the Company has the power to direct the relevant activities of the investee; and • determining the relevant activities and which party controls them. Consideration is given to: • voting rights; • the relative size and dispersion of the voting rights held by other shareholders; • the extent of participation by those shareholders in appointing key management personnel or board members; • the right to direct the investee to enter into transactions for the Company's benefit; and • the exposure, or rights, to variability of returns from the Company's involvement with the investee.

Principal (wholly owned) Operating Subsidiaries:	Location	Principal Activity
• Potash Corporation of Saskatchewan Inc.	Canada	Mining and/or processing of crop nutrient products and corporate functions
• Agrium Inc.	Canada	Manufacturer and distributor of crop nutrients and corporate functions
• Agrium Canada Partnership	Canada	Manufacturer and distributor of crop nutrients
• Agrium Potash Ltd.	Canada	Manufacturer and distributor of crop nutrients
• Agrium U.S. Inc.	United States	Manufacturer and distributor of crop nutrients
• Nutrien Ag Solutions Argentina S.A. (Argentina)	Argentina	Crop input retailer
• Cominco Fertilizer Partnership	United States	Manufacturer and distributor of crop nutrients
• Nutrien Ag Solutions, Inc.	United States	Crop input retailer
• Nutrien Ag Solutions (Canada) Inc.	Canada	Crop input retailer
• Landmark Operations Ltd.	Australia	Crop input retailer
• Loveland Products, Inc.	United States	Crop input developer and retailer
• PCS Sales (Canada), Inc.	Canada	Marketing and sales of the Company's products
• PCS Sales (USA), Inc.	United States	Marketing and sales of the Company's products
• PCS Phosphate Company, Inc. – PCS Purified Phosphates	United States	Mining and/or processing of phosphate products in the states of North Carolina, Illinois, Missouri and Nebraska

Topic	Accounting Policies			Accounting Estimates and Judgments
	• PCS Nitrogen Fertilizer, L.P.	United States	Production of nitrogen products in the states of Georgia and Louisiana, and of phosphate products in the state of Louisiana	
	• PCS Nitrogen Ohio, L.P.	United States	Production of nitrogen products in the state of Ohio	
	• PCS Nitrogen Trinidad Limited	Trinidad	Production of nitrogen products in Trinidad	
	• White Springs Agricultural Chemicals, Inc. (“White Springs”)	United States	Mining and processing of phosphate products in the state of Florida	
	Intercompany balances and transactions are eliminated on consolidation.			
Long-Lived Asset Impairment	At the end of each reporting period, the Company reviews conditions to determine whether there is any indication that an impairment exists that could potentially impact the carrying amounts of both its long-lived assets to be held and used and its identifiable intangible assets with finite lives. When such indicators exist, impairment testing is performed. Regardless, goodwill is tested at least annually (in the fourth quarter). To assess impairment, assets are grouped at the smallest levels for which there are separately identifiable cash inflows that are largely independent of the cash inflows from other assets or groups of assets (this can be at the asset or CGU level). Where impairment indicators exist for the asset or CGU: • the recoverable amount is estimated (the higher of FVLCD and value in use); • to assess value in use, the estimated future cash flows are discounted to their present value (using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset or CGU for which the estimates of future cash flows have not been adjusted); • the impairment loss is the amount by which the carrying amount exceeds its recoverable amount; and • the impairment loss is allocated first to reduce the carrying amount of any related goodwill and then pro rata to each asset in the unit (on the basis of the carrying amount). Non-financial assets, other than goodwill, that previously suffered an impairment loss are reviewed at each reporting date for possible reversal of the impairment.			Judgment involves: • identifying the appropriate asset or CGU; • determining the appropriate discount rate for assessing value in use; and • making assumptions about future sales, margins and market conditions over the long-term life of the assets or CGUs. The Company cannot predict if an event that triggers impairment will occur, when it will occur or how it will affect reported asset amounts. Asset impairment amounts previously recorded could be affected if different assumptions were used or if market and other conditions change. Such changes could result in non-cash charges materially affecting the Company’s consolidated financial statements. Impairments were recognized during 2018 and 2017 as shown in Note 16.

<table>
<tr><th>Topic</th><th>Accounting Policies</th><th>Accounting Estimates and Judgments</th></tr>
<tr><td>Fair Value Measurements</td><td>Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date, regardless of whether that price is directly observable or estimated using another valuation technique.

Fair value measurements are categorized into levels based on the degree to which inputs are observable and their significance:

<table><tr><th>Level 1</th><th>Level 2</th><th>Level 3</th></tr><tr><td>Unadjusted quoted prices (in active markets accessible at the measurement date for identical assets or liabilities).</td><td>Quoted prices (in markets that are not active or based on inputs that are observable for substantially the full term of the asset or liability).</td><td>Prices or valuation techniques that require inputs that are both unobservable and significant to the overall measurement.</td></tr></table></td><td>Fair value estimates:

• are at a point-in-time and may change in subsequent reporting periods due to market conditions or other factors;

• can be determined using multiple methods, which can cause values (or a range of reasonable values) to differ; and

• may require assumptions about costs/prices over time, discount and inflation rates, defaults and other relevant variables.

Determination of the level hierarchy is based on the Company's assessment of the lowest level input that is significant to the fair value measurement and is subject to estimation and judgment.</td></tr>
<tr><td>Restructuring Charges</td><td>Plant shutdowns, sales of business units or other corporate restructurings may trigger restructuring costs. Incremental costs for employee termination, contract termination and other exit costs are recognized as a liability and an expense when:

• a detailed formal plan for restructuring has been demonstrably committed to;

• withdrawal is without realistic possibility; and

• a reliable estimate can be made.</td><td>Restructuring activities are complex, can take several months to complete and usually involve reassessing estimates throughout the process.</td></tr>
<tr><td>Foreign Currency Transactions</td><td>Items included in the consolidated financial statements of the Company and each of its subsidiaries are measured using the currency of the primary economic environment in which the individual entity operates ("the functional currency").

Foreign exchange gains and losses resulting from the settlement of foreign currency transactions, and from the translation at period-end exchange rates of monetary assets and liabilities denominated in foreign currencies, are recognized and presented in the consolidated statements of earnings within other expenses, as applicable, in the period in which they arise.

Translation differences from non-monetary assets and liabilities carried at fair value are recognized as part of changes in fair value. Translation differences on non-monetary financial assets such as investments in equity securities classified as FVTOCI are included in OCI. Non-monetary assets measured at historical cost are translated at the average monthly exchange rate prevailing at the time of the transaction, unless the exchange rate in effect on the date that the transaction occurred is available and it is apparent that such rate is a more suitable measurement.</td><td>The consolidated financial statements are presented in US dollars, which was determined to be the functional currency of the Company and the majority of its subsidiaries.</td></tr>
</table>

Standards, Amendments and Interpretations Effective and Applied

The International Accounting Standards Board ("IASB") and IFRS Interpretations Committee ("IFRIC") have issued certain standards and amendments or interpretations to existing standards that were effective and applied by the Company. The standards disclosed below had a material impact or disclosure impact to the Company's consolidated financial statements.

Standard	Description	Impact
IFRS 15, Revenue from Contracts With Customers	Issued to provide guidance on the recognition of revenue from contracts with customers, including multiple-element arrangements and transactions not previously addressed comprehensively, and enhance disclosures about revenue.	Adopted using the modified retrospective method effective January 1, 2018, with required disclosures included in Note 4. No cumulative adjustment is required to the opening balance of retained earnings. The Company elected to use the practical expedient related to the adjustment of the promised consideration for the effects of a significant financing component as the expected period between when control over a promised good or service is transferred and when the customer pays for that good or service is less than 12 months. The Company sells certain retail products to end-customers with a right of return. Therefore, a refund liability and a right to the returned goods (included in inventory) are now recognized separately for the products expected to be returned.
IFRS 9, Financial Instruments	Issued to replace International Accounting Standards ("IAS") 39, providing guidance on the classification, measurement and disclosure of financial instruments and introducing a new hedge accounting model.	On adoption of IFRS 9, in accordance with transitional provisions, the Company has not restated prior periods but has reclassified the financial assets held at January 1, 2018, retrospectively, based on the new classification requirements and the characteristics of each financial instrument at the transition date. For financial liabilities, IFRS 9 retains most of the IAS 39 requirements. The Company did not designate any financial liabilities at fair value through profit or loss; therefore, the adoption of IFRS 9 did not impact the Company's accounting policies for financial liabilities. Refer to Note 13 for details. In addition, there was no change in the classification of the derivative instruments. The Company adopted the new general hedge accounting model under IFRS 9. This requires the Company to ensure that the hedge accounting relationships are aligned with its risk management objective and strategy and to apply a more qualitative and forward-looking approach to assess hedge effectiveness. The Company also reclassified realized cash flow hedges as a basis adjustment to finished goods inventory, recorded directly through accumulated other comprehensive income (net of income taxes).

Financial Instrument	Category under IAS 39	Category under IFRS 9
Financial assets		
Cash and cash equivalents	FVTPL	FVTPL
Receivables	Loans and receivables	Amortized cost
Derivatives	FVTPL	FVTPL
Derivatives designated as hedges	FV – hedging instrument	FV – hedging instrument
Prepaid expenses and other current assets – marketable securities	FVTPL	FVTPL
Investments – equity securities	Available-for-sale	FVTOCI
Investments – equity securities	FVTPL	FVTPL
Financial liabilities		
Short-term and long-term debt	Amortized cost	Amortized cost
Payables and accrued charges, excluding derivatives	Amortized cost	Amortized cost

IFRS 9 replaces the incurred loss model in IAS 39 with an expected credit loss model. This applies to financial assets measured at amortized cost. Under IFRS 9, credit losses are recognized earlier than under IAS 39. This change did not have a material impact to the Company's receivables.

Standards, Amendments and Interpretations Not Yet Effective and Not Applied

The IASB and IFRIC have issued the following standards, amendments or interpretations to existing standards that were not yet effective and not applied as at December 31, 2018.

Standard	Description	Expected Impact	Effective Date [1]
IFRS 16, Leases	Issued to supersede IAS 17 and related standards, this standard requires the Company to apply a new model for lessee accounting under which all leases will be recorded as a right-of-use ("ROU") asset on the balance sheet and a corresponding lease liability. Lease costs will be recognized in the income statement over the lease term as depreciation of the ROU asset and finance charges on the lease liability. ROU assets represent the right to use an asset for the lease term, and lease liabilities represent the obligation to make lease payments arising from a lease. ROU assets and liabilities are recognized at commencement of a lease based on the present value of lease payments over the lease term. The standard requires capitalizing the lease payments and expected residual value guarantees over the initial non-cancellable period plus periods covered by renewal, purchase and termination options where such are reasonably certain of exercise. The standard requires capitalization using the interest rate implicit in the lease at commencement, or if the implicit rate is not available, an incremental borrowing rate, adjusted for term, security, asset value, and the borrower's economic environment.	The Company has substantially completed its implementation, including review of contracts, aggregation of data to support the evaluation of the accounting impacts of applying the new standard and assessment of the need for changes to systems and processes, including internal controls. Adoption will have a material effect on the consolidated financial statements, resulting in increases in assets and liabilities in a subcategory of property, plant and equipment, ROU, and a new subcategory of long-term debt "Lease Liabilities". Compared with the existing accounting for operating leases, the classification and timing of expenses will change, causing a) reclassification of current operating lease payments out of cost of goods sold and expenses to depreciation and finance costs; and b) reclassification from cash flow from operating activities to cash flow from financing activities. Many commonly used financial ratios and performance metrics as currently defined will also change. The Company does not expect a material impact to consolidated net earnings. The Company's assessment will not result in recognition of any material non-lease components, additional lease components, residual value guarantees or purchase or termination options. The Company's assessment included: a) assessment of non-lease contracts for terms that resulted in control by the Company of an identified asset with a right to obtain substantially all the identified asset's economic benefits; and b) assessment of all relevant facts and circumstances in determining the lease term, including whether the Company was reasonably certain to exercise renewal or purchase options based on market and other business conditions, and costs and impacts of renewing. The adoption will result in an increase to property, plant and equipment and long-term debt of approximately $1 billion at January 1, 2019. Impact on future earnings is not expected to be significant.	January 1, 2019, applied using the modified retrospective method (which in the Company's case results in prospective application) measuring the ROU asset equal to the lease liability, and using the Company's incremental borrowing rate to determine the present value of future lease payments. The Company has chosen to apply practical expedients, including recognition exemptions for short-term and low-value leases, and to grandfather the lease definition on transition.

1 Effective date for annual periods beginning on or after the stated date.

The following amended standards and interpretations are not expected to have a material impact on the Company's consolidated financial statements:

- IFRIC 23, Uncertainty Over Income Tax Treatments
- Amendments to IAS 28, Long-term Interests in Associates and Joint Ventures
- Amendments to IAS 19, Employee Benefits
- Amendments to IFRS 3, Business Combinations
- Amendments to IAS 12, Income Taxes
- Amendments to IAS 23, Borrowing Costs

The following amended standards and interpretations are being reviewed by the Company to determine the potential impact on the Company's consolidated financial statements:

- Conceptual Framework for Financial Reporting
- IFRS 17, Insurance Contracts
- Amendments to IAS 1 and IAS 8, Definition of Material

NOTE 33 COMPARATIVE FIGURES

As described in Note 1, the comparative figures are PotashCorp only. To conform with Nutrien's new method of presentation, comparative figures were reclassified and additional 2017 information was provided, with no impact to net earnings, total assets and liabilities, and cash provided by operating activities.

The following additional information is retrospectively included in the 2017 comparatives to conform with current year presentation:

- Note 4 Segment Information, the first table on page 106 contains an analysis by segment of selling expenses, general and administrative expenses, other operating expenses and EBITDA.
- Note 25 Capital Management includes a line item for EBITDA and adjusted EBITDA was revised to conform with Nutrien's definition.

Refer to Notes 4, 5, 6, 7, 12 and 25 for further information specific to this additional information and the reclassifications within the tables.

Consolidated Statement of Earnings

	For the Year Ended December 31, 2017		
	Previously Reported	Reclassification Amounts	**Reported after Reclassifications**
Cost of goods sold	$ (3,335)	$ 19	$ (3,316)
Selling and administrative expenses	(214)	214	–
Selling expenses	–	(29)	(29)
General and administrative expenses	–	(185)	(185)
Provincial mining and other taxes	(151)	5	(146)
Merger and related costs	(84)	84	–
Other expenses	(17)	(108)	(125)
	$ (3,801)	$ –	$ (3,801)

Consolidated Statement of Comprehensive Income

	For the Year Ended December 31, 2017		
	Previously Reported	Reclassification Amounts	**Reported after Reclassifications**
Other	$ 3	$ 17	$ 20
Cash flow hedges			
Net fair value loss during the period	(17)	17	–
Reclassification of net gain to earnings	34	(34)	–
	$ 20	$ –	$ 20

Consolidated Statement of Cash Flows

	For the Year Ended December 31, 2017		
	Previously Reported	Reclassification Amounts	**Reported after Reclassifications**
Pension and other post-retirement benefits	$ 64	$ (64)	$ –
Net undistributed earnings of equity-accounted investees	(1)	1	–
Asset retirement obligations and accrued environmental costs	7	(7)	–
Other long-term liabilities and miscellaneous	21	70	91
	$ 91	$ –	$ 91

Consolidated Statements of Shareholders' Equity

	As at December 31, 2017		
	Previously Reported	Reclassification Amounts	**Reported after Reclassifications**
Other	$ (5)	$ (41)	$ (46)
Net loss on derivatives designated as cash flow hedges	(43)	43	–
Loss on currency translation of foreign operations	–	(2)	(2)
	$ (48)	$ –	$ (48)

	As at December 31, 2016		
	Previously Reported	Reclassification Amounts	**Reported after Reclassifications**
Other	$ (8)	$ (58)	$ (66)
Net loss on derivatives designated as cash flow hedges	(60)	60	–
Loss on currency translation of foreign operations	–	(2)	(2)
	$ (68)	$ –	$ (68)

Consolidated Balance Sheet

	As at December 31, 2017		
	Previously Reported	Reclassification Amounts	**Reported after Reclassifications**
Intangible assets	$ 166	$ (166)	$ –
Goodwill	–	97	97
Other intangible assets	–	69	69
	$ 166	$ –	$ 166
Investments in equity-accounted investees	$ 30	$ (30)	$ –
Available-for-sale investments	262	(262)	–
Investments	–	292	292
	$ 292	$ –	$ 292
Short-term debt and current portion of long-term debt	$ 730	$ (730)	$ –
Short-term debt	–	730	730
	$ 730	$ –	$ 730
Payables and accrued charges	$ 807	$ 29	$ 836
Current portion of derivative instrument liabilities	29	(29)	–
	$ 836	$ –	$ 836
Other non-current liabilities	$ 51	$ 35	$ 86
Derivative instrument liabilities	35	(35)	–
	$ 86	$ –	$ 86

Exhibit 99.4

KPMG LLP
205 5th Avenue SW
Suite 3100
Calgary AB T2P 4B9
Tel (403) 691-8000
Fax (403) 691-8008
www.kpmg.ca

Consent of Independent Registered Public Accounting Firm

The Board of Directors of Nutrien Ltd.

We consent to the use of our reports, each dated February 20, 2019, with respect to the consolidated financial statements and the effectiveness of internal control over financial reporting for Nutrien Ltd. included in this Annual Report on Form 40-F.

We also consent to the incorporation by reference of such reports in the registration statements on Form S-8 of Nutrien Ltd. (File Nos. 333-222384, 333-222385 and 333-226295) and Form F-10 of Nutrien Ltd. (File No. 333-223273).

/s/ KPMG LLP
Chartered Professional Accountants

February 27, 2019
Calgary, Canada

Exhibit 99.5

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in Registration Statement on Form S-8 (File Nos. 333-226295, 333-222384 and 333-222385) and Registration Statement on Form F-10 (File No. 333-223273) and to the use of our report dated February 20, 2018 relating to the consolidated financial statements of Potash Corporation of Saskatchewan Inc. and subsidiaries (before the effects of the adjustments to retrospectively reclassify certain comparative information and to provide additional disclosures to conform to the current year presentation as discussed in Note 33 to the consolidated financial statements of Nutrien Ltd.) appearing in this Annual Report on Form 40-F of Nutrien Ltd. for the year ended December 31, 2018.

/s/ Deloitte LLP
Chartered Professional Accountants
Saskatoon, Canada
February 27, 2019

Exhibit 99.6

CERTIFICATION
REQUIRED BY RULE 13a-14(a) OR RULE 15d-14(a) OF THE
SECURITIES EXCHANGE ACT OF 1934, AS ADOPTED PURSUANT TO
SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Charles V. Magro, certify that:

1. I have reviewed this Annual Report on Form 40-F of Nutrien Ltd.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in *Exchange Act* Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in *Exchange Act* Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   (a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   (a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 27, 2019

By: /s/ Charles V. Magro
Charles V. Magro
President and Chief Executive Officer

Exhibit 99.7

CERTIFICATION
REQUIRED BY RULE 13a-14(a) OR RULE 15d-14(a) OF THE
SECURITIES EXCHANGE ACT OF 1934, AS ADOPTED PURSUANT TO
SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Pedro Farah, certify that:

1. I have reviewed this Annual Report on Form 40-F of Nutrien Ltd.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in *Exchange Act* Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in *Exchange Act* Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   (a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   (a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 27, 2019

By: /s/ Pedro Farah
Pedro Farah
Executive Vice President and Chief Financial Officer

Exhibit 99.8

CERTIFICATIONS

Pursuant to Section 906 of the *Sarbanes-Oxley Act of 2002* (subsections (a) and (b) of Section 1350, Chapter 63 of Title 18, *United States Code*), each of the undersigned officers of Nutrien Ltd. (the "Company"), does hereby certify, to such officer's knowledge, that:

The Annual Report on Form 40-F for the year ended December 31, 2018 (the "Form 40-F"), of the Company fully complies with the requirements of Section 13(a) or 15(d) of the *Securities Exchange Act of 1934* and information contained in the Form 40-F fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: February 27, 2019

By: /s/ Charles V. Magro
Charles V. Magro
President and Chief Executive Officer

Date: February 27, 2019

By: /s/ Pedro Farah
Pedro Farah
Executive Vice President and Chief Financial Officer

Exhibit 99.9

February 27, 2019

Nutrien Ltd.

Ladies and Gentlemen:

Re: Annual Report on Form 40-F

Reference is made to the Annual Report on Form 40-F (the "Annual Report") filed by Nutrien Ltd. under the Securities Exchange Act of 1934, as amended.

I, Craig Funk, B.Sc., M.Sc., P. Eng., P.Geo., a qualified person, am responsible for preparing or supervising the preparation of (1) the technical report entitled "National Instrument 43-101 Technical Report on Allan Potash Deposit (KL 112R A), Saskatchewan, Canada" dated effective December 31, 2018 (the "Allan Technical Report"); (2) the technical report entitled "National Instrument 43-101 Technical Report on Cory Potash Deposit (KL 103 B), Saskatchewan, Canada" dated effective December 31, 2018 (the "Cory Technical Report"); (3) the technical report entitled "National Instrument 43-101 Technical Report on Lanigan Potash Deposit (KLSA 001 C), Saskatchewan, Canada" dated effective December 31, 2018 (the "Lanigan Technical Report"); and (4) the technical report entitled "National Instrument 43-101 Technical Report on Rocanville Potash Deposit (KL 305), Saskatchewan, Canada" dated effective December 31, 2018 (the "Rocanville Technical Report", together with the Allan Technical Report, the Cory Technical Report and the Lanigan Technical Report, the "Technical Reports").

I hereby consent to the inclusion in the Annual Report of references to and information derived from the Technical Reports and to the use of my name therein. I hereby also consent to the incorporation by reference of such information in the registration statements on Form S-8 (File Nos. 333-222384, 333-222385 and 333-226295) and on Form F-10 (File No. 333-223273) of Nutrien Ltd.

Yours truly,

/s/ Craig Funk

Craig Funk, B.Sc., M.Sc., P. Eng., P.Geo.
Director, Earth Science – Engineering, Technology & Capital
Nutrien Ltd.

Exhibit 99.10

February 27, 2019

Nutrien Ltd.

Ladies and Gentlemen:

Re: Annual Report on Form 40-F

Reference is made to the Annual Report on Form 40-F (the "Annual Report") filed by Nutrien Ltd. under the Securities Exchange Act of 1934, as amended.

I, A. Dave Mackintosh, B.Sc., P. Geo., a qualified person, am responsible for preparing or supervising the preparation of sections 1-3, 13, 17 and 24-27 of the technical report entitled "National Instrument 43-101 Technical Report on Vanscoy Potash Operations, Vanscoy, Saskatchewan, Canada" dated effective October 31, 2014 (the "Technical Report").

I hereby consent to the inclusion in the Annual Report of references to and information derived from the Technical Report and to the use of my name therein. I hereby also consent to the incorporation by reference of such references and information in the registration statements on Form S-8 (File Nos. 333-222384, 333-222385 and 333-226295) and on Form F-10 (File No. 333-223273) of Nutrien Ltd.

Yours truly,

/s/ A. Dave Mackintosh

A. Dave Mackintosh, B.Sc., P. Geo.

Exhibit 99.11

February 27, 2019

Nutrien Ltd.

Ladies and Gentlemen:

Re: Annual Report on Form 40-F

Reference is made to the Annual Report on Form 40-F (the "Annual Report") filed by Nutrien Ltd. under the Securities Exchange Act of 1934, as amended.

The undersigned hereby consents to the use of its name and references to the technical report entitled "National Instrument 43-101 Technical Report on Vanscoy Potash Operations, Vanscoy, Saskatchewan, Canada" dated effective October 31, 2014 (the "Technical Report"), and the inclusion of extracts from, or a summary of, the Technical Report in the Annual Report. The undersigned hereby also consents to the incorporation by reference of such information in the registration statements on Form S-8 (File Nos. 333-222384, 333-222385 and 333-226295) and on Form F-10 (File No. 333-223273) of Nutrien Ltd.

Yours truly,
ADM Consulting Limited

/s/ A. Dave Mackintosh

A. Dave Mackintosh, B. Sc., P. Geo.
President

Exhibit 99.12

February 27, 2019

Nutrien Ltd.

Ladies and Gentlemen:

Re: Annual Report on Form 40-F

Reference is made to the Annual Report on Form 40-F (the "Annual Report") filed by Nutrien Ltd. under the Securities Exchange Act of 1934, as amended.

I, Michael Ryan Bartsch, P. Eng., a qualified person, am responsible for preparing or supervising the preparation of sections 1-5, 12, 16 and 19-27 of the technical report entitled "National Instrument 43-101 Technical Report on Vanscoy Potash Operations, Vanscoy, Saskatchewan, Canada" dated effective October 31, 2014 (the "Technical Report").

I hereby consent to the inclusion in the Annual Report of references to and information derived from the Technical Report and to the use of my name therein. I hereby also consent to the incorporation by reference of such references and information in the registration statements on Form S-8 (File Nos. 333-222384, 333-222385 and 333-226295) and on Form F-10 (File No. 333-223273) of Nutrien Ltd.

Yours truly,

/s/ Michael Ryan Bartsch

Michael Ryan Bartsch, P.Eng.

Exhibit 99.13

February 27, 2019

Nutrien Ltd.

Ladies and Gentlemen:

Re: Annual Report on Form 40-F

Reference is made to the Annual Report on Form 40-F (the "Annual Report") filed by Nutrien Ltd. under the Securities Exchange Act of 1934, as amended.

I, Dennis William Aldo Grimm, P. Eng., a qualified person, am responsible for preparing or supervising the preparation of sections 1-3, 13, 17 and 24-27 of the technical report entitled "National Instrument 43-101 Technical Report on Vanscoy Potash Operations, Vanscoy, Saskatchewan, Canada" dated effective October 31, 2014 (the "Technical Report").

I hereby consent to the inclusion in the Annual Report of references to and information derived from the Technical Report and to the use of my name therein. I hereby also consent to the incorporation by reference of such references and information in the registration statements on Form S-8 (File Nos. 333-222384, 333-222385 and 333-226295) and on Form F-10 (File No. 333-223273) of Nutrien Ltd.

Yours truly,

/s/ Dennis William Aldo Grimm

Dennis William Aldo Grimm, P.Eng.

Exhibit 99.14

Information concerning mine safety violations or other regulatory matters required by Section 1503(a) of the Dodd-Frank Wall Street Reform and Consumer Protection Act.

The following table reflects citations, orders and notices issued to us by the United States Mine Safety and Health Administration (the "MSHA") for the year ended December 31, 2018 (the "Reporting Period") and contains certain additional information as required by Section 1503(a) and Item 104 of Regulation S-K of the United States Securities and Exchange Commission, including information regarding mining-related fatalities, proposed assessments from the MSHA and legal actions ("Legal Actions") before the United States Federal Mine Safety and Health Review Commission ("FMSHRC"), an independent adjudicative agency that provides administrative trial and appellate review of legal disputes arising under the United States Federal Mine Safety and Health Act of 1977, as amended by the Mine Improvement and New Emergency Response Act of 2006 (the "Act").

Included below is the information required by Section 1503(a) with respect to our facilities at Aurora, North Carolina (MSHA Identification Number 31-00212) ("Aurora"), Rasmussen Ridge, Idaho (MHSA Identification Number 10-02177) ("Rasmussen Ridge") and White Springs, Florida (MSHA Identification Number 08-00798) ("White Springs") for the Reporting Period:

		Aurora	Rasmussen Ridge(1)	White Springs
(a)	the total number of alleged violations of mandatory health or safety standards that could significantly or substantially contribute to the cause and effect of a coal or other mine safety or health hazard under Section 104 of the Act for which a citation was received from the MSHA	2	0	6
(b)	the total number of orders issued under Section 104(b) of the Act	0	0	0
(c)	the total number of citations and orders issued under Section 104(d) of the Act for unwarrantable failures of the Company to comply with mandatory health or safety standards	0	0	0
(d)	the total number of flagrant violations under Section 110(b)(2) of the Act	0	0	0
(e)	the total number of imminent danger orders issued under Section 107(a) of the Act	0	0	0
(f)	the total value (in dollars) of proposed assessments from the MSHA under the Act	$ 1,965	$ 0	$ 6,452
(g)	the total number of mining-related fatalities	0	0	0
(h)	received notice from the MSHA of a pattern of violations under Section 104(e) of the Act	No	No	No
(i)	received notice from the MSHA of potential to have a pattern of violations under Section 104(e) of the Act	No	No	No
(j)	the total number of Legal Actions pending as of the last day of the Reporting Period	1	0	0
(k)	Legal Actions initiated during the Reporting Period	0	0	0
(l)	Legal Actions resolved during the Reporting Period	0	0	0

(1) The information provided is from January 1, 2018 through the sale of Rasmussen Ridge mine to Itafos Conda LLC on January 12, 2018.