

National Topographic System 1:50 000 Map Sheets:
Clearwater Sub-Property: 82O09; 82O16; 82P12; 82P13; 82P14; 83A04; 83B01
Exshaw Sub-Property: 83A02; 83A03; 83A06; 83A07

**GEOLOGICAL INTRODUCTION TO E3 METALS CORP. CLEARWATER
AND EXSHAW LITHIUM-BRINE PROPERTIES
IN SOUTH-CENTRAL ALBERTA**

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Table of Contents

1.0 Summary 1

2.0 Introduction 6

3.0 Reliance on Other Experts..... 10

4.0 Property Description and Location 10

 4.1 Property Rights and Maintenance 11

 4.2 Coexisting Oil, Gas and Oil Sands Rights 15

 4.3 Permitting and Other Factors/Risks..... 15

5.0 Accessibility, Climate, Local Resources, Infrastructure and Physiography..... 17

6.0 History 18

 6.1 Government of Alberta Discovery of Lithium-Bearing Devonian Formation Water in Alberta 18

 6.2 Summary of Devonian-Aged Oil and Gas Production within E3 Metals Permits..... 20

 6.3 Historical Geochemical Results from Devonian Oil and Gas Wells within the E3 Metals Permits 24

 6.4 Historical Geochemical Results from Devonian Oil and Gas Wells Adjacent to the E3 Metals Permits 28

 6.5 Historical Geochemical Result Summary 29

7.0 Geological Setting and Mineralization 29

 7.1 Precambrian Geology 32

 7.2 Phanerozoic Geology..... 32

 7.3 Late Tertiary – Quaternary Geology 34

 7.4 Structural Geology..... 34

 7.5 Mineralization 35

8.0 Deposit Types 37

9.0 Exploration 38

10.0 Drilling 38

11.0 Sample Preparation, Analysis and Security 38

12.0 Data Verification..... 38

 12.1 Verification of Historical Government-Published Geochemical Formation Water Data 38

 12.2 Confirmation of Current Well Production 39

13.0 Mineral Processing and Metallurgical Testing..... 42

14.0 Mineral Resource Estimate..... 42

23.0 Adjacent Properties..... 42

24.0 Other Relevant Data and Information..... 44

 24.1 Preliminary Water Deliverability Study..... 44

 24.2 Discussion on the Extraction of Lithium from Alberta Oilfield Formation Water 45

 24.2.1 Historical Test Work: Ultrasonic Cavitation 46

 24.2.2 Historical Test Work: Chemical Extraction Methods 46

 24.2.3 Current Test Work: Lithium-Brine Beneficiation (MGX Minerals Inc.) 47

25.0 Interpretation and Conclusions..... 48

26.0 Recommendations 51

 26.1 Phase One Exploration Work..... 51

 26.2 Phase Two Exploration Work..... 52

27.0 References..... 54

28.0 Certificates of Authors 58

Tables

Table 1. Summary of Phase 1 and Phase 2 recommendations to advance the Clearwater and Exshaw oilfield lithium-brine properties. 5

Table 2. Industrial and Metallic Mineral Permit descriptions for E3 Metals lithium-brine properties. 12

Table 3. Representative maximum lithium chemical compositions of Cambrian to Triassic aged aquifers as reported in Government of Alberta studies. 20

Table 4. Historical geochemical summary for wells analyzed within the E3 Metals permits. 26

Table 5. Regional stratigraphy/hydrostratigraphy of Alberta..... 30

Table 6. Cumulative 2015 production values of water, gas and crude oil for selected Leduc-producing wells within the Clearwater and Exshaw claim boundaries.. 40

Table 7. Results of beneficiation bench scale test work conducted by MGX Minerals Inc. on oilfield lithium-brine from their Sturgeon Lake Property in west-central Alberta..... 48

Table 8. Summary of Phase One and Phase Two recommendations to advance the Clearwater and Exshaw oilfield lithium-brine properties..... 52

Figures

Figure 1. E3 Metals Metallic and Industrial Mineral permits in south-central Alberta.. 7

Figure 2. Location, access and permit agreement numbers at the Clearwater Sub-Property.... 13

Figure 3. Location, access and permit agreement numbers at the Exshaw (East and West) Sub-Property..... 14

Figure 4. Oil and gas well activity status within the Clearwater and Exshaw property areas. 16

Figure 5. Summary of active Devonian well production in the Clearwater Property. 22

Figure 6. Summary of active Devonian well production on the Exshaw sub-properties. 23

Figure 7. Devonian lithium-brine occurrences within the E3 Metals permits..... 25

Figure 8. Devonian lithium-brine occurrences in the general area of the E3 Metals permits. Lithium sample points with >75 mg/L Li are labelled. 27

Figure 9. Regional inferred basement geology of the properties..... 31

Figure 10. Regional bedrock geology of the Clearwater and Exshaw properties. 33

Figure 11. The extent of the Cooking Lake Platform, Devonian reefs, and hydrocarbon resources beneath the Clearwater and Exshaw properties. 36

Figure 12. Cumulative 2015 (A) and lifetime (B) water, crude oil and gas production from selected Devonian-producing wells within the Clearwater and Exshaw permits..... 41

Figure 13. Adjacent properties in the vicinity of the properties..... 43

1.0 Summary

E3 Metals Corp. (formerly Savannah Gold Corp.; “E3 Metals”) has commissioned APEX Geoscience Ltd. to prepare a National Instrument 43-101 Technical Report. The intent of the report is to introduce their lithium oilfield brine properties in Alberta, Canada.

On May 8, 2017, E3 Metals entered into a Share Exchange Agreement with 1975293 Alberta Ltd. In anticipation of closing the agreement, Savannah Gold Corp. changed its name to E3 Metals Corp. On closing of the Share Exchange Agreement E3 Metals will acquire all outstanding securities of 1975293 Alberta Ltd., including the 100% interest acquisition of the Clearwater and Exshaw properties. The properties are comprised of 10 Alberta Metallic and Industrial Mineral Permits totaling 87,965 hectares (879.65 square kilometres) that can be further sub-divided into three separate areas, or groups of contiguous permits:

1. Clearwater Sub-Property: 7 contiguous permits totalling 62,540.1 hectares;
2. Exshaw (East) Sub-Property: 2 contiguous permits totalling 16,628.4 hectares; and
3. Exshaw (West) Sub-Property: a single permit of 8,796.1 hectares.

In Alberta, rights to metallic and industrial minerals, to bitumen (oil sands), to coal and to oil/gas are regulated under separate statutes, which collectively make it possible for several different ‘rights’ to coexist and be held by ‘different grantees’ over the same geographic location. In Alberta, lithium is considered a metal or mineral, and therefore, the statutes fall under industrial and metallic mineral legislation that is regulated and administered by Alberta Energy. Accordingly, the Alberta Metallic and Industrial Mineral Permits grant E3 Metals the exclusive right to explore for metallic and industrial minerals for seven consecutive two-year terms (total of fourteen years), subject to biannual assessment work.

All three E3 Metals properties are located in south-central Alberta. With respect to the closest urban center, the City of Red Deer, the properties are located 25 km south (Clearwater), 25 km east (Exshaw West) and 60 km east (Exshaw East) of the city. Access to the properties is facilitated by decade’s worth of petro-production that enables ground vehicle access via a well-maintained network of paved and all-weather roads.

The E3 Metals permits have been staked for their oilfield lithium-brine (“Li-brine”) potential. To summarize this deposit type, formation water or brine associated with some of the world’s oilfields are known to contain medium to highly anomalous concentrations of lithium and are therefore, considered potential sources for large tonnages of lithium. In Alberta, lithium-enriched (>50 mg/L) formation water, or brine, has been historically documented by government and industry to occur within the Devonian Beaverhill Lake (Swan Hills), Winterburn (Nisku), Woodbend (Leduc) and

Wabamun groups (formations) of the Alberta Basin. This package of strata in Alberta is world-renowned for its oil and gas resources and is collectively known as the Devonian petroleum system, which was discovered at the Leduc No. 1 well near Leduc, Alberta, Canada on February 13, 1947. The vast hydrocarbon reserves within Alberta's Devonian strata are attributed to the abundance of mature, excellent to good quality reservoir rocks.

By nature, saline brine coexists with oil/gas in these highly porous and permeable reservoirs (or aquifers). As such, brine at the Clearwater and Exshaw properties is accessible via oil/gas wells that have pumped the brine (along with hydrocarbons) from Devonian aquifers situated at depths of between approximately 1,500 m to 3,500 m below the earth's surface. The brine is essentially waste water associated with hydrocarbon products. Currently, the extracted water is treated to separate and remove petroleum products and then is re-injected back into subsurface formations. It is conceivable that existing water processing procedures could be modified to extract lithium and other elements from the Devonian aquifer systems; however at this stage of exploration there is no guarantee that lithium and associated elements (e.g., potassium, boron, and bromine) will be economically extractable from the brine with current technology.

E3 Metals has yet to conduct any brine sampling, analytical work, drilling, recovery test work, or mineral resource estimate work at the properties. Accordingly, the intent and purpose of this Technical Report is to prepare a geological introduction of E3 Metals Clearwater and Exshaw properties that is in accordance with the Canadian Securities Administration's ("CSA's") National Instrument 43-101 ("NI 43-101") and amended and adopted Canadian Institute of Mining, Metallurgy and Petroleum ("CIM") Definition Standards (May 10, 2014). The effective date of this Technical Report is 18 May 2017.

The Clearwater and Exshaw properties represent an early-stage exploration project, and at present, E3 Metals is relying on historical brine geochemical fluid data and petroleum production data to assess the Li-brine potential. These 1970's to 2010's government and industry formation water studies have reported that anomalous values of lithium and other elements occur in Devonian aquifers associated with carbonate buildups in the Leduc Formation of the Woodbend Group, the Swan Hills Formation of the Beaverhill Lake Group, the Nisku Formation of the Winterburn Group, and the Wabamun Group; all of which are Devonian in age. In the case of the Clearwater and Exshaw properties, brine from the Leduc, Nisku and Wabamun aquifers is pumped to the surface from depths of more than 1,500 m as part of hydrocarbon production associated with the Devonian petroleum system.

As exploration work has yet to be conducted by E3 Metals on the Property, the History Section delivers a significant component of this Technical Report and:

1. Provides an overview of the Devonian petroleum system, which underlies E3 Metals Clearwater and Exshaw properties; and

2. Summarizes brine geochemical fluid results from historical oil and gas formation water sampling and analyses.

Historical compilation shows that the Winterburn Group (Nisku Formation), Woodbend Group (Leduc Formation) and Wabamun Group contain the highest concentrations of Li-brine in the area of the properties. Ten wells within the Clearwater and Exshaw properties yield lithium values of between 34 and 74 mg/L lithium. The highest – within property – Li-brine occurs in wells with petro-production from the Nisku and Leduc formations. Specific areas of interest, based on historical assay data, include: Haynes and Joffre fields of the Exshaw West property; Fenn-Big Valley field of the Exshaw East Property; and Wimborne field of the Clearwater property.

Additionally, data from wells, which occur directly adjacent to the E3 Metals Clearwater and Exshaw properties in the Lone Pine Creek, Clive and Erskine oilfields, have historical Devonian formation water assays that yielded >120 mg/L Li. Note: Li-brine concentrations documented on adjacent properties are not necessarily indicative of the mineralization on the properties that are the subject of this Technical Report. It is important to point out, however, that these adjacent-property lithium-enriched brine assays occur in aquifers that underlie both the adjacent property and E3 Metals properties. Accordingly, these aquifers should be considered prospective for future test-assaying to determine whether these historical Li-brine contents extend underneath E3 Metals properties.

Another observation is that there has generally been a limited number of Devonian brine samples collected, analyzed and report within the E3 Metals permit area. For example, the Innisfail and Garrington fields (Clearwater), Mikwan (Exshaw West), and Ewing Lake and Fenn West fields (Exshaw East) do not seem to have had any Devonian brine testing to date.

By way of comparison, lithium values of brine associated with Cretaceous-aged oil and gas production within the E3 Metals properties is generally below the limit of detection. This observation unequivocally shows that the Devonian brine should be the subject of any Li-brine targeting going forward by E3 Metals. The Devonian aquifers are situated at prospective depths of between 1,500 and 3,500 m, and the formation water is accessible via producing petroleum wells that pump the brine to the earth's surface – essentially as waste water associated with hydrocarbon production.

Lastly, the Devonian petroleum system at the Clearwater and Exshaw properties represents a mature petroleum field, and therefore, generates large volumes of brine. That is, in the early history of this oilfield, most wells started out pumping hundreds to thousands of barrels of petroleum products per day, which required little active pumping to extract. However, at present most of the wells produce excessive amounts of formation water in comparison to petroleum products due to increased pumping to generate crude oil. With respect to ongoing water production, the E3 Metals properties contain at least 5 actively producing wells (as of March 2017) that had known historical

Li-brine values of >50 mg/L Li. These wells produced 143,698 m³ of water in 2015 (the last full year of available data).

It is concluded that the Devonian petroleum system underlying E3 Metals Clearwater and Exshaw properties yield historical lithium-enriched brine and that petro-operators in the area are active and continue to produce petroleum with large volumes of waste formation water.

A Qualified Person site inspection on E3 Metals Clearwater and Exshaw properties was completed by the senior author of this Technical Report on March 14th 2017. Because the Li-brine occurs at a depth of >1,500 m below surface, it was not possible to view 'mineralization' during the site inspection. Rather, the author was able to observe that several petro-companies are actively producing oil and gas from wells within the boundaries of the Property. For example, active petro-operations observed by the author during the site visit included producing wells/plants in the Innisfail, Garrington Wimborne oil/gas fields (Clearwater Sub-Property), and Stettler, Fenn-Big Valley and Fenn West oil fields (Exshaw East Sub-Property).

To advance the project, E3 Metals will need to gain access to the brine, either through drilling their own wells or using third party wells, to: verify lithium-enrichment of the brine; conduct bench-scale testing of existing technologies to prove viability of the resource; and perform mineral resource estimations. Accordingly, the authors recommend a two-phased exploration approach with a total estimated cost of CDN\$540,000 (Table 1).

Recommended Phase One work involves negotiating access to the formation waters with the oil and gas companies, well target delineation and a formation water geochemical sampling program. The sampling program will have the objectives of designing a Geographical Information System to delineate favourable brine-producing wells and collecting Devonian brine from throughout the properties to: 1) verify historical Li-brine enrichment; 2) fully quantify the property areas as to which oil/gas fields may have the highest concentrations of specialty elements; and 3) collect water samples for bench-scaled test work focused on the extraction and recovery of lithium and other elements of interest. The sampling program should collect approximately 35-60 formation water samples from up to 20 separate wells across all permit areas (if possible). In addition to analytical samples, the program should include optimally sized samples to initiate element extraction/recovery test work as part of Phase Two work. The total of the Phase One exploration work is estimated at CDN\$105,000 (Table 1).

Pending positive Li-brine assay results of the Phase One sampling/analytical program, the objective of Phase Two program is to conduct: aquifer characterization and geological investigations; mineral separation test work; land management planning; and to prepare a Li-brine mineral resource estimate at the Clearwater and Exshaw properties. Aquifer geometry and hydrogeologic characterization of the aquifer using publicly available data (e.g., porosity, permeability, brine composition, and transmissivity) are required to conduct a proper evaluation of the brine resource.

Laboratory test work should be conducted to optimize the elemental recovery process toward determination of a reasonable prospect for eventual economic extraction. Initial metal recovery experiments should focus on those techniques that eliminate traditional methods of invasive mining or evaporation ponds that require significant land, water, and energy use. It is also recommended that Phase 2 include preliminary land management planning studies including investigation into surface dispositions and environmental studies toward potential future pilot plant operations. The total cost of the Phase Two exploration work is estimated at CDN\$435,000.

Table 1. Summary of Phase 1 and Phase 2 recommendations to advance the Clearwater and Exshaw oilfield lithium-brine properties.

Phase	Item	Description	Cost Estimate (CDN\$)	Totals (CDN\$)
Phase One	Access management planning	Negotiate formationwater access with the oil and gas companies	\$5,000	
	Sampling/analytical program	GIS sampling delineation program followed by collecting 35-60 formation water samples from up to 20 separate wells for geochemical analysis	\$100,000	\$105,000
Phase Two	Aquifer characterization and geological investigations	Define the aquifer geometry and determination of the specific yield of the aquifer	\$200,000	
	Recoverability test work	Laboratory-scaled test work to explore and optimize recovery processes	\$150,000	
	Land management planning	Initiate surface disposition and environmental studies	\$35,000	\$435,000
	Mineral resource estimations and NI 43-101 Technical Report	Using the results from Phase One work, in conjunction with reservoir characterization, prepare maiden inferred resource estimations	\$50,000	
			Total	\$540,000

2.0 Introduction

This Technical Report was prepared by APEX Geoscience Ltd. (“APEX”) for E3 Metals Corp. (“E3 Metals”, or the “Company”), a mineral exploration and development company focused on developing lithium-brine (“Li-brine”) projects. The introductory report focuses on E3 Metals Clearwater and Exshaw properties, which are located in south-central Alberta (Figure 1). The City of Red Deer represents the largest urban center near the properties, and the individual sub-properties are located approximately 25 km south (Clearwater), 25 km east (Exshaw West) and 60 km east (Exshaw East) of the city.

On May 8, 2017, E3 Metals entered into the Share Exchange Agreement with 1975293 Alberta Ltd. (“AlbertaCo”) and AlbertaCo’s securities holders, whereby all outstanding securities of AlbertaCo will be exchanged for securities of E3 Metals (the “Transaction”). In anticipation of closing the Transaction, Savannah Gold Corp. changed its name to E3 Metals Corp. on May XX, 2017. On closing of the Transaction E3 Metals will acquire all outstanding securities of AlbertaCo and AlbertaCo will become a wholly owned subsidiary of E3 Metals.

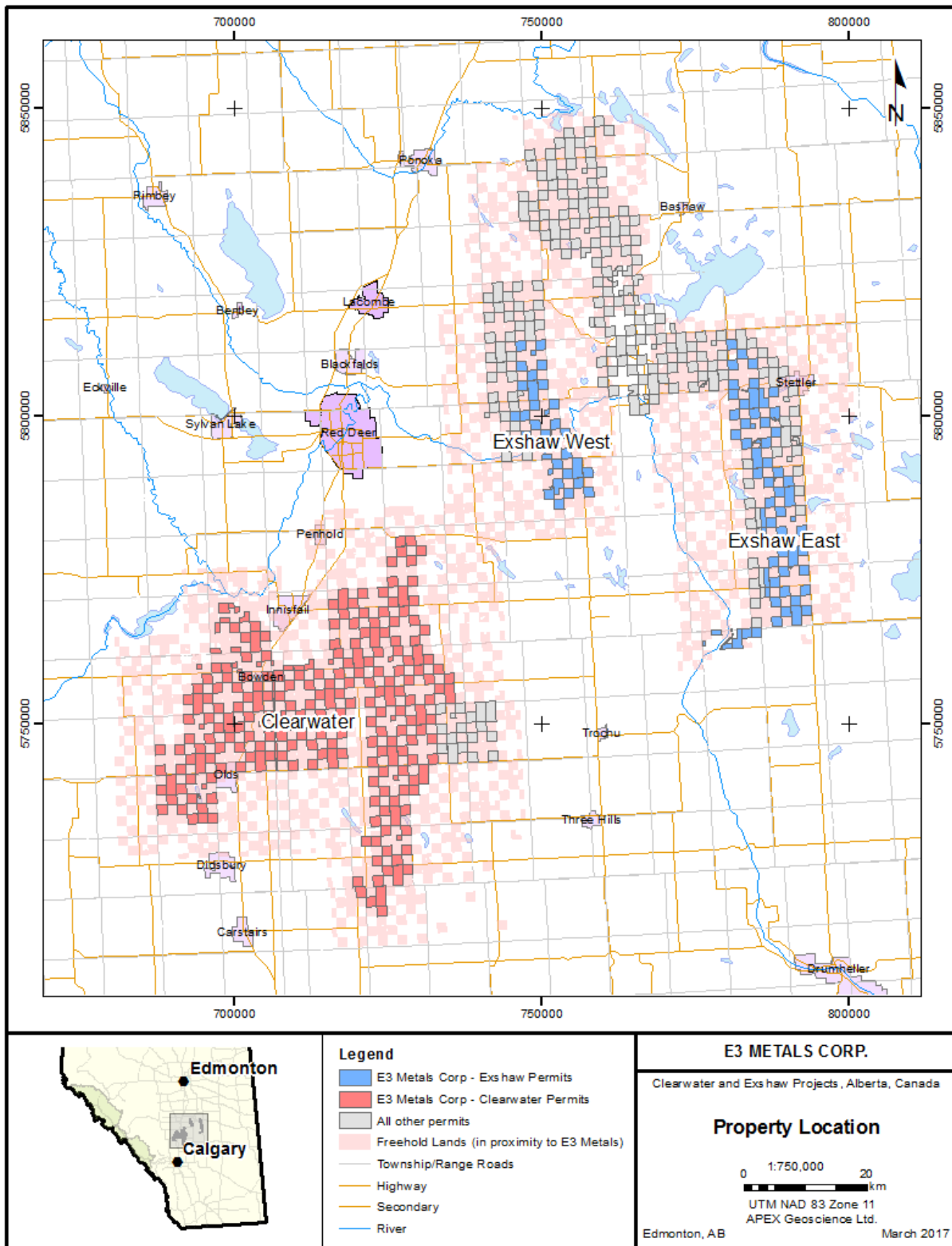
In so doing, E3 Metals will acquire 100% interest in the Clearwater and Exshaw properties, which are comprised of 10 Alberta Metallic and Industrial Mineral Permits totaling 87,965 hectares (879.65 square kilometres). The 10 permits are sub-divided into three separate groups of contiguous permits:

1. Clearwater Sub-Property: 7 contiguous permits totalling 62,540.1 hectares;
2. Exshaw (East) Sub-Property: 2 contiguous permits totalling 16,628.4 hectares; and
3. Exshaw (West) Sub-Property: a single permit of 8,796.1 hectares.

The Clearwater and Exshaw properties are situated in an area where mid-1990’s to mid-2010’s government and industry studies of formation water, or brine, have reported anomalous values of lithium (Li) and other elements such as potassium (K), boron (B), bromine (Br), and magnesium (Mg). These elements occur in aquifers associated with Devonian-aged carbonate buildups in the Leduc Formation of the Woodbend Group, the Swan Hills Formation of the Beaverhill Lake Group, the Nisku Formation of the Winterburn Group, and the Wabamun Group (Hitchon et al., 1993, 1995; Underschultz et al., 1994; Bachu et al., 1995; Eccles and Jean, 2010; and Eccles and Behrane, 2011).

Brine at the Clearwater and Exshaw properties is accessible via oil/gas wells that have pumped the formation water (along with hydrocarbons) from depths of between approximately 1,500 m to 3,500 m below the earth’s surface – essentially as waste water associated with hydrocarbon products (note: the Leduc production is from approximately 1,600 m depth at the Clearwater and Exshaw properties).

Figure 1. E3 Metals Metallic and Industrial Mineral permits in south-central Alberta. The Clearwater and Exshaw properties are the subject of this Technical Report.



Currently, the extracted water is treated to separate and remove petroleum products and then is re-injected back into subsurface formations. It is conceivable that existing water processing procedures could be modified to extract lithium and other elements from the Devonian aquifer systems; however at this stage of exploration there is no guarantee that Li and associated elements (K, B, Br, Ca, Mg and Na) described above will be economically extractable from the formation waters with current technology.

E3 Metals Li-brine properties are considered an early stage exploration project. The Company is relying on historical brine geochemical fluid data and has yet to conduct any brine sampling, analytical work, drilling, recovery test work, or mineral resource estimate work. E3 Metals was, however, able to acquire and assess decade's worth of petro-production and -testing data. These data are being used by the Company to implement preliminary aquifer characterization studies and to assess the volume of accessible brine for future Li-brine test work via active oil and gas wells (over 300 Devonian petro-production wells are currently active within the boundaries of the properties).

The intent and purpose of this Technical Report is to prepare a geological introduction of E3 Metals Clearwater and Exshaw properties that is in accordance with the Canadian Securities Administration's ("CSA's") National Instrument 43-101 ("NI 43-101") and amended and adopted Canadian Institute of Mining, Metallurgy and Petroleum ("CIM") Definition Standards (May 10, 2014). The effective date of this Technical Report is 18 May 2017.

The author of this report is Mr. Roy Eccles, M.Sc., P. Geol. of APEX, a Qualified Person as defined by the CSA's NI 43-101.

The CIM defines a Qualified Person as *"an individual who is a geoscientist with at least five years of experience in mineral exploration, mine development or operation or mineral project assessment, or any combination of these; has experience relevant to the subject matter of the mineral project and the technical report; and is a member or licensee in good standing of a professional association."*

R. Eccles is a Professional Geologist with the Association of Professional Engineers and Geoscientists of Alberta (APEGA), and has worked as a geologist for more than 25 years since his graduation from University. R. Eccles has been involved in all aspects of mineral exploration and mineral resource estimations for metallic and industrial mineral projects and deposits in North America. R. Eccles technical experience with respect to Li-brine includes:

- Collaborative industry studies involving a variety of Qualified Persons with relevant experience in brine geology such as geologists, hydrogeologists and geochemists; these studies have confirmed that brine associated with the Devonian petroleum system in Alberta contains enriched lithium and other elements of interest; and

- Government of Alberta AGS studies documenting the spatial location of lithium-enriched brine in Alberta and hypotheses on the source origins of the lithium (e.g., Eccles and Jean, 2010; Eccles and Berhane, 2011; Eccles, 2012).

A Qualified Person site inspection on the Clearwater and Exshaw (East and West) properties was completed by R. Eccles on March 14th 2017. Because the Li-brine occurs at a depth of >1,500 m below the surface, it was not possible to view ‘mineralization’ during the site inspection. Rather, several active oil and gas wells and plants within the boundaries of the Property – from which the brine is pumped to the surface – were observed.

Hydrocarbons were originally discovered in the Leduc Formation of central Alberta in 1947, and production from the Leduc and other Devonian-aged reservoirs located throughout the Province continues today. Thus, Alberta’s petroleum industry is partly responsible for the development of Alberta’s infrastructure (major and secondary highways, rail lines and power lines), including the region surrounding E3 Metals properties. Besides providing rural access to wells within various oil/gas fields and pools, the influence of the petro-industry is most noticeable in towns servicing the Clearwater and Exshaw property areas including: Bowden, Innisfail, Olds, Stettler, and the City of Red Deer.

This Report is a compilation of publicly available information. The source of information and data used in this Technical Report are based on compiled publicly available geological and geochemical data for the Clearwater and Exshaw properties. Government reports include those that depict the bedrock stratigraphy of the Clearwater and Exshaw areas and the formation water geochemistry of Alberta (e.g., Hitchon, 1984; Kharaka et al., 1988; Bloy and Hadley, 1989; Connolly et al., 1990a, b; Hitchon et al., 1993, 1995; Mossop et al., 1994; Underschultz et al., 1994; Bachu et al., 1995; Garrett, 2004; Pawlowicz and Fenton, 1995a, b; Eccles and Jean, 2010; Eccles and Berhane, 2011; Huff et al., 2011, 2012).

Miscellaneous Journal articles and company news releases were used to corroborate the stratigraphy and formation water potential of the Clearwater and Exshaw properties (e.g., Billings et al., 1969; Kunasz, 1980, 1994, 2006; Jaskula, 2008; Eccles, 2016; Eccles and Dufresne, 2016).

The senior author of this Technical Report, R. Eccles, has reviewed all government and miscellaneous reports. Government reports and Journal papers were prepared by a person, or persons, holding post-secondary geology or related degrees. Based on a review of these documents and/or information, the senior author has deemed that these reports and information, to the best of his knowledge, are valid contributions to this Technical Report, and therefore takes ownership of the ideas and values as they pertain to the current Technical Report.

In addition to these Government and industry reports, E3 Metals initiated a preliminary aquifer characterization study to determine formation water volumes within the various oil/gas fields and pools that underlie their properties. This work was

conducted by GLJ Petroleum Consultants (“GLJ”), of Calgary, AB. The report was prepared as an internal report for E3 Metals by Professional Geologists and Engineers. R. Eccles has reviewed the details of the report, including data, interpretation, and conclusions and recommendations, and found the results sufficient enough to summarize the findings in Section 24, Other Relevant Data and Information.

Units of measure in this Technical Report, unless otherwise stated, include:

- Abbreviated shorthand is consistent with the International System of Units (International Bureau of Weights and Measures, 2006);
- Distance and small weights are presented in metric units;
- Geographic coordinates in the Universal Transverse Mercator (“UTM”) system relative to Zone 11 of the North American Datum (“NAD”) 1983; and
- Currency in Canadian dollars (“CDN\$”).

3.0 Reliance on Other Experts

E3 Metals holds 100% interest in 10 Metallic and Industrial Mineral Permits that are known as the Clearwater and Exshaw properties. Alberta Metallic and Industrial Mineral Permits can be held by an individual person, or by any organized or corporate entity, which is duly registered to do business in the province of Alberta.

The authors of this Technical Report are not qualified to provide an opinion or comment on issues related to legal agreements, royalties, permitting and environmental matters, and therefore, disclaim certain portions associated with Section 4, Property Description and Location. Specifically, the authors have not attempted to verify the legal status of the Property permits. During the preparation of this Technical Report, however, the authors did review the Alberta Energy metallic and industrial mineral disposition of mineral rights management system. As of 18 May 2017, the mineral rights management system shows the 10 permits (87,965 hectares) are active and in good standing. The mineral rights management system can be accessed at: (<http://www.energy.gov.ab.ca/OurBusiness/1071.asp>).

4.0 Property Description and Location

On May 8, 2017, E3 Metals entered into the Share Exchange Agreement with 1975293 Alberta Ltd. (“AlbertaCo”) and AlbertaCo’s securities holders, whereby all outstanding securities of AlbertaCo will be exchanged for securities of E3 Metals (the “Transaction”). In anticipation of closing the Transaction, Savannah Gold Corp. changed its name to E3 Metals Corp. on May XX, 2017. On closing of the Transaction E3 Metals will acquire all outstanding securities of AlbertaCo and AlbertaCo will become a wholly owned subsidiary of E3 Metals.

The Clearwater and Exshaw Alberta Metallic and Industrial Mineral Permits are held by the AlbertaCo, which upon close of the Transaction will be a wholly owned subsidiary of E3 Metals. Collectively, the Clearwater and Exshaw properties include 10 Alberta Metallic and Industrial Mineral Permits totaling 87,965 hectares (Figure 1). The legal descriptions for the permits are provided in Table 2. The Alberta Energy mineral rights management system shows that the designated representative of the permits is the business corporation 1975293 Alberta Ltd. The 10 permits are further sub-divided into three separate groups of contiguous permits: 1) Clearwater Sub-Property: 7 contiguous permits totalling 62,540.1 hectares; 2) Exshaw East Sub-Property: 2 contiguous permits totalling 16,628.4 hectares; and 3) Exshaw West Sub-Property: one permit of 8,796.1 hectares (Table 2; Figures 2 and 3).

The Clearwater and Exshaw properties are located in south-central Alberta. The City of Red Deer represents the largest urban center near the properties, and the individual sub-properties are located approximately 25 km south (Clearwater), 25 km east (Exshaw West) and 60 km east (Exshaw East) of the city (Figures 1-3).

The centre of the Clearwater Sub-Property is located at approximately 710759 m Easting and 5749907 m Northing in Universal Transverse Mercator ("UTM") Zone 11 coordinates using the North American Datum 1983 ("NAD83"), or at Longitude 113° 56' 21" West and Latitude 51° 51' 36" North. The centre of the Exshaw East Sub-Property is located at approximately 788467 m Easting and 5787504 m Northing in UTM Zone 11 NAD83 or at Longitude 112° 46' 55" West and Latitude 52° 9' 45" North. The centre of the Exshaw West Sub-Property is located at approximately 750685 m Easting and 5797135 m Northing in UTM Zone 11 NAD83 or at Longitude 113° 26' 28" West and Latitude 52° 12' 40" North.

4.1 Property Rights and Maintenance

Alberta Metallic and Industrial Mineral Permits grant the explorer the exclusive right to explore for metallic and industrial minerals for seven consecutive two-year terms (total of fourteen years), subject to traditional biannual assessment work. Work requirements for maintenance of permits in good standing are \$5.00/ha for the first term, \$10.00/ha for each of the second and third terms, and \$15.00/ha for each the fourth, fifth, sixth and seventh terms. The statutes also provide for conversion of Permits to Metallic Minerals Leases once a mineral deposit has been identified. Leases are granted for a renewable term of 15 years, and require annual payments of \$3.50/ha for rent to maintain them in good standing. There are no work requirements for the maintenance of leases and they confer rights to minerals.

Complete terms and conditions for mineral exploration permitting and work can be found in the Alberta Mines and Minerals Act and Regulations (Metallic and Industrial Minerals Tenure Regulation 145/2005, Metallic and Industrial Minerals Exploration Regulation 213/98). These and other acts and regulations, with respect to mineral exploration and mining, can be found in the Laws Online section of the Government of Alberta Queen's Printer website (www.qp.alberta.ca/Laws_Online.cfm).

Table 2. Industrial and Metallic Mineral Permit descriptions for E3 Metals lithium-brine properties. Contiguous groups of permits are colour-coded.

No.	Agreement number	Sub-property	Designated representative	Landzone description	Term date	Expiry date	Agreement area (hectares)	Zone description notices (Source: Alberta Energy Mineral Agreement Detail Report)
1	093 9316060174	Clearwater	1975293 Alberta Ltd.	4-26-032: 19; 29; 30; 32 4-27-030: 20; 29; 30; 32 4-27-031: 2; 4; 6; 10-12; 14; 16; 22; 24; 26NE; 28; 29; 34; 36 4-27-032: 2; 4; 10-12; 14; 16; 22; 24; 26NE; 28; 34; 36 4-28-030: 36	6/20/2016	6/20/2030	9,088.0	
2	093 9316060175	Clearwater	1975293 Alberta Ltd.	4-26-033: 4; 6; 16; 18; 20; 28-30; 32 4-26-034: 2; 4; 6; 10; 11; 14; 16; 18; 20; 22; 28-30; 32 4-27-033: 2; 4; 10-12; 14; 16; 22; 24; 26NE; 28; 34; 36	6/20/2016	6/20/2030	9,024.0	
3	093 9316060176	Clearwater	1975293 Alberta Ltd.	4-28-033: 2; 4; 6; 10-12; 14; 16; 18; 20; 22; 24; 26NE; 28-30; 32; 34; 36 4-29-033: 2EF; 11EF; 12; 14EF; 24; 26NEF; 36S,NE 5-01-033: 2; 4; 6; 10-12; 14; 16; 18; 20; 22; 24	6/20/2016	6/20/2030	8,618.3	
4	093 9316060177	Clearwater	1975293 Alberta Ltd.	4-27-034: 2; 4; 6; 10-12; 14; 16; 18; 20; 22; 24; 26NE; 27SWP; 28-30; 32; 34; 36 4-28-034: 2; 4; 6; 10-12; 14; 16; 18; 20; 22; 24; 26NE; 28S,NE; 29S; 30S; 36 4-29-034: 24	6/20/2016	6/20/2030	8,768.2	Portion(s) designated as lake on Township plan approved and confirmed by the surveyor general at Ottawa, ON.
5	093 9316060178	Clearwater	1975293 Alberta Ltd.	4-29-034: 2EF; 11EF; 12; 14EF; 26NEF 5-01-033: 26NE; 28-30; 32; 34; 36 5-01-034: 2; 4; 6; 10-12; 14; 16; 18; 20; 22; 24; 26NE; 28NW,L1,L2; 29; 30; 34; 36 5-01-035: 2; 4S; 6S; 10-12; 14; 16; 18E; 20S; 22S,NE; 28SE,NW; 29	6/20/2016	6/20/2030	8,904.8	
6	093 9316060179	Clearwater	1975293 Alberta Ltd.	4-26-035: 4; 6; 10; 16; 18; 20; 28-30; 32 4-26-036: 4; 6; 16; 18; 20; 22; 28; 29 4-27-035: 2; 4; 6; 10-12; 14; 16; 18; 20; 22; 24; 28-30; 32; 34; 36	6/20/2016	6/20/2030	9,216.0	
7	093 9316060180	Clearwater	1975293 Alberta Ltd.	5-02-032: 10-12; 14; 16; 18; 20; 22; 23NWP; 24; 26NE; 28-30; 32; 34; 36 5-02-033: 2; 4; 6; 10-12; 14; 16; 18; 22; 24; 26NE; 34; 36 5-02-034: 2; 10-12; 14; 24; 26NE	6/20/2016	6/20/2030	8,920.8	
8	093 9316070173	Exshaw (East)	1975293 Alberta Ltd.	4-20-035: 2; 4; 10-12; 14; 16; 20E; 22; 24; 28; 29E; 32E; 34; 35NWP; 36 4-20-036: 2; 4; 10-12; 14; 16; 20E; 22; 24; 26NE; 28; 29E; 32E; 34 4-21-034: 27; 28NP, 28SWP, 28SE, 29SEP; 30L12, 30L13; 32N, 33SEP, 33NEP; 34SE, 34WP,NE; 35; 36.	7/5/2016	7/5/2030	8,053.6	Portion(s) designated as lake, Red Deer River and to the east of the right bank of the Red Deer River as shown on Township plan approved and confirmed by the surveyor general at Ottawa, ON. Portions lying outside Dry Island Buffalo Jump Provincial Park and Tolman Badlands Heritage Rangeland Natural Area.
9	093 9316070174	Exshaw (East)	1975293 Alberta Ltd.	4-20-037: 2; 4; 10; 11; 14; 15NWP; 16; 20; 22; 28; 29; 32 4-20-038: 4; 5P; 6; 10; 15NWP, 15NEP; 16; 17SW; 18; 20; 22; 28-30; 31NP; 32; 33W; 34; 4-20-039: 4; 6; 16; 18; 20; 30 4-21-038: 12; 24; 36	7/5/2016	7/5/2030	8,574.8	Portion(s) designated as lake on Township plan approved and confirmed by the surveyor general at Ottawa, ON.
10	093 9316070175	Exshaw (West)	1975293 Alberta Ltd.	4-23-037: 16; 18; 20; 28-30; 32 4-23-038: 6; 18N,SW 4-24-037: 12; 13NW; 14; 23SEP; 24; 26NE; 36 4-24-038: 2S; 10-12; 13WP; 14; 16; 22; 24; 26NE; 28; 29; 34; 36 4-24-039: 2; 10-12; 14; 22; 24; 26NE; 34; 36	7/5/2016	7/5/2030	8,796.1	Portion(s) designated as lake on Township plan approved and confirmed by the surveyor general at Ottawa, ON. Portions lying to the west of the westerly limit of the surveyed roadway as shown on plan 8295AG.

Total Area: Clearwater sub-property 62,540.1
 Total Area: Exshaw (East) 16,628.4
 Total Area: Exshaw (West) 8,796.1
Total Area: All Permits 87,964.6

Figure 2. Location, access and permit agreement numbers at the Clearwater Sub-Property.

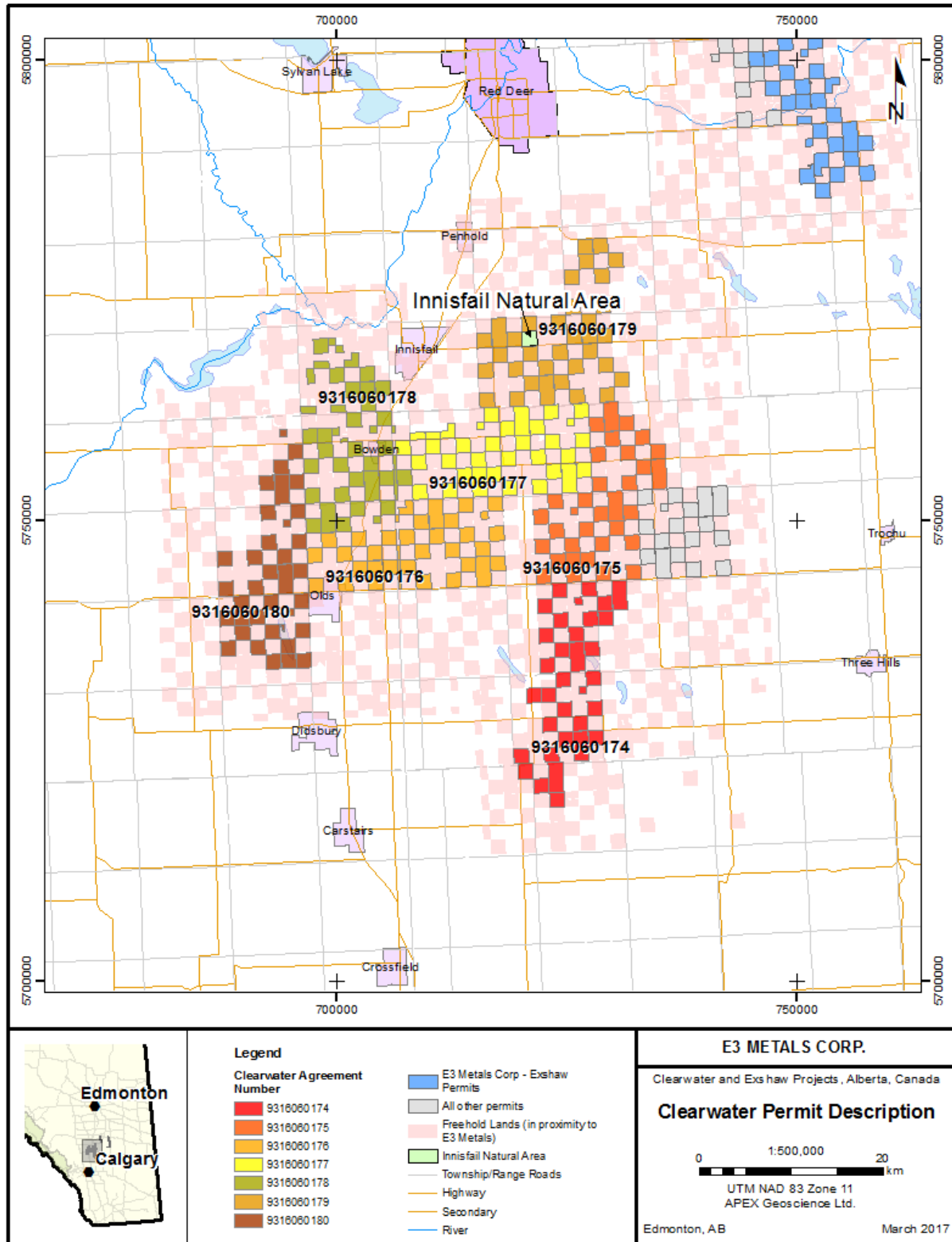
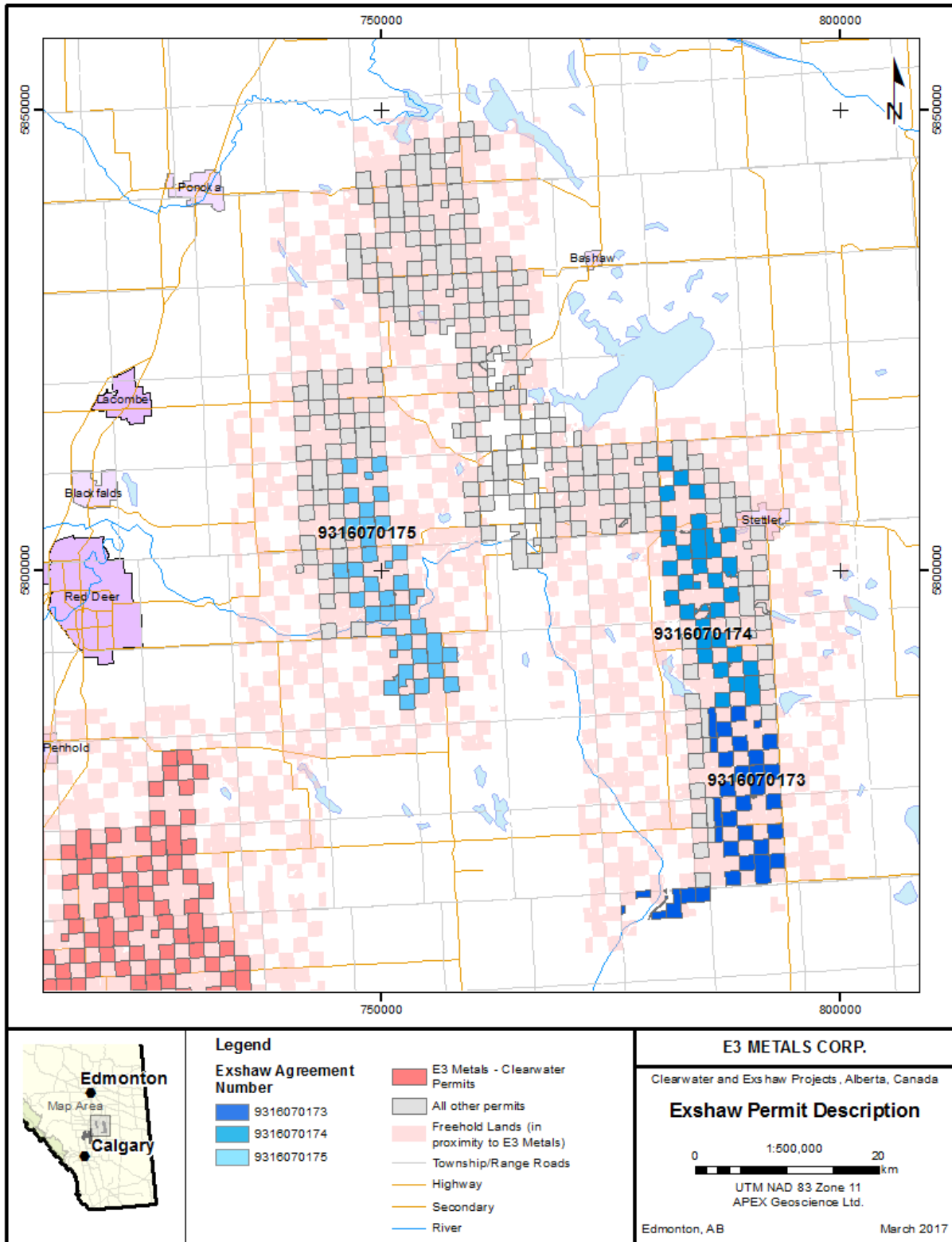


Figure 3. Location, access and permit agreement numbers at the Exshaw (East and West) Sub-Property.



4.2 Coexisting Oil, Gas and Oil Sands Rights

E3 Metals has strategically acquired mineral permits over Devonian-producing oil and gas fields in south-central Alberta. A summary of the active oil and gas wells (to March 2017) is presented in Figure 4. With respect to Devonian production, the wells currently pump brine from depths of up to 3,500 m from the Nisku and Leduc formations, and Wabamun Group to the earth's surface. It is this production/infrastructure that enables the mineral exploration company to access to the brine for lithium-brine testing and assessment.

In Alberta, rights to metallic and industrial minerals, to bitumen (oil sands), to coal and to oil/gas are regulated under separate statutes, which collectively make it possible for several different 'rights' to coexist and be held by 'different grantees' over the same geographic location. Oil/gas leases and Alberta Metallic and Industrial Mineral Permits coexist in the vicinity of, and under, the Company's Property.

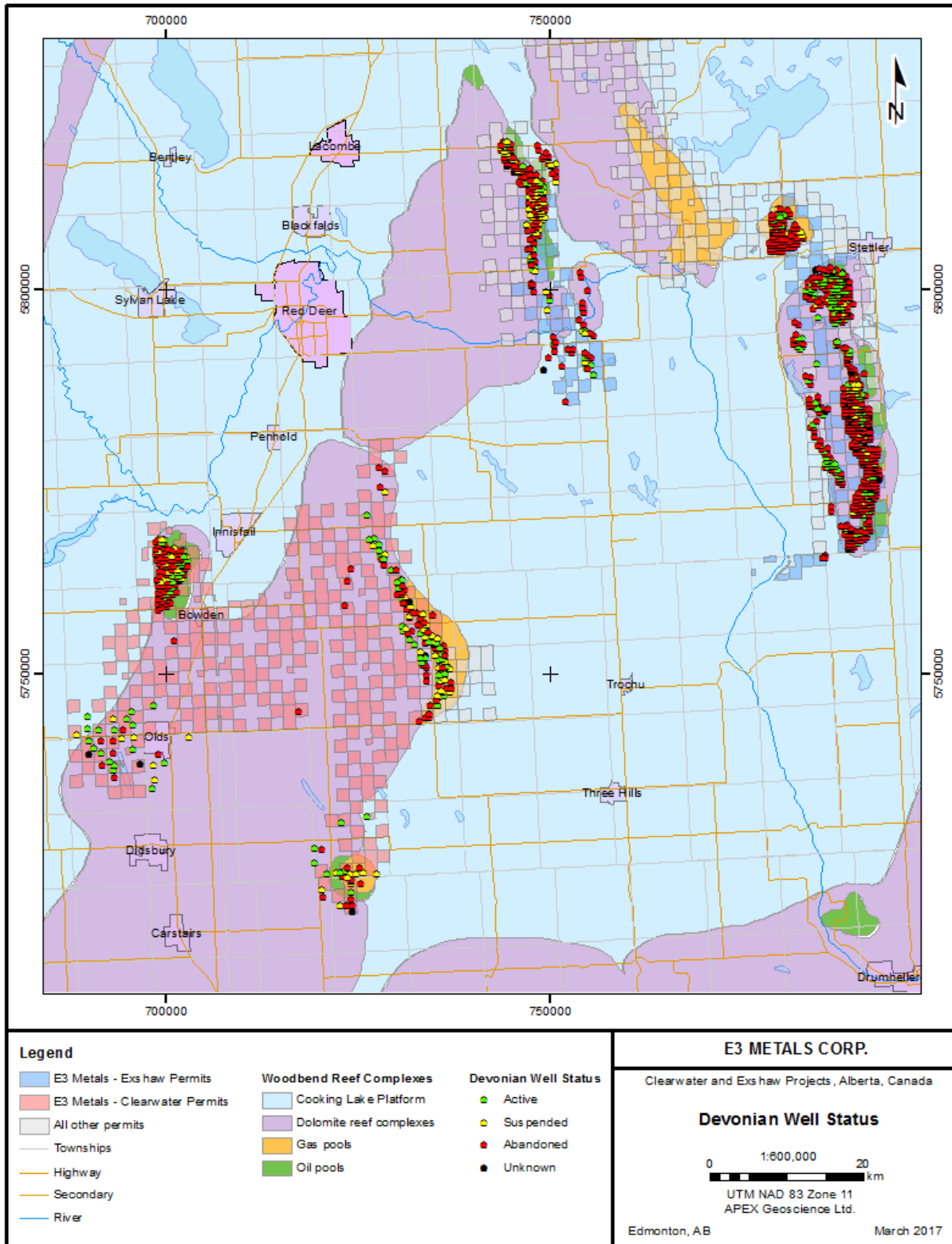
In Alberta, lithium (and other metals) are categorized as mineral resources and therefore fall under the Alberta Mines and Minerals Act and Regulations (Metallic and Industrial Minerals Tenure Regulation 145/2005, Metallic and Industrial Minerals Exploration Regulation 213/98). Lithium royalty rates associated with Li-production would be 1% gross mine-mouth revenue before payout; after payout, the greater of 1% gross mine-mouth revenue and 12% net revenue. The regulation governing the royalty rate can be found in Section 4(1) of the Metallic and Industrial Mineral Royalty Regulation at: <http://www.energy.alberta.ca/minerals/714.asp>.

4.3 Permitting and Other Factors/Risks

E3 Metals can access Devonian brine within the boundaries of their Property by either: 1) drilling their own well(s); or 2) by collecting the brine using the current oil and gas infrastructure. With respect to permits that must be acquired to conduct the work, the two brine-access methods require significantly different approaches. If E3 Metals were to drill a well, the company would be required to comply with well licence application requirements as administered by the Alberta Energy Regulator ("AER") as authorized by various acts and the regulations under those acts. The AER is a well-established regulator of all drilling activity in Alberta's energy industry.

The proposed work plan, however, does not involve drilling oil wells. Rather E3 Metals will conduct initial Li-brine assay and mineral processing test work by accessing the brine via existing and currently operational oil and gas infrastructure. This sampling methodology does not require additional exploration permits beyond the actual Alberta Metallic and Industrial Mineral Permit. That is, the well licenses and corresponding pipelines and facilities are already permitted by the respective petro-operator. In this case, access to the brine and surface rights would require negotiation and agreement between E3 Metals and the current oil and gas companies. To the best of the author's knowledge, such an agreement has yet to be formed, and an initial review of the properties oil and gas production data is required prior to initial correspondence.

Figure 4. Oil and gas well activity status within the Clearwater and Exshaw property areas.



With respect to other significant factors and risks that may affect access, title, or the right or ability to perform work on the property:

- The author is not aware of any environmental issues associated with the Property or this early stage exploration project.
- The land interspersed with the Clearwater claims contains the Innisfail Natural Area, which has an area of 64.75 ha (Figure 2). The Natural Area is under the administration of Alberta Parks and is located on Provincial Highway 590, approximately 10.5 km east of the Town of Innisfail. The Natural Area is reserved from dispositions, and therefore, is not part of E3 Metals land package.
- The Clearwater and Exshaw mineral permits are interspersed with Privately Owned (Freehold) Land, where the surface and/or minerals rights are owned by private individuals and/or companies. The Freehold lands do not pose an obstacle to initial brine assay and mineral processing test work within the mineral permits owned by E3 Metals. Given a favourable distribution of contiguous Permit coverage and completion of advanced characterization studies focused on the drawdown effect of the liquid resource (particularly laterally), it is possible that E3 Metals does not have to acquire Freehold Land in order to produce Li-brine from aquifers within the properties. It is also possible that E3 Metals would have to negotiate with Freehold Land owners to gain access to oil and gas well infrastructure on Freehold Land. The pre-existing Freehold agreements associated with hydrocarbon exploitation may reduce the number of agreements to be negotiated.

5.0 Accessibility, Climate, Local Resources, Infrastructure and Physiography

The properties are readily accessible by ground transportation via major and secondary provincial highways, and all-weather roads developed to support oil/gas infrastructure. The City of Red Deer (population of 100,400) is located at the junction of Alberta Provincial Highway 2 (“Hwy 2”) and Highway 11; Hwy 2 is the main corridor between Edmonton and Calgary and runs North-South directly through the Clearwater Property. Highway 11 runs East-West and bisects both the Exshaw East and Exshaw West properties to the east of Red Deer. Further access to the properties is provided by secondary one- or two-lane all weather roads, and numerous all weather and dry weather gravel roads. Accommodation, food, fuel, and supplies are readily obtained in the City of Red Deer and the towns of Bowden, Innisfail, Olds and Stettler.

The Clearwater and Exshaw properties are situated in the plains region of central Alberta in an area characterized by flat plains topography with relatively minor undulation. Elevation in the region varies from 700 m to 1055 m above sea level (m asl) and generally falls toward the east. The Red Deer River is the dominant topographic feature; it runs northwards and is situated between the Exshaw East and Exshaw West properties. The region is dominantly farmland with numerous creeks and wetlands occurring throughout the property. Clusters of forested terrain are dominated by aspen,

balsam poplar, lodgepole pine and white spruce. Vegetation in the wetland areas is characterized by black spruce, tamarack and mosses.

Red Deer has a humid continental climate (Köppen climate classification *Dfb*). A humid continental climate occur between latitudes 40° N and 60° N and has a mean coldest month temperature of below -3 °C and at least four months with mean temperatures at or above 10 °C. At Red Deer, annual temperatures range from -40° C in January to 30° C in July and August with temperatures above 0° C between April and October. Precipitation is well distributed through the year. Yearly precipitation (as rain and snow) ranges from approximately 14 mm to greater than 100 mm; the greatest amount of precipitation typically occurs in June and July (Environment Canada, 2011).

With the 1947 discovery of Devonian-sourced oil at the historical Leduc #1 well, central Alberta has experienced 70 years' worth of infrastructure upgrades and maintenance, including those to major and secondary highways, rail and power lines. The infrastructure development includes towns in the area of E3 Metals properties that include, for example, Bowden, Innisfail, Olds, Stettler, and the City of Red Deer.

This is of great benefit to the Company, particularly because energy resource-related infrastructure provides power and transportation connections between a series of oil and gas wells/plants that are networked throughout the Property. In addition, the region has a large workforce associated with the petro-sector. Workers live in the region, and are trained and educated in petro-production.

The ease of Property access and year-round petro-production means that E3 Metals could potentially access brine at any time, and therefore, the operating season for brine assaying, mineral processing and other test work is not limited to any one season.

6.0 History

6.1 Government of Alberta Discovery of Lithium-Bearing Devonian Formation Water in Alberta

Exploration in Alberta is traditionally petroleum-related (Mossop and Shetson, 1994). With respect to minerals exploration, the first comprehensive overview of the mineral potential of formation waters from across Alberta was compiled by the Government of Alberta (Hitchon et al., 1993, 1995). 'Formation water' is used as a generic term to describe all water that naturally occurs in pores of a rock and if the rock is permeable could represent an aquifer.

Hitchon et al. (1993, 1995) compiled nearly 130,000 analyses of formation water from various stratigraphic ages across Alberta. The data was derived from numerous sources including Alberta Energy Regulator ("AER") submissions for drilling conducted by the petroleum industry and various Government of Alberta reports (e.g., Hitchon et al., 1971; 1989; Connolly et al., 1990a, b and unpublished analytical data collected by the Government of Alberta).

The method for defining geographic areas with elements of possible economic interest in formation water was defined by Hitchon (1984) and Hitchon et al. (1995). For each element studied (e.g., Ca, Mg, K, Li, Br and iodine, I), a 'detailed exploration threshold value' was determined by studying the concentrations in economically producing fields as defined in Hitchon (1984) and Hitchon et al. (1995). Additionally, a lower 'regional exploration threshold value' was defined to allow for contouring and extrapolation of data to undrilled areas. For example, the regional exploration threshold value for Li was considered to be 50 ppm and the detailed exploration threshold value was defined as 75 ppm (Hitchon et al., 1995).

At the provincial scale, Hitchon et al. (1995) showed that lithium was analyzed and reported in 708 formation water analyses (out of the 130,000 total analyses examined). Of the 708 analyses: 96 analyses yielded Li concentrations above the 'regional threshold value' (greater than 50 ppm); and 47 analyses yielded Li concentrations above the 'detailed threshold value' of 75 ppm.

Significantly, Hitchon et al. (1993, 1995) showed the highest concentrations of Li in formation water – up to 140 mg/L Li – occurred within Middle to Late Devonian aquifers associated with the:

- Beaverhill Lake Group (Swan Hills Formation);
- Woodbend Group (Leduc Formation);
- Winterburn Group (Nisku Formation); and
- Wabamun Formation aquifers (Table 3).

More recently, Eccles and Jean (2010) modelled 1,511 lithium-bearing formation water analyses from throughout Alberta; this compilation supported the previous government author's conclusions that aquifers associated with Devonian strata comprise elevated concentrations of lithium in reef systems throughout Alberta. Of the 1,511 analyses, 19 analyses/wells contained >100 mg/L Li (up to 140 mg/L), all of which were sampled from within the Middle to Late Devonian carbonate complexes.

While the crude oil and conventional marketable gas reserves of Alberta's Devonian petroleum system is dwindling, it is still a viable producer of oil and gas. Consequently, an important consideration for Li-brine companies is to investigate the remaining reserves of Devonian petroleum products within their respective target fields/pools to ascertain/estimate the operational lifespan of the hydrocarbon producing wells (i.e., assurance to access Li-brine).

Table 3. Representative maximum lithium chemical compositions of Cambrian to Triassic aged aquifers as reported in Government of Alberta studies (Hitchon et al., 1993).

Stratigraphic Unit	Lithium Max (mg/l)
Triassic	
Baldonnel Fm.	60
Charlie Lake Fm.	68
Halfway Fm.	58
Montney Fm.	60
Permian	
Carboniferous	
Stoddart Gp.	
Rundle Gp.	60
Banff Fm.	52
Devonian	
Wabamun Gp.	115
Winterburn Gp.	90
Woodbend Gp.	140
Beaverhill Lake Gp.	130
Watt Mountain Fm.	98
Keg River Fm.	95
Lower Elk Point Gp.	71
Ordovician	
Cambrian	81

6.2 Summary of Devonian-Aged Oil and Gas Production within E3 Metals Permits

A review of the AER oil and gas database shows that there are approximately 1,559 Devonian-aged wells in E3 Metals Clearwater and Exshaw property areas. The compilation was completed by searching for all oil and gas field/pool codes associated with Devonian producing formations, including the: Wabamun; Nisku; Leduc; Beaverhill Lake; and Winnipegosis formations. The search did not include commingled oil and gas pools; although there is some Nisku-Leduc commingled oil/gas production in the central and east-central parts of Alberta, the commingled pools are predominantly associated with Cretaceous-aged production. Of the 1,559 wells, there are:

- 322 active wells;
- 965 abandoned wells;

- 222 suspended wells; and
- 50 wells described as 'not applicable' (based on AER code nomenclature).

Of the 322 active Devonian wells within E3 Metals Clearwater and Exshaw permit areas, there are:

- 179 wells producing from the Winterburn Group (Nisku Formation);
- 105 wells producing from the Woodbend Group (Leduc Formation); and
- 38 wells producing from the Wabamun Formation.
- 2 wells producing from the Winnipegosis Formation.

To the best of the author's knowledge, there is no Beaverhill Lake production within the permit areas.

These well data are visually summarized in Figures 5 and 6, which illustrate the active Devonian wells presented by Devonian formation production age for the Clearwater and Exshaw properties (Figures 5 and 6, respectively).

Petroleum fields in the Clearwater Sub-Property include the: Innisfail (Leduc); Garrington (Wabamun); Lone Pine Creek (Nisku, Leduc and Wabamun); Wimborne (Nisku, Leduc and Wimborne); and Three Hills Creek (Leduc) fields (Figure 5). The southwestern and northwestern portions of the Clearwater Sub-Property are characterized by Wabamun and Leduc formation hydrocarbon production, respectively. Production along the eastern edge of the Clearwater Sub-Property is sourced from within varying Devonian strata illustrated by wells production from the Wabamun, Nisku and Leduc formations.

With respect to petro-operators in the Clearwater Sub-Property, Pengrowth Energy Corporation and Bonavista Energy Corporation are the main active operators of Wabamun-aged production near the Town of Olds. Leduc production near the Town of Bowden is conducted by numerous operators, including, for example: Clearbrook Resources Inc.; Penn West Petroleum Ltd.; Bellatrix Exploration Ltd.; and Shell Canada Limited.

Predominant operators in the Exshaw Sub-Property includes: Penn West Petroleum Ltd.; TAQA North Ltd.; and Devon Canada Corporation. A number of wastewater processing facilities are within, or proximal to, the Clearwater Sub-Property. Newalta Corporation has a waste processing facility near Stettler (Newalta Stettler: ODP2, WM 018, /16-18-038-20W4). A waste water facility is located in the Town of Doan, within the Clearwater claim block.

Figure 5. Summary of active Devonian well production in the Clearwater Sub-Property.

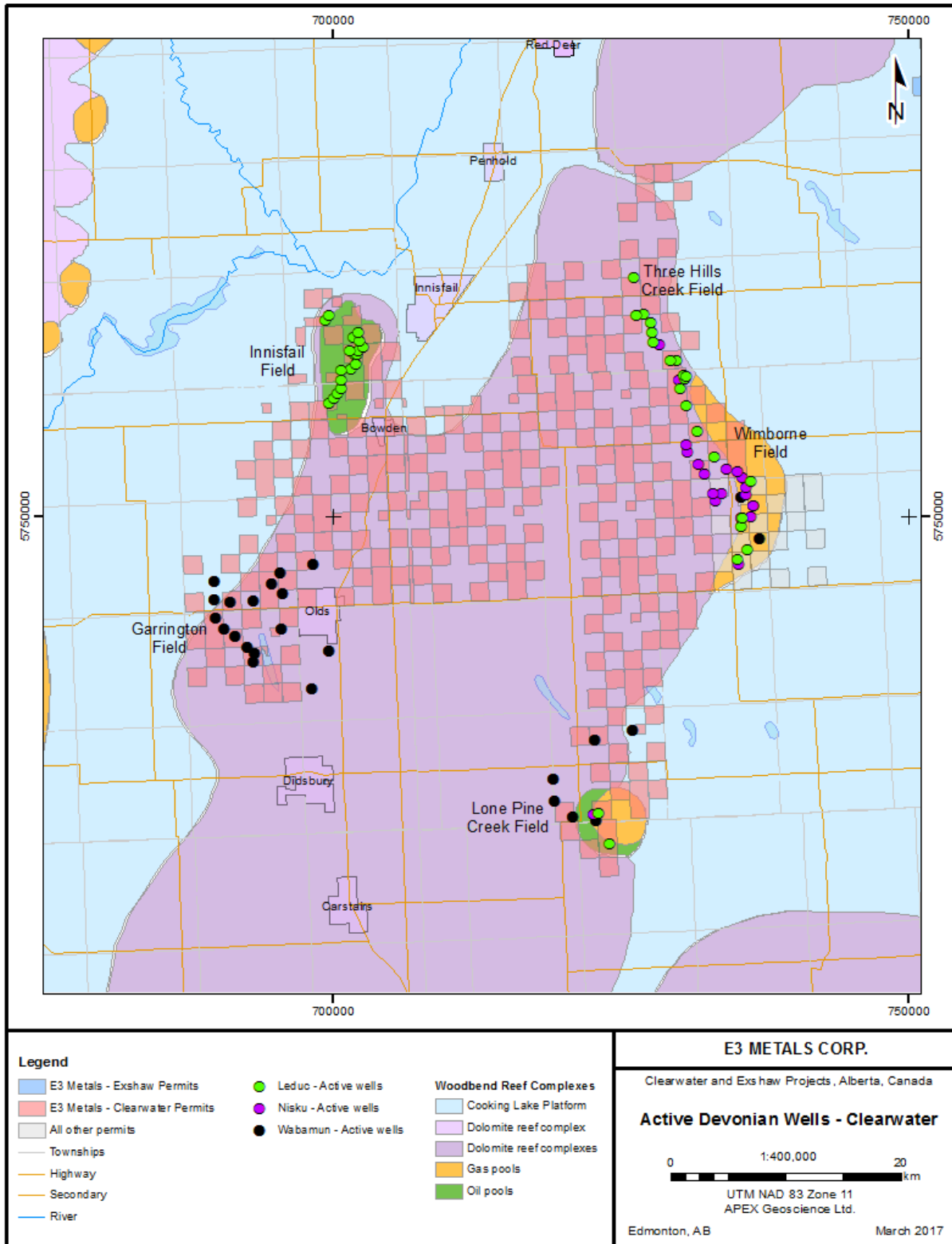
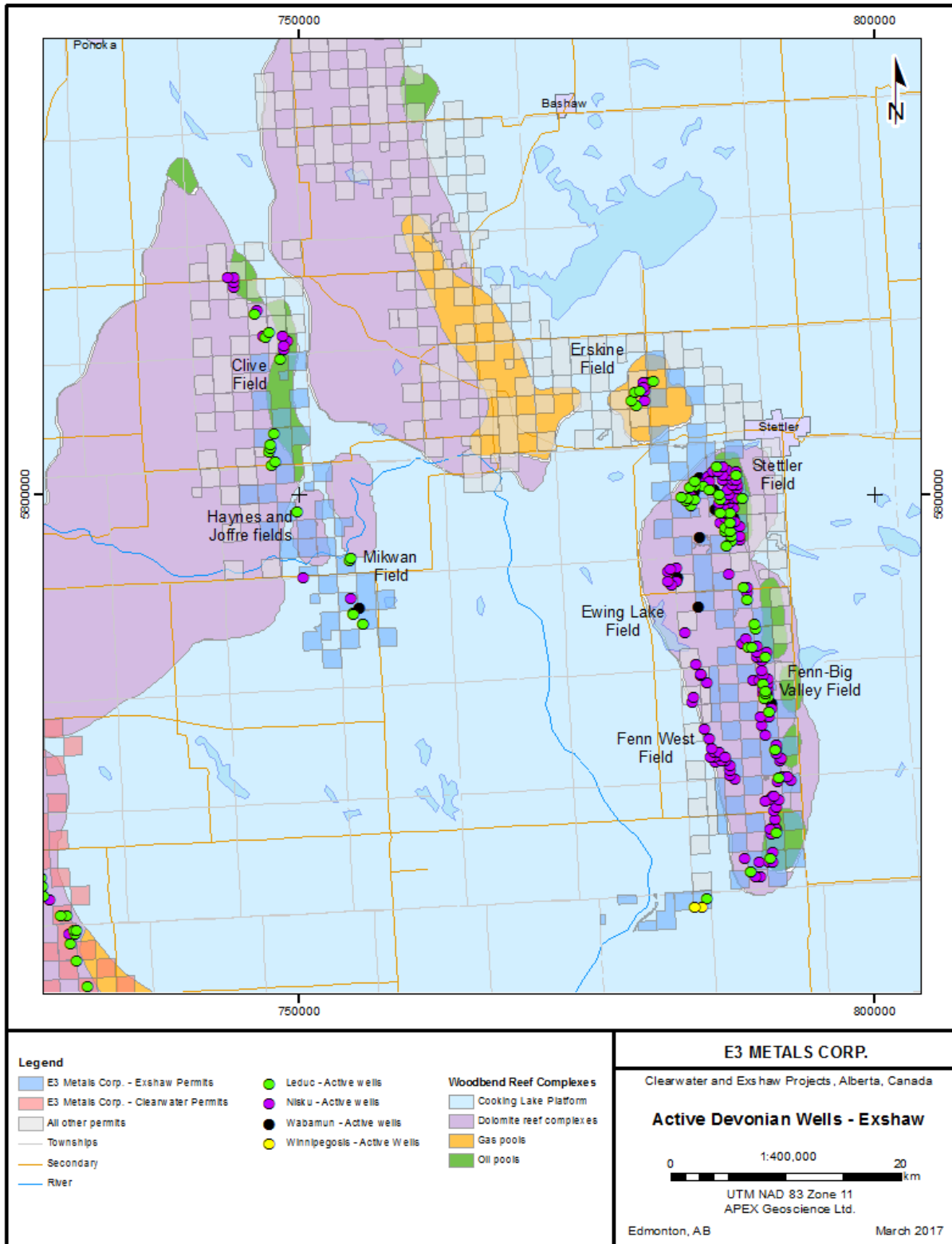


Figure 6. Summary of active Devonian well production on the Exshaw sub-properties.



The Exshaw East and Exshaw West sub-properties are underlain by north-trending reef systems that include the: Clive, Haynes, Joffre, and Mikwan fields (Exshaw West); and Erskine, Stettler, Ewing Lake, Fenn-Big Valley and Fenn West (Exshaw East; Figure 6). Petroleum production is presently dominated by Nisku- and Leduc-aged production with less prominent Wabamun and Winnipegosis production (Figure 6). Exshaw West oil and gas operators include: Enhance Energy Inc.; Tourmaline Oil Corp.; Danforth Oil & Gas Ltd.; Long Run Exploration Ltd.; and ARC Resources Ltd. Exshaw East oil and gas operators are dominated by Pengrowth Energy Corporation and Bearspaw Petroleum Ltd. and Canadian Natural Resources Limited.

6.3 Historical Geochemical Results from Devonian Oil and Gas Wells within the E3 Metals Permits

E3 Metals has yet to conduct brine sampling at its Clearwater and Exshaw properties. Consequently, the geochemical data presented in this section is historical in nature and was conducted during:

1. 1950's to 1980's formation waters testing by the then respective oil and gas operating companies; these data are maintained by the Government of Alberta; and
2. 2010's Government of Alberta formation water sampling studies as completed by the Alberta Geological Survey.

During preparation of this Technical Report, APEX personnel compiled all available data for lithium and other elements of interest (e.g., bromine, potassium and iodine) from formation water brines within and around E3 Metals Clearwater and Exshaw properties. Data were compiled from the Alberta Energy Regulator ("AER") well file database using GeoSCOUT™ (a recognized industry software standard) and from recent Government of Alberta publications (Eccles and Jean, 2010; Huff, 2011, 2012). The lithium-in-brine results of the compilation within E3 Metals permits is presented in Figure 7 and in Table 4; results of the lithium-in-brine compilation from the general area surrounding E3 Metals permits is presented in Figure 8.

Historical geochemical data from ten wells within the Clearwater and Exshaw properties yield lithium values of between 34 and 74 mg/L Li (Figure 7; Table 4). Brines of the Winterburn Group (Nisku Formation) and Woodbend Group (Leduc Formation) contain the highest concentrations of lithium in this region. The highest recorded historical Li-brine values within E3 Metals permits occur in the Clearwater Sub-Property, where three wells contain between 71 and 74 mg/L Li (wells: 00/05-23-038-24W4; 00/07-03-034-26W4; and 00/03-02-038-24W4). These wells would have to be resampled to confirm these historical values.

Figure 7. Devonian lithium-brine occurrences within the E3 Metals permits. Lithium sample points with >50 mg/L Li are labelled.

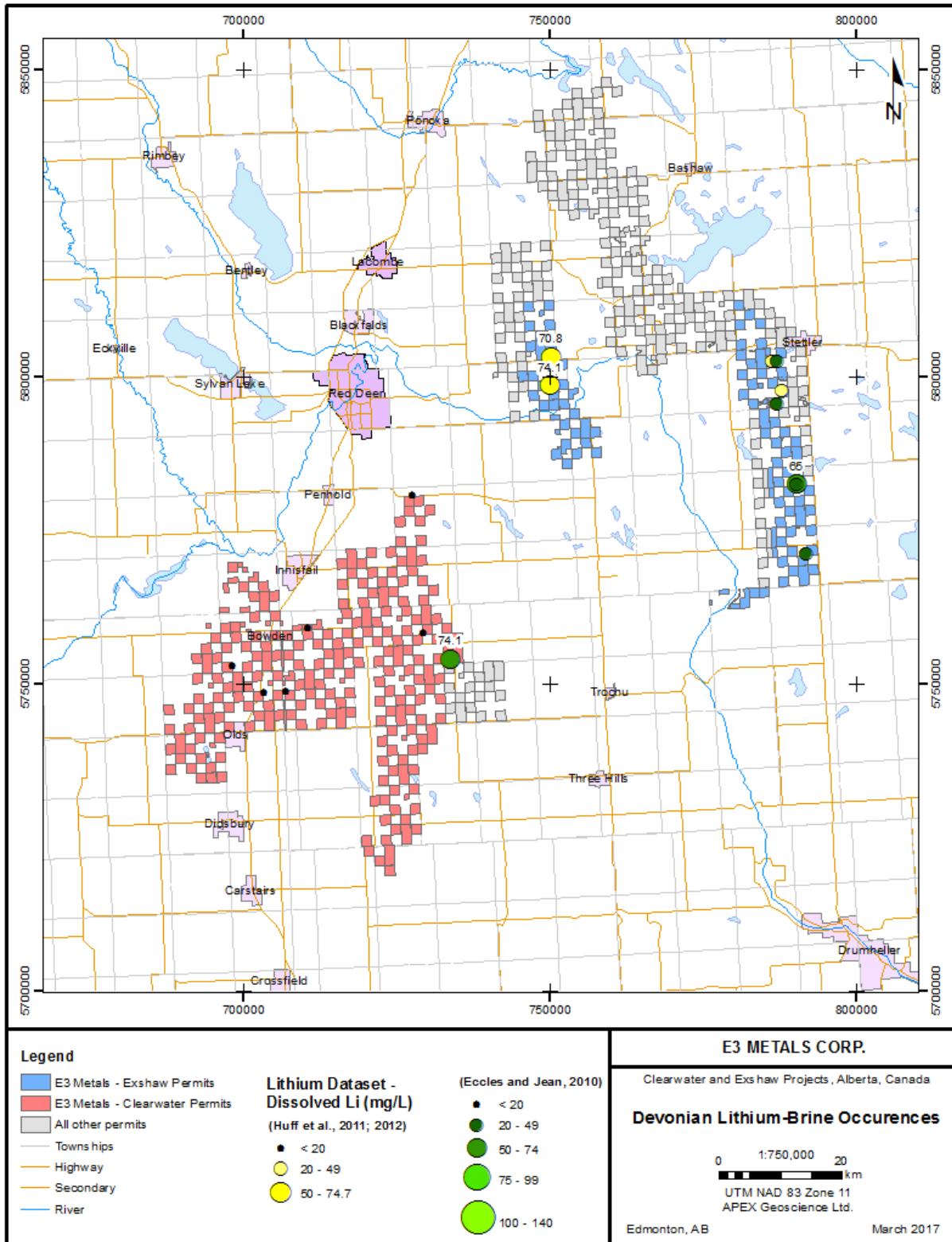
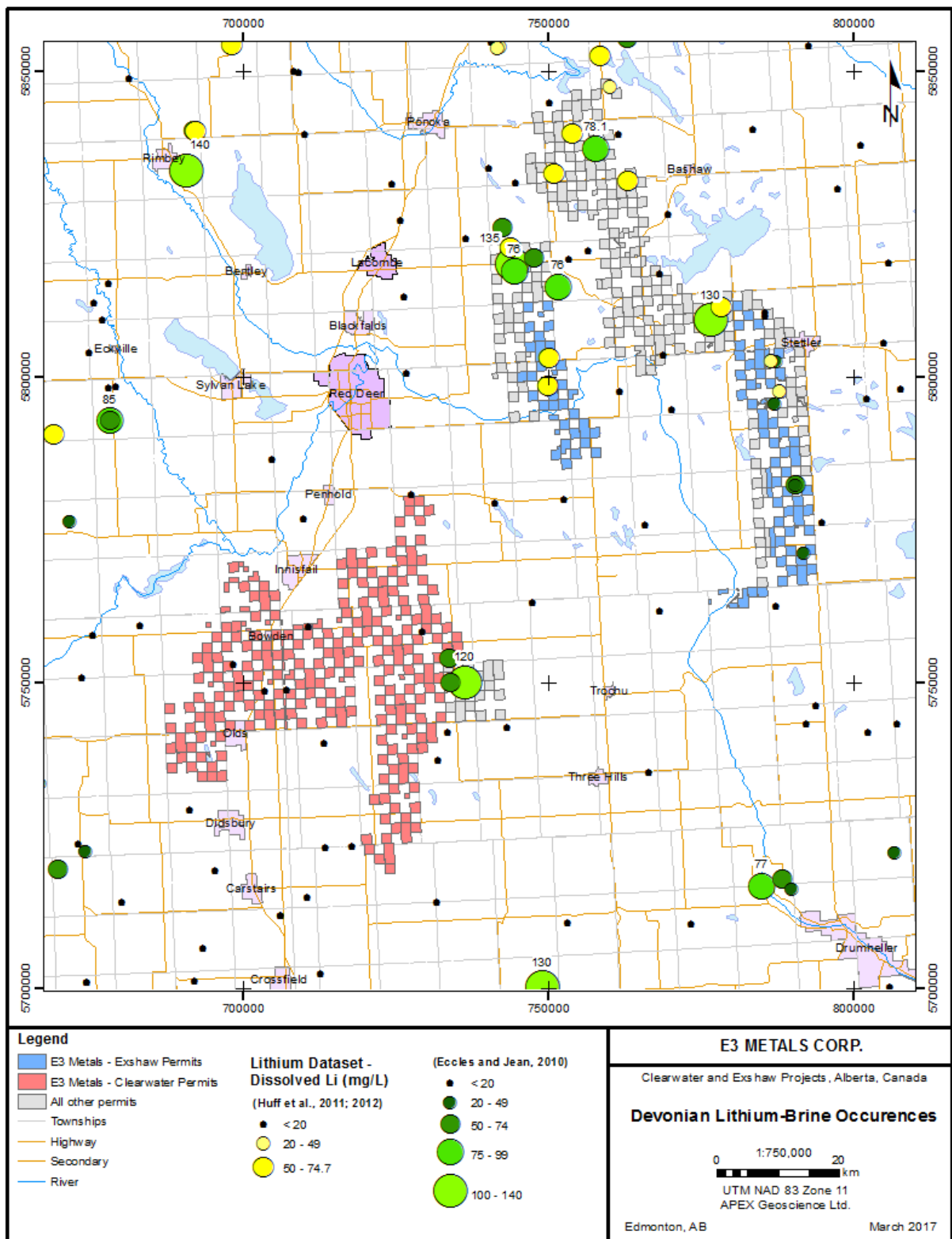


Table 4. Historical geochemical summary for wells analyzed within the E3 Metals permits.

Unique well ID	Latitude (NAD83)	Longitude (NAD83)	Sample date	Depth (m)	Geological age	Geological Formation	Lithium (mg/L)	Bromide (mg/L)	Potassium (mg/L)	Iodide (mg/L)	TDS (ppm)	Source
100/05-23-038-24W4	52.28014	-113.33489	20/06/2011	1,838.5	Devonian	Winterburn Group (Nisku)	74.1	860	6200	/	216,000	Huff et al. (2011, 2012)
100/07-03-034-26W4-0	51.88773	-113.60363	14/07/1964	2,302.2	Devonian	Woodbend Group (Leduc)	74.1	424	/	19	202,342	Eccles and Jean (2010)
100/03-02-038-24W4	52.23149	-113.32878	16/06/2011	1,856.0	Devonian	Winterburn Group (Nisku)	70.8	820	6070	/	209,000	Huff et al. (2011, 2012)
100/03-26-036-20W4-0	52.11571	-112.75797	24/08/1965	1,622.8	Devonian	Woodbend Group (Leduc)	65.0	480	/	11	121,370	Eccles and Jean (2010)
100/01-23-035-20W4-0	52.01372	-112.74619	18/08/1965	1,617.9	Devonian	Winterburn Group (Nisku)	48.6	494	/	12	115,362	Eccles and Jean (2010)
100/03-26-036-20W4-0	52.11571	-112.75797	01/05/1957	1,587.1	Devonian	Woodbend Group (Leduc)	48.0	476	/	2	100,643	Eccles and Jean (2010)
102/10-28-038-20W4	52.29797	-112.79898	27/07/2011	1,640.0	Devonian	Woodbend Group (Leduc)	47.7	550	3480	/	130,000	Huff et al. (2011, 2012)
100/08-04-038-20W4-0	52.23578	-112.79403	03/06/1957	1,638.6	Devonian	Woodbend Group (Leduc)	45.5	635	/	12	123,496	Eccles and Jean (2010)
100/12-27-038-20W4-0	52.29785	-112.78754	18/08/1965	1,580.7	Devonian	Winterburn Group (Nisku)	44.0	642	/	16	159,812	Eccles and Jean (2010)
100/11-10-038-20W4	52.25389	-112.78080	28/07/2011	1,572.8	Devonian	Winterburn Group (Nisku)	34.2	370	2330	/	91,600	Huff et al. (2011, 2012)
100/01-02-001-17W4-0	51.85138	-114.04625	18/09/1980	32.6	Cretaceous	Paskapoo Formation	0.1	/	/	/	/	Eccles and Jean (2010)
102/01-02-001-17W4-0	51.89146	-114.11709	17/09/1980	89.9	Cretaceous	Paskapoo Formation	0.1	/	/	/	/	Eccles and Jean (2010)
100/12-24-001-10W4-0	51.92726	-113.66339	22/07/1977	27.4	Cretaceous	Paskapoo Formation	-0.1	/	/	/	/	Eccles and Jean (2010)
100/10-25-001-10W4-0	51.94187	-113.93498	22/07/1977	109.7	Cretaceous	Paskapoo Formation	-0.1	/	/	/	/	Eccles and Jean (2010)
100/11-26-001-10W4-0	51.85120	-113.99423	22/07/1977	12.2	Cretaceous	Paskapoo Formation	-0.1	/	/	/	/	Eccles and Jean (2010)
100/06-28-001-10W4-0	52.13027	-113.67432	14/07/1977	12.2	Cretaceous	Paskapoo Formation	-0.1	/	/	/	/	Eccles and Jean (2010)

Figure 8. Devonian lithium-brine occurrences in the general area of the E3 Metals permits. Lithium sample points with >75 mg/L Li are labelled.



For comparison, the geochemical data of brine associated with Cretaceous-aged oil/gas production is included in Table 4; the lithium results of the Cretaceous brine are generally below the limit of detection. This result unequivocally shows that the lithium content within the Devonian brine are higher and that Devonian brine, in comparison to other current production aged brine, should be the subject of any Li-brine targeting going forward by E3 Metals

6.4 Historical Geochemical Results from Devonian Oil and Gas Wells Adjacent to the E3 Metals Permits

The author notes that Li-brine data from adjacent properties are not necessarily indicative of mineralization on the E3 Metals permits that are the subject of this Technical Report. However, the adjacent-property Li-brine results discussed in this subsection occur in aquifers that underlie both the adjacent property and E3 Metals properties (i.e., the aquifer just happened to be historically sampled in a location that is adjacent to E3 Metals permits, but the actual aquifer does underlie E3 Metals properties).

Accordingly, these aquifers should be considered prospective for future test-assaying to verify whether the historical Li-brine contents extend within the aquifers that underlie E3 Metals respective permits.

Individual historical samples that are situated directly adjacent to the E3 Metals permits and contain >75 mg/L Li are shown in Figure 8. Selected examples include:

- In the Wimborne Field in the eastern portion of the Clearwater Sub-Property, one sample from well 00/13-24-033-26W4-0 yielded 120 mg/L Li (Eccles and Jean, 2010). Other wells of interest in this specific area include: 00/15-22-033-26W4-0 and 00/07-03-034-26W4-0, which contain 74 mg/L Li in Winterburn and Woodbend group strata, respectively.
- In the Clive Field of the Exshaw West Sub-Property, a cluster of samples located directly north of the E3 Metals permits yield between 76 and 135 mg/L Li (00/07-07-040-23W4-0, 76 mg/L Li; 00/03-21-040-24W4-0, 76 mg/L Li; and 00/13-21-040-24W4-0, 135 mg/L Li; Eccles and Jean, 2010);
- In the Erskine Field of the Exshaw East Sub-Property, one sample from well 00/02-22-039-21W4-0 yielded 130 mg/L Li (Eccles and Jean, 2010).

The author reiterates that the Eccles and Jean (2010) data in the E3 Metals permit area represents compiled data from 1950's to 1980's geochemical analysis. More recent Government of Alberta analysis conducted by Huff (2011, 2012), has collected and analyzed:

- Two samples from wells 100/03-02-038-24W4 and 100/05-23-038-24W4 from within the Exshaw West Sub-Property that yielded 71 mg/L Li and 74 mg/L Li, respectively; and
- Two samples from wells 100/11-10-038-20W4 and 102/10-28-038-20W4 from within the northern part of the Exshaw East Sub-Property that yielded 34 mg/L Li and 48 mg/L Li, respectively.

The more modern data analysis conducted by Huff (2011, 2012) help to support the values recorded in the older work (i.e., those data compiled by Eccles and Jean, 2010).

6.5 Historical Geochemical Result Summary

With respect to observations and conclusions of the historical Li-brine compilation:

- The Cretaceous formation waters have lower values of lithium in comparison to Devonian brine (Table 4).
- Generally, there has been a limited number of Devonian brine samples collected, analyzed and report within the E3 Metals permit area. For example, the Innisfail, Garrington, Mikwan, Ewing Lake and Fenn West fields do not seem to have had any Devonian brine testing to date.
- The compilation shows there are prospective target areas based on these historical data. Historical geochemical data from ten wells within the Clearwater and Exshaw properties yield lithium values of between 34 and 74 mg/L Li. In addition, aquifers underlying E3 Metals properties have historical Devonian brine samples with >120 mg/L Li, albeit being sampled from wells that are located directly adjacent to the E3 Metals permits, (i.e., essentially producing petroleum and brine from the same reservoir or aquifer).

7.0 Geological Setting and Mineralization

The Clearwater and Exshaw properties are situated in the south-central part of the Western Canada Sedimentary Basin (“WCSB”), within the boundaries of the Cooking Lake Platform and the Leduc Reef Complex. The Li-enriched saline brine occurs in reef-associated carbonates of the Woodbend Group (Leduc Formation) and the Winterburn Group (Nisku Formation; Hitchon et al., 1995; Eccles and Jean, 2010). The regional stratigraphy and hydrostratigraphy of Alberta is summarized in Table 5.

The geology of the Precambrian bedrock and Phanerozoic units underlying the properties are summarized in Figures 9 and 10, respectively, and discussed in the text that follows.

Table 5. Regional stratigraphy/hydrostratigraphy of Alberta (adapted from Hitchon et al., 1990).

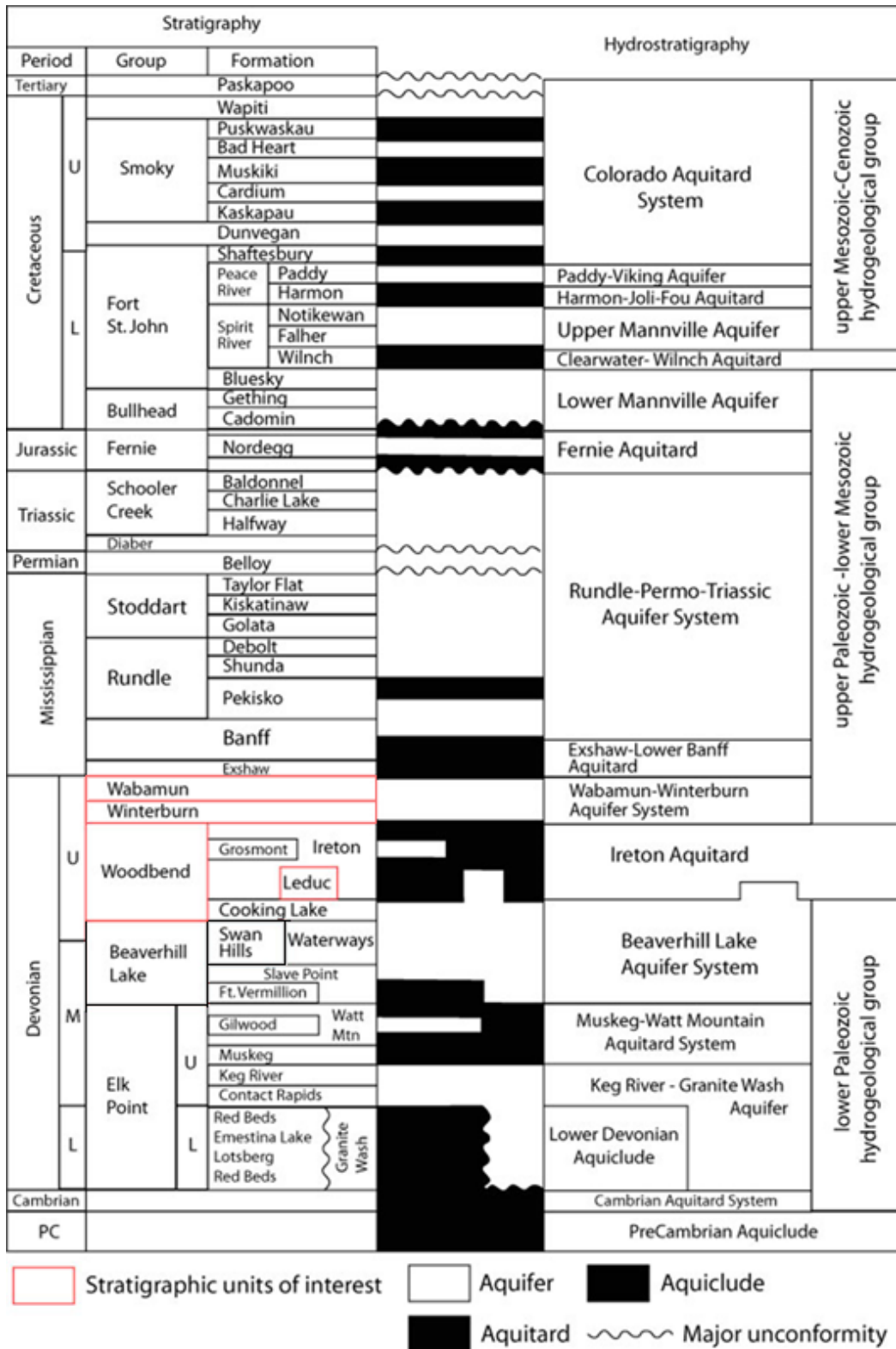
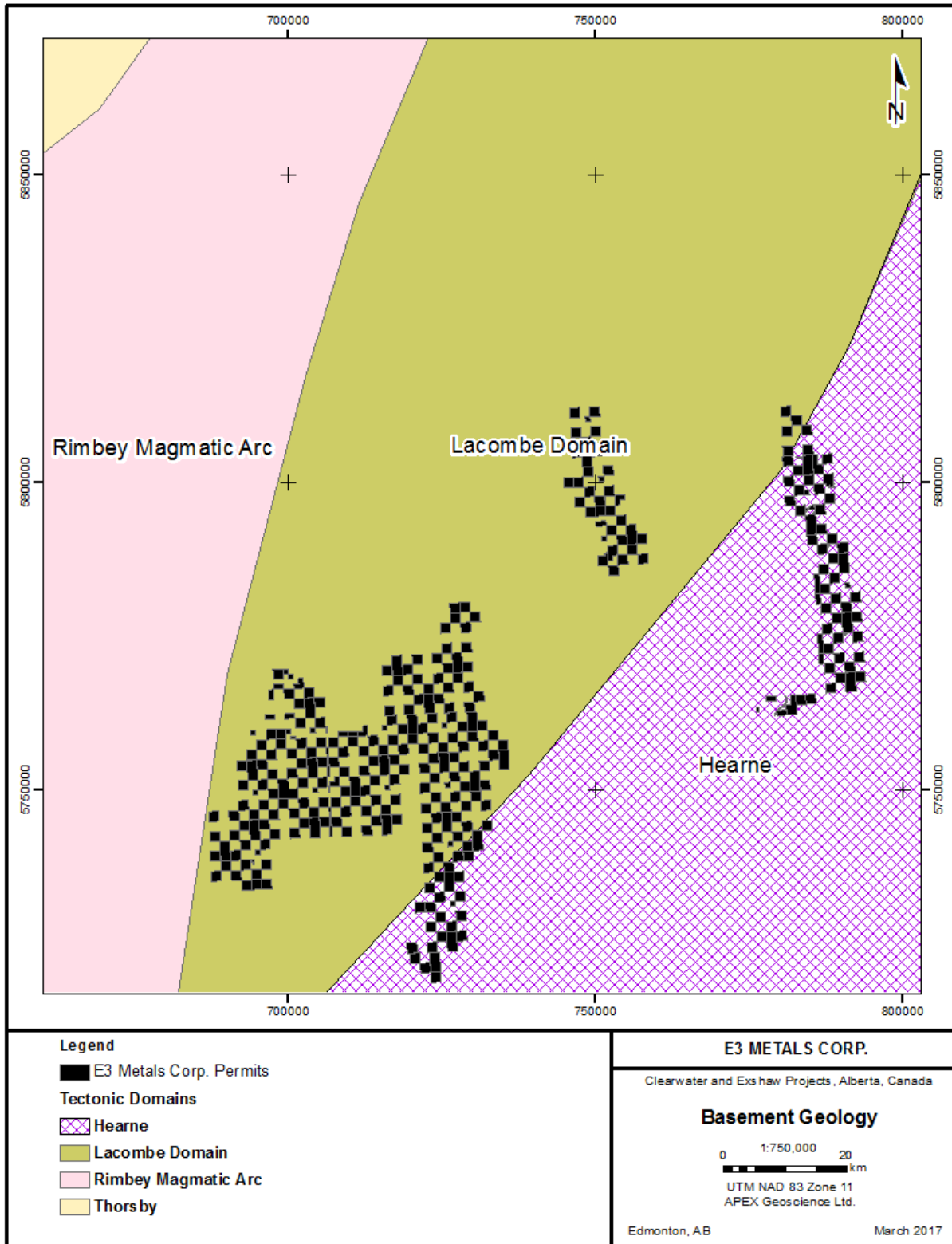


Figure 9. Regional inferred basement geology of the Clearwater and Exshaw properties.



7.1 Precambrian Geology

The Clearwater and Exshaw properties lie in the southern portion of the WCSB, which forms a wedge of Phanerozoic strata overlying the Precambrian basement. The basement underlying the Clearwater property is predominantly Lacombe Domain (Figure 9) with the south-eastern portion of the property on the Hearn Terrane (Paná, 2003). The Exshaw West Sub-Property lies exclusively on the Lacombe Domain while the Exshaw East is dominantly on the Hearn Terrane (Paná, 2003), with the northern-most portion on the Lacombe Domain. The Hearn Terrane is part of the Churchill Province and formed at approximately 2.6 to 2.8 Ga (Ross et al., 1991, 1998).

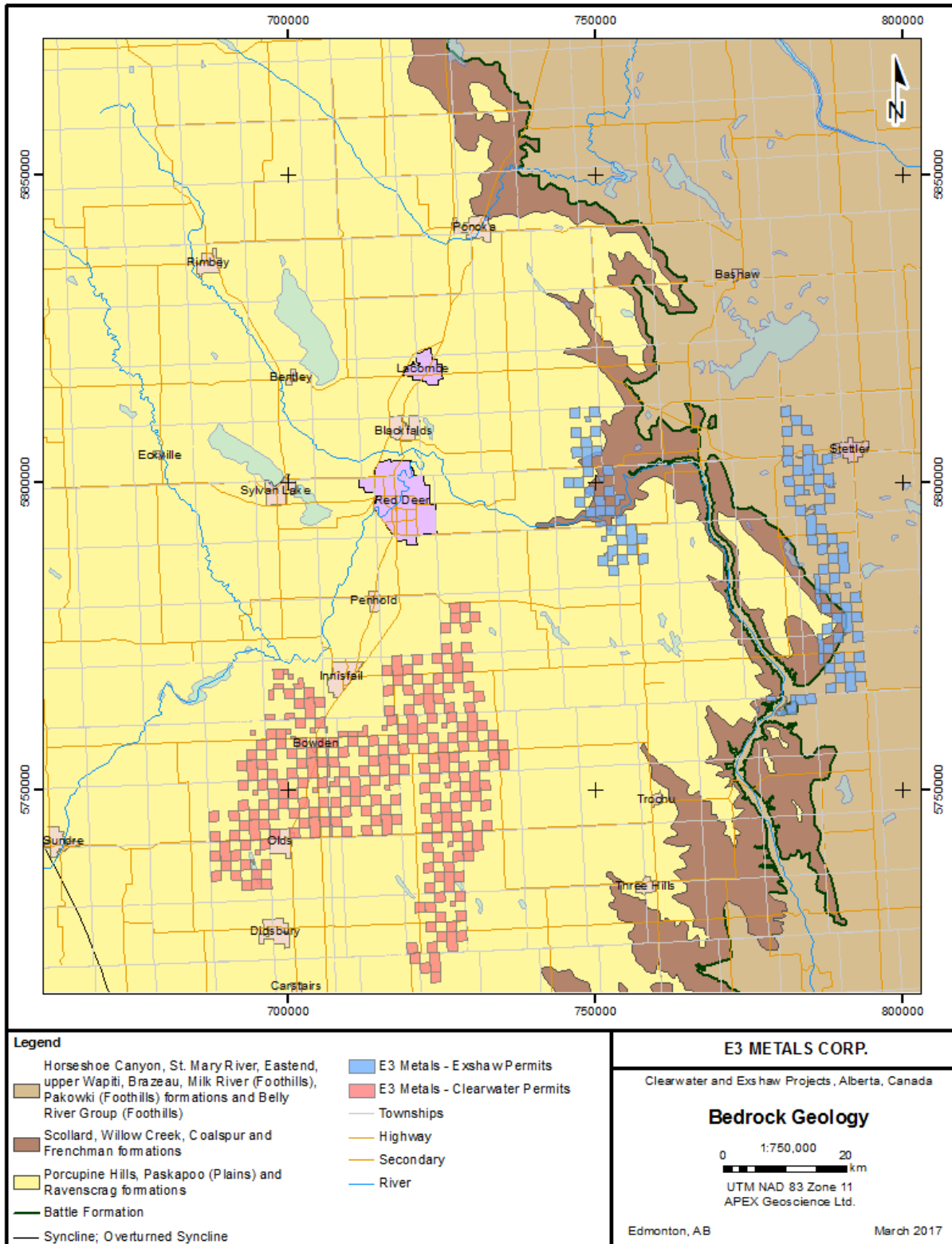
7.2 Phanerozoic Geology

A thick sequence of Tertiary and Cretaceous clastic rocks and Mississippian to Devonian carbonate, sandstone and salt overlie the basement (e.g., Green et al., 1970; Glass, 1990; Mossop and Shetson, 1994; Figure 10). At the base of the Beaverhill Lake Group, the Elk Point Group is comprised of restricted marine carbonate and evaporite that gradationally overlies the Watt Mountain Formation (Mossop and Shetson, 1994). The Upper Elk Point, including the Ft. Vermillion, Muskeg and Watt Mountain formations represent an aquitard layer (Table 5; Hitchon et al., 1990).

The Upper Devonian Woodbend Group conformably overlies the Beaverhill Lake Group (Table 5). The Woodbend Group is dominated by basin siltstone, shale and carbonate of the Majeau Lake, Duvernay and Ireton formations, which surround and cap the Leduc reef complexes. The Leduc reefs are characterized by multiple cycles of reef growth including backstepping reef complexes and isolated reefs (Mossop and Shetson, 1994). The Leduc Formation (Woodbend Group) is the major host to prolific reserves of oil and gas in Alberta and contains elevated concentrations of Li (Hitchon et al., 1995). The Duvernay Formation is composed of dark bituminous shale and limestone which contain and preserve a large accumulation of organic carbon thought to be the source for most of the conventional hydrocarbons in the upper Devonian in Alberta. The Ireton Formation caps the Leduc reefs and was formed by an extremely voluminous influx of shale into the region (Mossop and Shetson, 1994). The Ireton Formation is an aquitard that forms an impermeable cap rock over the Leduc reefs (Hitchon et al., 1995). The Camrose Member represents the only significant carbonate deposition during the Ireton cycles of basin-filling shale (Stoakes, 1980).

The Woodbend Group is conformably overlain by the Winterburn and Wabamun Groups of upper Devonian age (Table 5). In the area of the E3 Metals properties, the Winterburn thickness in south-central Alberta is available from the logs of holes drilled for petroleum and is composed of shale and argillaceous limestone. The Wabamun Group is composed of buff to brown massive limestone interbedded with finely crystalline dolomite at the base. These two Groups comprise the Wabamun-Winterburn Aquifer system from which a few anomalous Li analyses have been obtained (Hitchon et al., 1995).

Figure 10. Regional bedrock geology of the Clearwater and Exshaw properties.



The Wabamun Group is unconformably overlain by the Lower Carboniferous Exshaw shale, an aquitard. The Exshaw shale is overlain by the Banff Group, which is composed of a medium to light olive grey limestone with subordinate fine-grained siliciclastics, marlstone and dolostone overlying a basal shale, siltstone and sandstone unit (Mossop and Shetson, 1994). The Rundle Group conformably overlies the Banff Group and is composed of cyclic dolostone and limestone with subordinate shale. Permian strata in the area are thin. The Permian Belloy Group unconformably overlies the Rundle Group and is unconformably overlain by the Triassic Montney Formation. It is composed of shelf sand and carbonate (Mossop and Shetson, 1994).

The overlying Mesozoic strata (mainly Cretaceous) are composed of alternating units of marine and nonmarine sandstone, shale, siltstone and mudstone. The Triassic includes fine-grained argillaceous siltstone and sandstone. The overlying Jurassic Fernie Group is composed of limestone of the Nordegg Formation that is overlain by interbedded sandstone, siltstone and shale (Mossop and Shetson, 1994). The Lower Cretaceous strata are represented by the Bullhead, Fort St. John and Shaftesbury Groups which comprise a major clastic wedge on the Foreland basin (Table 5).

Bedrock units underlying the Properties include the late Cretaceous Horseshoe Canyon and Scollard formations and Tertiary Paskapoo Formation (Figure 10). Horseshoe Canyon strata consist of interbedded sandstone, siltstone, mudstone, carbonaceous shale and coal seams. The Scollard Formation consists primarily of sandstone and siltstone that is interbedded with mudstone. Coal seams in the upper portion of the Scollard are economically significant, particularly in western Alberta. Finally, the Paskapoo Formation underlies the Clearwater Property, and much of southwestern Alberta. It consists of sandstone, siltstone and mudstone.

7.3 Late Tertiary – Quaternary Geology

During the Pleistocene, multiple southerly glacial advances of the Laurentide Ice Sheet across the region resulted in the deposition of ground moraine and associated sediments in south-central Alberta (Dufresne et al., 1996). The majority of the Clearwater and Exshaw properties is covered by drift of variable thickness, ranging from a discontinuous veneer to just over 15 m (Pawlowicz and Fenton, 1995a, b). Bedrock may be exposed locally, in areas of higher topographic relief or in river and stream cuts. The advance of glacial ice may have resulted in the erosion of the underlying substrate and modification of bedrock topography. Limited general information regarding bedrock topography and drift thickness in south-central Alberta is available from the logs of holes drilled for petroleum, coal or groundwater exploration and from regional government compilations (Mossop and Shetson, 1994; Pawlowicz and Fenton, 1995a, b). Glacial ice is believed to have receded from the area between 15,000 and 10,000 years ago.

7.4 Structural Geology

A number of Alberta's prominent Devonian Reef Complexes are underlain by and are proximal to basement faults, including numerous complexes in the Clearwater and

Exshaw properties (e.g., Bashaw, Innisfail – Woodbend Group; Nisku carbonate bank – Winterburn Group). These reef complexes promoted growth over long periods of time along the shallow water side or uplifted fault interfaces during slow subsidence of the down side of the fault (e.g., Bloy and Hadley, 1989; Dufresne et al., 1996).

7.5 Mineralization

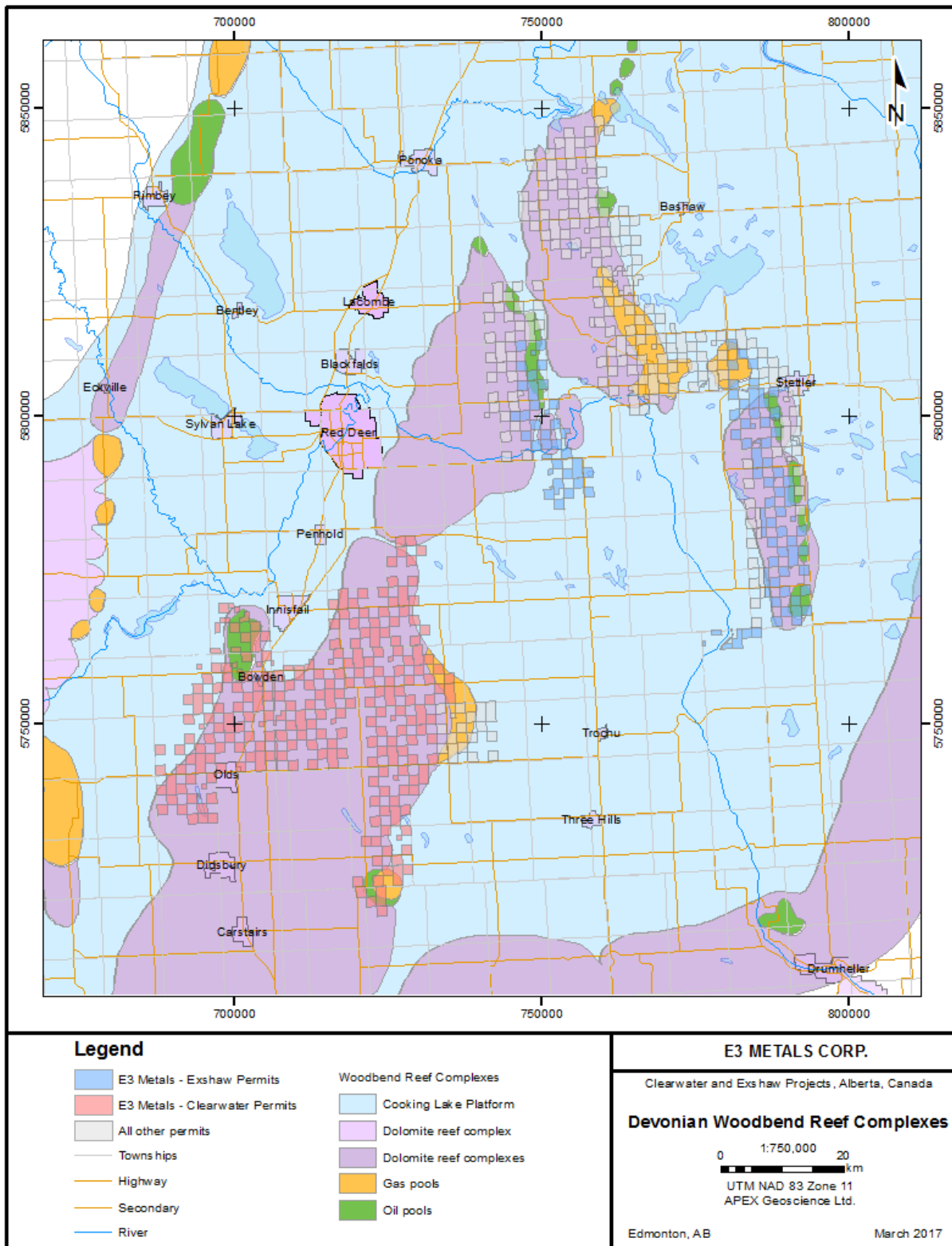
E3 Metals has yet to conduct direct measurements of Li concentrations of formation waters from the Clearwater and Exshaw properties. Consequently, any discussion of Li-brine mineralization in Alberta is based on the author's knowledge of oilfield Li-brine that has been derived from Government of Alberta and industry publications. Hitchon et al. (1995) initially identified the potential for Li-enriched brine in the Devonian petroleum system of Alberta, including reef complexes of the Woodbend and Winterburn group aquifers. Subsequent work by Eccles and Jean (2010) and Huff et al. (2011, 2012) confirmed the presence of elevated Li (e.g., >75 mg/L Li) in aquifers associated with the Devonian reef complexes.

The main oil and gas accumulations in E3 Metals properties occur in dolomitized reefs of Devonian Leduc age, with a secondary accumulation occurring at a higher elevation in the biostromal development in the Nisku Formation of the Devonian Winterburn Group (Figure 11). The Clearwater Sub-Property also includes Wabamun Group oil and gas production in the Garrington field. Consequently, Li-brine mineralization on the Property consists of Li-enriched Na-Ca brines that are hosted in porous and permeable aquifers associated with the Devonian carbonate reef complexes.

With respect to water production, the Devonian oil and gas reservoirs (or aquifers) are situated at depths of greater than 1,500 m below the Earth's surface. Consequently, the brine can be analyzed for lithium and other elements by accessing the brine as waste water associated with oil and gas production. The Devonian petroleum system region represents a mature petroleum field and today, most, if not all of the wells produce far more water than petroleum products. Many of the wells in this area in their early history started out at hundreds to thousands of barrels per day of petroleum products and required little active pumping to extract. However, at present most of the wells produce excessive amounts of formation water in comparison to petroleum products. This fact is true for E3 Metals Clearwater and Exshaw properties. Many of the oil and gas facilities in the region produce on average less than 32 m³ per day of petroleum products, but waste water production produces anywhere from 22,700 to 227,000 litres of brine per hour (about 545 m³ to 5,450 m³ per day; as documented via GeoSCOUT™).

To end, petro-operators are currently producing petroleum and large volumes of waste water brine from fields underlying E3 Metals properties. Accordingly, confirmation of Li-brine mineralization within the properties is subject to E3 Metals conducting a formation water sampling program and a hydrogeologic characterization study of aquifers within the permit boundaries.

Figure 11. The extent of the Cooking Lake Platform, Devonian reefs, and hydrocarbon resources beneath the Clearwater and Exshaw properties.



8.0 Deposit Types

Lithium-brine deposits can be divided into continental and non-continental brine deposits. Continental brine deposits are the most common form of lithium-containing brine. They occur in saline desert basins and are commonly referred to as salars, salt lakes and salt flats. Continental brine is located near Tertiary or Recent volcanoes and is made up of sand, minerals with brine and saline water with high concentrations of dissolved salts (e.g., Chile, Argentina, China and Tibet).

Non-continental brine deposits include geothermal brine and oilfield brine. Geothermal lithium brine deposits are comprised of a hot, concentrated saline solution that has circulated through crustal rocks in areas of high heat flow and become enriched with elements such as lithium, boron and potassium (e.g., Salton Sea, California; Wairakei, New Zealand; Reykanes Field, Iceland; and El Tatio, Chile). The most attractive known occurrences are in the the Brawley area south of the Salton Sea in Southern California.

Formation waters associated with some of the world's oilfields are known to contain medium to highly anomalous concentrations of Li and are considered potential sources for large tonnages of Li. For example, the Smackover brines in the southern United States (Arkansas and Texas) are high NaCl and CaCl₂ brines with concentrations of Li ranging from 50 to 572 ppm (Garrett, 2004; Tahil, 2007). The high Ca and Br content of these brines suggest they are concentrated seawater dolomitization brines with the high concentrations of Li (along with B and other trace ions) supplied by geothermal sources. The Smackover brines are found at depths ranging from 1,800 to 4,800 m. The brine is hosted in an oolitic limestone with an average porosity of about 5% (Garrett, 2004). Currently only Br is recovered from the Arkansas brines however studies have been conducted on the potential recovery of Li (Garrett, 2004; Tahil, 2007).

In Alberta, lithium-enriched (>50 mg/L) brine occurs within porous carbonate source rocks of the Devonian Petroleum System, including the: Late Devonian Beaverhill Lake (Swan Hills), Winterburn (Nisku) and Woodbend (Leduc) groups (formations) of the Alberta Basin. The brine is accessible via oil/gas wells that have pumped the formation water (as waste water along with hydrocarbons) from depths of greater than 1,500 m to the earth's surface. Currently, the extracted water is treated to separate and remove petroleum products and then is re-injected back into subsurface formations. It is conceivable that existing water processing procedures could be modified to extract lithium and other elements from the Devonian aquifer systems.

With respect to the source of Alberta oilfield Li-brine, early studies proposed a source related to connate water (original sea water) that was altered by diagenesis with selective membrane-filtration of lithium (Billings et al., 1969). Geochemical and isotopic data were used by Eccles and Berhane (2011) to suggest that any viable lithium-source models for the Swan Hills area of northwestern Alberta should invoke direct mobilization of silicate-bearing fluids from either the crystalline basement or the immature siliciclastics deposited above the basement (basal Cambrian sandstone, Granite Wash

or the Gilwood Member), to the Devonian Beaverhill Lake and Leduc formation waters. Based on major ion and strontium, lead and Li isotopic geochemistry, Eccles and Berhane (2011) concluded that the source of the lithium is ultimately unknown, but it precludes halite precipitation, lacks a meteoric water source, involves alteration of silicates (particularly Li- and K-bearing minerals), and appears to correlate with dolomitization.

More recently, Huff (2016) has shown that two Li-enriched brines have distinctly different geochemical characteristics, and thus distinct evolutionary histories, exist within the Late Devonian carbonates of the Alberta Basin. With respect to the Beaverhill Lake Group (Swan Hills Formation), Huff (2016) concurred with Eccles and Berhane (2010) that Li-enriched brine in this aquifer was formed by mixing with Li-enriched fluids expelled from Precambrian crystalline basement.

Secondly, Li-enriched brine of the Nisku and Leduc Formations were formed by preferential dissolution of Li-enriched late-stage evaporate minerals, likely from the Middle Devonian Prairie Evaporite, into evapoconcentrated Late Devonian seawater. Dense Li-enriched brines formed through evaporite dissolution migrated downward into the Middle Devonian Winnipegosis Formation and then westward by gravity-driven flow in response to westward tilting of the Winnipegosis Formation beginning in Jurassic time. Laramide tectonics and modern-day upward movement of water through Devonian carbonates has emplaced the diluted Li-enriched brines into the Late Devonian carbonate reef complexes or the Nisku and Leduc Formations (Huff, 2016).

9.0 Exploration

E3 Metals has yet to conduct exploration at the Clearwater and Exshaw properties for the intent to explore for L-brine.

10.0 Drilling

E3 Metals has yet to conduct drilling at the Clearwater and Exshaw properties for the intent to explore for Li in formation water.

11.0 Sample Preparation, Analysis and Security

E3 Metals has yet to conduct any sampling at the Alberta Clearwater and Exshaw properties for the intent to explore for Li-brine.

12.0 Data Verification

12.1 Verification of Historical Government-Published Geochemical Formation Water Data

Historical brine data in the government archives comprise a variety of sampling/analytical methodologies. The majority are classified as 'standard' analyses, in

which case sodium is calculated as the difference between the analyzed anions (chloride, sulphate, bicarbonate and carbonate) and cations (calcium and magnesium).

These analyses inherently include accumulated analytical and other errors, and trace elements are rarely reported. Although these 'standard' analyses are of limited utility – especially for detailed work such as evaluating water-rock reactions – their occasional inclusion of trace elements is of interest when Li, Br, B and I are included. Other sources of historical data include the mid-1970s RCAH-series (Research Council of Alberta Hitchon series) that includes brine data collected as part of drill-stem testing. These data include trace element analyses using ICP methods (Hitchon, 1995).

The 'standard' and 'RCAH-series' data were evaluated for robustness and charge imbalances using SOLMINEQ.88 (Kharaka et al., 1988). Any assays with a charge imbalance of >15% were rejected; of the analysis retained, approximately 66% and 23% had a charge imbalance of <5% and 5-10%, respectively. In reviewing historical Alberta oilfield formation waters data, the authors have reviewed only the pre-culled data of Hitchon et al. (1995). For further review on the data culling, the full details of the manipulations carried out on these historical data can be reviewed in Hitchon (1993).

12.2 Confirmation of Current Well Production

A March 14th 2017 site inspection by the author of this Technical Report verified that there is active oil and gas production taking place within the Clearwater and Exshaw properties.

In addition, an office-based study was conducted to confirm current oil, gas and water production in the Devonian petroleum system in the Clearwater and Exshaw Sub-Property areas. This study was completed as part of this Technical Report, essentially to confirm that formation water continues to be extracted from Devonian Leduc aquifers as a by-product of petroleum production. The study was conducted by accessing the AER database via GeoSCOUT™. The data search focused specifically on those wells that were within the claim boundaries and had lithium values of greater than 50 mg/L Li from the combined dated of Eccles and Jean (2010) and Huff et al. (2011, 2012).

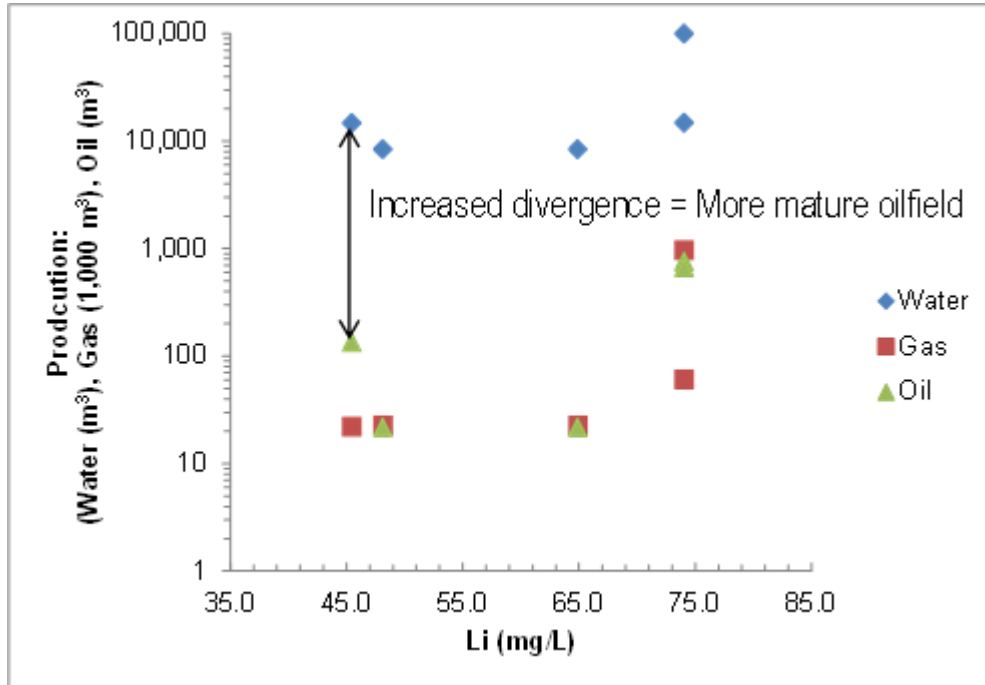
The result of the well production activity search is presented in Table 6 and Figure 12. Within the claim boundaries 5 wells that had historical Li-brine values of >50 mg/L Li are actively producing as of March 2017. These wells produced 143,698 m³ of water in 2015 (the last full year of available data). A total of 9 wells with Li data have produced hydrocarbons within the claim boundaries historically; with a combined 5.67 million m³ of water produced over the lifetime of the wells. The Devonian petroleum system is a mature oilfield. Current hydrocarbon production produces significant volumes of water in comparison to petroleum products (Figure 12; see 2015 production values versus those over the lifespan of the wells).

Table 6. Cumulative 2015 production values of water, gas and crude oil for selected Leduc-producing wells within the Clearwater and Exshaw claim boundaries. All available Li values above detection are shown. Note that a value of >50 mg/L lithium is considered regionally significant (Hitchon et al., 1993).

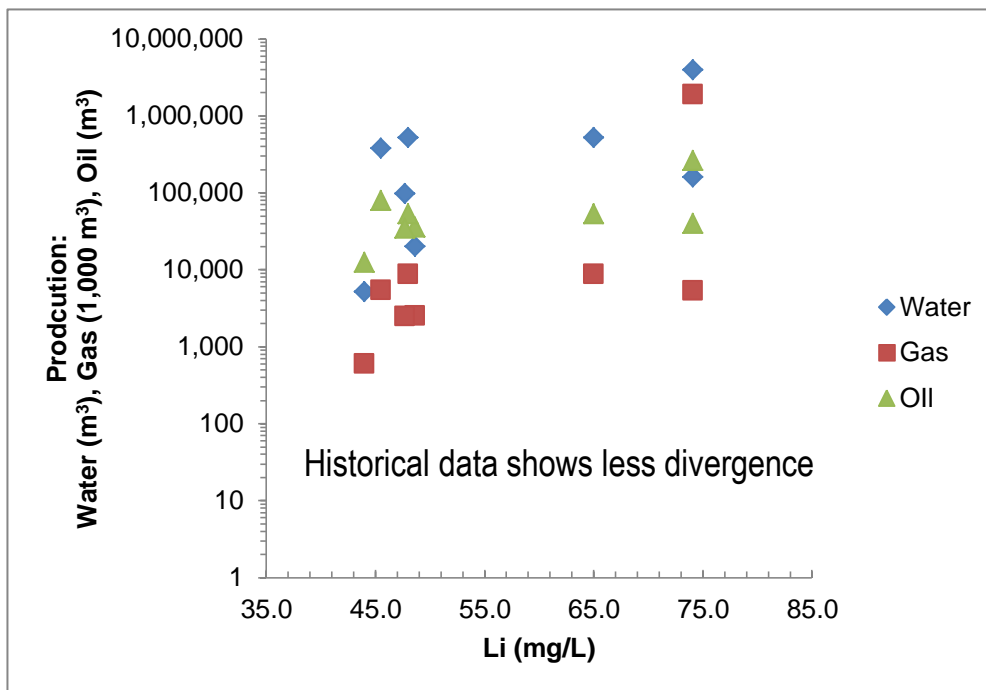
Well Name and Well ID	Well Status	Group/Formation	Lithium (mg/L)	2015 Production Values			Cumulative Production (lifetime)*		
				Water (m ³)	Gas (1,000 m ³)	Crude Oil (m ³)	Water (m ³)	Gas (1,000 m ³)	Crude Oil (m ³)
ENHANCEENERGY HAYNES 5-23-38-24	Active	Winterburn Group (Nisku)	74.1	14,780	60	754	158,926	5,351	39,869
VAULT WIM 7-3-34-26	Active	Woodbend Group (Leduc)	74.1	99,421	961	668	3,962,056	1,873,101	262,381
100/03-02-038-24W4	Suspended	Winterburn Group (Nisku)	70.8	/	/	/	196,132	5,131	22,743
BEARSPAW FENNBV 3-26L-36-20	Active	Woodbend Group (Leduc)	65.0	8,389	23	22	521,553	8,727	52,732
CPR CONNOR NO. 1 01-23-035-20	Suspended	Winterburn Group (Nisku)	48.6	/	/	/	20,152	2,498	35,537
BEARSPAW FENNBV 3-26L-36-20	Active	Woodbend Group (Leduc)	48.0	8,389	23	22	521,553	8,727	52,732
NORCEN UNIT STETTLER 10-28-38-20	Suspended	Woodbend Group (Leduc)	47.7	/	/	/	97,105	2,456	34,557
BEARSPAW STETTLER 8-4-38-20	Active	Woodbend Group (Leduc)	45.5	14,633	22	133	374,093	5,378	79,285
NORCEN UNIT STETTLER 12-27-38-20	Suspended	Winterburn Group (Nisku)	44.0	/	/	/	5,189	599	12,410
BEARSPAW UNIT STETTLER 11-10-38-20	Active	Winterburn Group (Nisku)	34.2	6,474	6	121	338,138	4,046	77,499
				143,698			5,673,345		

Figure 12. Cumulative 2015 (A) and lifetime (B) water, crude oil and gas production from selected Devonian-producing wells within the Clearwater and Exshaw permits.

A) Cumulative 2015 production values



B) Cumulative lifetime of well production values



13.0 Mineral Processing and Metallurgical Testing

E3 Metals has yet to conduct any mineral processing, metallurgical testing or extraction/recovery test work at the Clearwater and Exshaw properties, for the intent to explore, recover and extract lithium from Devonian oilfield brine.

14.0 Mineral Resource Estimate

The intent of this Technical Report is to provide a geological introduction to the E3 Metals Clearwater and Exshaw properties in accordance with the Canadian Securities Administration's ("CSA's") National Instrument 43-101 ("NI 43-101"). Because exploration work, including brine assaying and lithium recovery test work has yet to commence at the Clearwater and Exshaw properties, it is not at this time possible to conduct mineral resource estimation work.

SECTIONS 15 THROUGH 22 OF FORM 43-101 F1 ARE NOT REQUIRED

THE CLEARWATER AND EXSHAW PROPERTIES ARE NOT CONSIDERED ADVANCED PROPERTIES

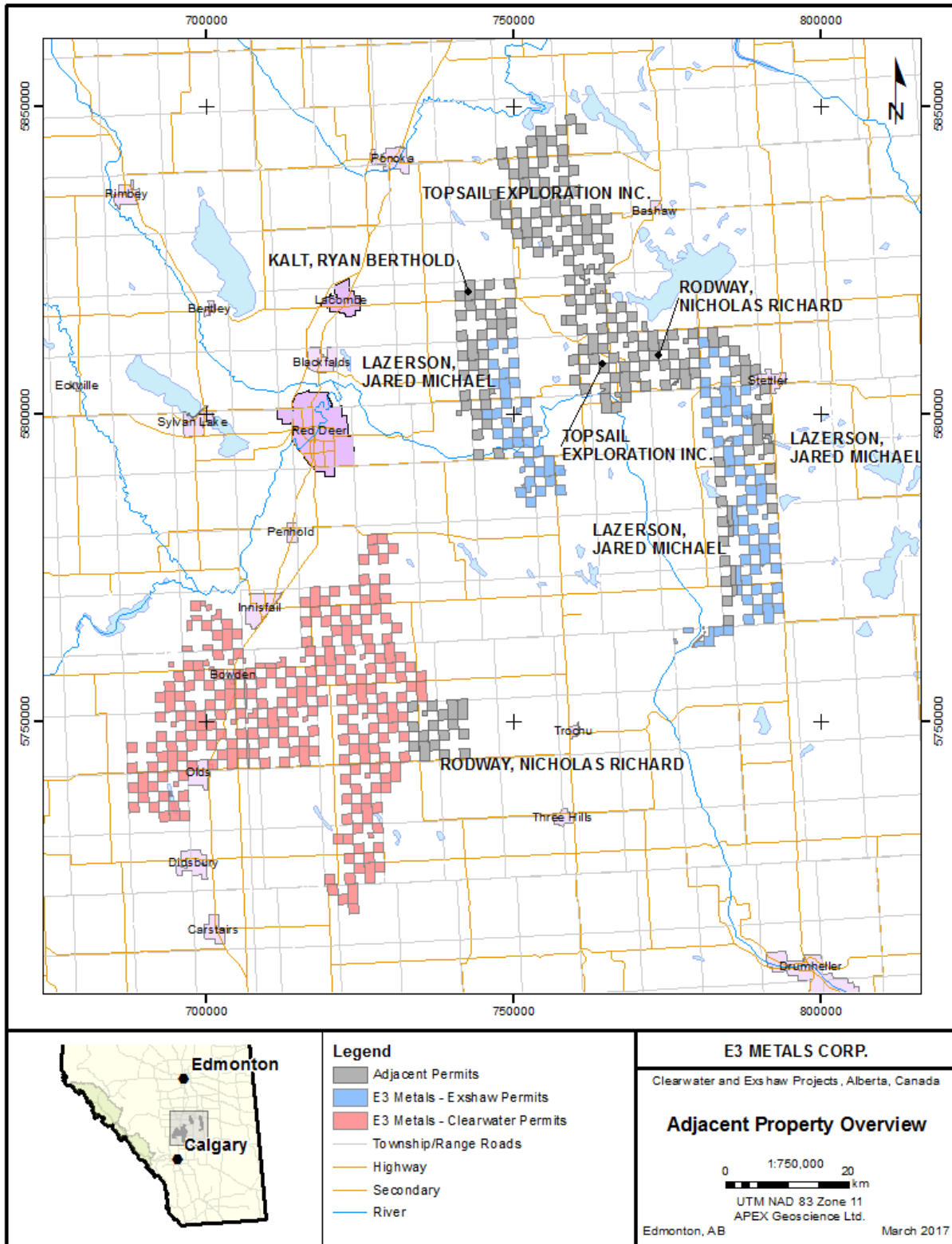
23.0 Adjacent Properties

An adjacent property is defined as a reasonably proximate property in which the issuer does not have an interest and has similar geological characteristics to those of the subject of this Technical Report. Alberta is currently experiencing a high level of industry interest in its oilfield Li-brine potential. A variety of exploration companies have staked permits throughout Alberta; these properties have essentially staked all historical instances of lithium-in-brine enrichment. E3 Metals Clearwater and Exshaw properties are bounded by other exploration companies that are also exploring the Devonian petroleum system for Li-brine (Figure 13).

The Clearwater and Exshaw claim blocks are bounded by adjacent permits from four permit owners, namely: Ryan Berthold Kalt, Jared Michael Lazerson, Nicholas Richard Rodway, and Topsail Exploration Inc. (Figure 13). All of the adjacent claim blocks were staked in 2016. The claims owned by Nicholas Richard Rodway and Jared Michael Lazerson are currently under option by MGX Minerals Inc. as part of the Red Deer group of permits (Eccles, 2016). The Erskine permit (9316020087) lies immediately adjacent to the north-western border of the Exshaw East claim block, and the Wimborne permit immediately adjacent to the western border of the Clearwater claim block. The claims owned by Jared Michael Lazerson flank both sides of the Exshaw East claim block.

Topsail Exploration Inc. own three permit (9316070198 to 9316070200) which lie to the west of the Erskine claims owned by Nicholas Richard Rodway. Ryan Berthold Kalt owns a single permit in the area (09316020096) which borders the northern edge of the Exshaw West claim block.

Figure 13. Adjacent properties in the vicinity of the Clearwater and Exshaw properties.



To date, none of these neighboring competitor companies have publicly released brine assay results or mineral resources from the properties that are adjacent to E3 Metals Clearwater and Exshaw properties.

24.0 Other Relevant Data and Information

24.1 Preliminary Water Deliverability Study

GLJ Petroleum Consultants (“GLJ”), of Calgary, AB, was commissioned by E3 Metals to determine the well deliverability of water from the aquifer underlying the Wimborne D-3A pool (within the Clearwater Sub-Property). The focus of the study was concentrated in the formation below the original oil-water contact, which occurs at 1,314 m below surface. This depth was selected as shallower elevations did not represent favorable permeability conditions.

GLJ reviewed the publicly available oil and gas reserve development and production data from the Wimborne D-3A pool. Open hole logs from three wells the fully penetrate the aquifer were used to characterize the reservoir thickness and porosity. Information from these wells yielded an average aquifer thickness of 125 m and an average porosity of 6%. Using publically available core data, in addition to publically available pressure buildup tests, the average permeability of the aquifer was estimated at between 1 and 80 millidarcys (mD). Water saturation in the original aquifer section is 100%.

Analytical models were created for vertical and horizontal wells in which the aquifer was assumed to be circular with constant pressure boundary at 17,200 m. A ‘minimum required flow-rate’ value of 3,000 m³ of water per day sustained for 1,000 hours was used as a benchmark to estimate the minimum effective permeability required for the project. For the vertical well model, the aquifer was modeled as a composite of two units: an ‘inner unit’ comprising a 35 m radius around the well with increased permeability, simulating a well stimulation; and an ‘outer unit’ extending to the boundary of the aquifer. A minimum practically achievable bottom hole pressure of 500 kPa was used. Based on these parameters, a minimum permeability of approximately 15 mD was required to reach the minimum required flow-rate of 3,000m³/d. The inflow performance relationship was then estimated for analytical models with: 1) average expected permeability (20 mD); and 2) highest expected permeability (80 mD). The results for the vertical wells returned maximum water flow rates of 5,000 m³ per day (at 20 mD) and 20,500 m³ per day (at 80 mD).

For horizontal well simulations, the aquifer was modeled as a single homogeneous reservoir. A well length of 1600 m and a minimum practically achievable bottom hole pressure of 1500 kPa was used. It was found that a minimum permeability of around 5 mD was required to reach the minimum required flow-rate. The inflow performance relationship was estimated for analytical models using three permeability scenarios: 1) lowest viable (5 mD); 2) average expected (20 mD); and 3) highest expected (80 mD). Models for horizontal wells returned maximum water flow rates of 3,300 m³ per day (at 5 mD), 8,100 m³ per day (at 20 mD) and 26,500 m³ per day (at 80 mD).

This preliminary evaluation illustrates the potential for water deliverability at the Wimborne D-3A pool (Clearwater Property). Additional aquifer characterization studies, including pressure surveys, should be completed using current oil and gas infrastructure to provide more detailed data on the fluid deliverability and fluid-level response to any potential Li-brine production in the future.

24.2 Discussion on the Extraction of Lithium from Alberta Oilfield Formation Water

To the best of the author's knowledge, no company or process has successfully extracted lithium and metalliferous elements from Alberta-specific formation water/brine for commercial production.

Several extraction processes have been, and are currently being, researched, tested and patented for the removal of high purity lithium (approximately 99.5% purity) from brine (Garrett, 2004; Lithium Americas, 2015; Tran and Luong, 2015; Pure Energy Minerals, 2016); however, companies involved in the extraction of Li typically develop proprietary processes, the details of which are often undisclosed. Metallurgical testing of lithium brine continues to make advancements. Two selected developmental processes are presented in the discussion that follows.

California Simbol Materials and South Korean steelmaker POSCO claim to have developed proprietary methodologies designed to minimize large scale evaporation ponds and create a high efficiency recovery rate in comparison to traditional brine evaporation technology (e.g., Lithium Americas, 2015). This 'rapid extraction' technology essentially minimizes the step of beneficiating the brine by solar evaporation, and therefore, might have some applicability in Alberta where the evaporation technique is likely not possible given Alberta's climate.

Pure Energy Minerals Limited, and its technology providers Tenova Bateman Technologies and SGS Canada, announced that column test work had achieved an overall lithium recovery of at least 85% from brine (Pure Energy Minerals, 2016). The test work was conducted at Tenova Bateman Technologies test facility in Katzrin, Israel, and incorporated a four-stage process that involved: pre-treatment; solvent extraction; electrolysis; and crystallization. Pre-treatment effectively removed divalent ions such as calcium and magnesium by using a membrane-based process. The treated brine is then mixed with a customized solvent in which lithium ions are preferentially absorbed, effectively loading the organic solvent with lithium. The loaded organic solvent is then separated from the aqueous brine and stripped of lithium by the addition of an appropriate acid. The electrolysis and crystallization processes were then performed on the resulting lithium sulphate solution by a sub-contractor to Tenova Bateman Technologies to produce Lithium Hydroxide Monohydrate crystals (Pure Energy Minerals, 2016).

With respect to Alberta oilfield brine, historical recovery test work has been conducted on Alberta Li-brine by at least two companies: Lithium Exploration Group

Inc.; and Channel Resources Ltd. These companies explored two distinctly different methodologies to recover lithium and other elements of interest from Alberta oilfield brine as summarized in the text that follows. More recently, MGX Minerals announced successful preliminary trials to extract Li from oilfield waste water in Alberta (MGX Minerals, 2017a, b), which is also discussed below.

24.2.1 Historical Test Work: Ultrasonic Cavitation (Lithium Exploration Group Inc.)

In 2011, Lithium Exploration Group Inc. (“LEXG”) invested in the development of Ultrasonic Technology to assist in separating suspended solids from vapour phase brine (Lithium Exploration Group Inc., 2012). The intent of the Ultrasonic technology is to take the formation water to the super-critical stage, thereby using minimal energy to separate and extract solids out of their suspended state in isolation from the vapour phase. The resulting slurry or cake would then require further processing to separate minerals of economic interest. It is not known if the technique was ever applied to test lithium extraction specific to Alberta formation water. LEXG is currently performing ongoing testing to the cavitation technology to desalinate water and/or to upgrade crude oil.

24.2.2 Historical Test Work: Chemical Extraction Methods (Channel Resources Ltd.)

In 2010, Channel Resources Ltd. (“Channel Resources”) collected a bulk sample of approximately 2,000 litres and shipped a 1,500 litre sub-sample to Hazen Research, Inc. (“Hazen”) of Golden, Colorado for testing. Hazen tested a variety of extraction methods to determine the optimal process to extract Li, B, K, and Br from the brine (Baughman and Gertenbach, 2011, Channel Resources Ltd., 2010). Hazen reported encouraging baseline recovery rates for all elements of interest by evaluating a variety of extraction methods, including:

- >95% of Li to an intermediary compound (up to 50% lithium chloride by solvent extraction and co-precipitation method with $Al(OH)_3$);
- Up to 88% of Br (as pure-bromine using chlorination/steam stripping);
- Up to 100% of B (as sodium borate using solvent extraction/sodium hydroxide stripping); and
- 40% K as carnallite (with >70% recovery of KCl from carnallite).

Channel Resources reported that the processes have not been optimized for cost-effectiveness and require further study to determine practical cost-efficient parameters. Nevertheless, the initial test results are a positive step towards future Alberta oilfield brine beneficiation and extraction technologies.

In 2010-2012, Channel Resources engaged Chemetics to explore the possibility of using nanofiltration technology coupled with chemical treatment to purify the brine to

enhance the recovery of the metal contents, namely lithium and potassium, in the form of lithium and potassium chloride. Approximately 200 litres of acidified brine (pH 1) contained in a 45 gallon size plastic drum were sent by Channel Resources to Chemetics' Technology Centre for use as the representative brine solution for a two phase test. The result of this test work is not known.

24.2.3 Current Test Work: Lithium-Brine Beneficiation (MGX Minerals Inc.)

In September 2016, MGX Minerals Inc. ("MGX") announced that they had entered into a Letter of Intent to acquire 50% interest in PurLucid Treatment Solution (Canada) Inc. ("PurLucid"; MGX Minerals Inc., 2016a). PurLucid's environmental services technology was initially designed to separate impurities from oil industry waste streams to produce clean water. It was proposed that the PurLucid technology could be used to remove heavy metals from brine and provide a continuous stream of partially concentrated Li-brine that was low in impurities.

In November 2016, MGX announced a pending patent proprietary process (U.S. Provisional Patent #62/419,011) for the extraction of lithium and other valuable minerals from oilfield brine (MGX Minerals Inc., 2016b). Like the Simbol/POSCO technology, MGX proposes to reduce the production time of lithium extraction from brine by 99% compared with conventional lithium brine production times that use solar evaporation.

MGX proposed to merge the impurity separation PurLucid technology with their rapid extraction patent to produce lithium carbonate. In January 2017, MGX announced they had successfully used this technology to extract lithium from heavy oil wastewater (MGX Minerals Inc., 2017a,b). A sample of heavy oil evaporator blowdown wastewater ("EBD") – essentially a concentrated brine solution with anomalous levels of lithium grading 87 mg/L Li – was bench-scale tested in the laboratory. The test work reportedly recovered 34.8 mg/L Li or 40% of the original 87 mg/L Li feed. Twenty-one per cent of the total Li remained in the final brine with the remaining lithium being lost during the extraction process due to: the initial softening of the wastewater (18%); NaCl removal (1%); magnesium removal (16%); and CaCl₂ removal (4%). It is possible that some percentage of the remaining 22% lithium-in-solution could be further recovered during a second pass. The lithium was crystallized as lithium carbonate. Other primary recoveries resulting from this test work include: 83% sodium and 100% calcium with the final brine having high concentrations of sodium, potassium, and boron.

During March 2017, MGX announced that its lithium beneficiation and recovery technology continues to advance. This time, a mini-bulk oilfield brine sample from the South Sturgeon Lake Gas Plant at MGX's Sturgeon Lake Property in west-central Alberta was used in place of the EBD. The test work, which employed the filtration and pre-treatment phase of the lithium extraction process, resulted in beneficiating the brine from 67mg/L Li to 1600 mg/L Li (MGX Minerals Inc., 2017c). In addition to lithium, the optimization results reported that magnesium, boron and potassium were effectively removed from the brine (compare the feed to concentrate values in Table 7). MGX

reported that this newly developed process concentrates lithium by more than 20-fold while removing contaminants using a low energy process.

Table 7. Results of beneficiation bench scale test work conducted by MGX Minerals Inc. on oilfield lithium-brine from their Sturgeon Lake Property in west-central Alberta.

	Feed	Pre-treatment	Concentrate
Total Boron (B; mg/L)	110	59	4
Total Calcium (Ca; mg/L)	23,000	11,000	370
Total Lithium (Li; mg/L)	67	41	1,600
Total Magnesium (Mg; mg/L)	2,800	<10	13
Total Potassium (K; mg/L)	4,500	2,800	12
Total Sodium (Na; mg/L)	57,000	43,000	68
Total Sulphur (S; mg/L)	96	56	7

25.0 Interpretation and Conclusions

25.1 Geological Introduction Summary

APEX has prepared a Technical Report to introduce E3 Metals Clearwater and Exshaw properties in west-central Alberta. E3 Metals acquired the 10 Alberta Metallic and Industrial Mineral Permits (87,965 hectares) to assess brine within Devonian reef complexes of the Woodbend Group (Leduc Formation), the Winterburn Group (Nisku Formation), and the Wabamun Group for dissolved Li, K, Br and B.

To date, E3 Metals has yet to conduct brine sampling work at the Clearwater and Exshaw properties, and therefore, the Company has relied on historical brine geochemical fluid data to acquire the permits and conduct an initial assessment. Consequently, the intent and purpose of this Technical Report is to provide a geological introduction to the Clearwater and Exshaw properties. The effective date of this report is 24 March, 2017.

The compilation of historical government and energy industry work shows that the Devonian petroleum system underlying the properties contains elevated concentrations of Li-brine. Ten wells within the Clearwater and Exshaw properties yield historical lithium assay values of between 34 and 74 mg/L Li. The highest – within property – Li-brine occurs in wells with petro-production from the Winterburn Group (Nisku Formation) and Woodbend Group (Leduc Formation). Specific areas of interest, based on historical assay data, include: Haynes and Joffre fields of the Exshaw West property; Fenn-Big Valley field of the Exshaw East Property; and Wimborne field of the Clearwater property.

A review of the current status of oil and gas production in the Clearwater and Exshaw properties shows that there are 322 active Devonian oil and gas wells. The Devonian petroleum system represents a mature petroleum field, and consequently, most wells in the area produce far more brine than petroleum product. For example, many of the batteries in the region, which take in production from five to ten wells, produce 22,700 to 227,000 litres of brine per hour of formation water (about 545 m³ to 5,450 m³ per day). Within the claim boundaries at least 5 wells with historical Li-brine values of >50 mg/L Li are actively produced over 143,000 m³ of formation water in 2015.

To conclude, this geological introduction Technical Report shows that there are a number of prospective target areas for Li-brine potential within the Clearwater and Exshaw properties. Target oil/gas fields/pools include the Innisfail, Lone Pine Creek, Three Hills Creek, and Wimborne Fields within the Clearwater claim block; the Fenn-Big Valley, Stettler, and Esrkin Fields within the Exshaw East claim block; and the Clive, Haynes, Joffre and Mikwan Fields within the Exshaw West claim block. Petroleum production actively continues throughout the properties, and large volumes of waste water brine continue to be pumped together with petroleum from depths in excess of 1,500 m to surface.

25.2 Risk and Uncertainties

With respect to risks and uncertainties of the information included in this Technical Report. It should be noted that a large portion of the historical Li-brine data represents compiled data from 1950's to 1980's, and as such the sampling and analytical protocols behind these data are not known and possibly are not compatible with current reporting standards and analytical technology. Having said this, the historical overview provided in this Technical Report does include recent Government of Alberta data (Huff, 2011, 2012); these studies used modern, standard Li-in-brine analytical techniques the results of which yielded elevated Li-brine (e.g., 71 mg/L Li and 74 mg/L Li). Regardless, future Li-brine sampling and analytical work is required by E3 Metals to verify the historical Li-brine results.

E3 Metals Alberta oilfield Li-brine project is an early stage mineral exploration project. At this time, short- and long-term risks and uncertainties on the project's potential economic viability or continued viability involve: recovery of lithium and other elements of interest from the brine; cooperation between mineral and energy companies; the random distribution of E3 Metals land position; and the Alberta Governments position on potential Li-brine production.

To date, no known lithium, or any other metal, production has occurred from Alberta oilfield brine. In addition, beneficiation of the brine to achieve higher levels of lithium-in-brine-solution by traditional solar evaporation is not possible in Alberta due to its geographic location and climate (between 60° and 49° Latitude). Consequently, rapid extraction technologies designed to minimize the step of beneficiating brine by solar

evaporation are in technological development stages (e.g., Lithium Americas, 2015; Pure Energy Minerals Ltd., 2016; MGX Minerals Inc., 2017). Given enough time, funding and technological advancement, it seems inevitable that Li-brine extraction methodologies will progress such that extracting elements of interest from Alberta oilfield brine will one-day be a reality.

E3 Metals may wish to sample for lithium from existing infrastructure owned by certain oil and gas companies. To conduct sampling from existing infrastructure, E3 metals will be required to negotiate access to the brine with these companies. Sampling for lithium is a key component in establishment of mineral resources and reasonable prospects for eventual economic extraction. Overall, cooperation with energy companies is not a major impediment to initial Li-brine testing; the author is aware of several petro-operators throughout the province of Alberta that have granted mineral companies access to their formation water for Li-brine assessment and test work. In the longer term, however, E3 Metals may wish to consider factors or risks of how the continuation or subsidence of the oil and gas operation(s) could affect access to the brine and the ability to perform work on the property.

The Clearwater and Exshaw mineral permits are interspersed with Privately Owned (Freehold) Land, where the surface and/or minerals rights are owned by private individuals and/or companies. The Freehold lands do not pose an obstacle to initial brine assay and mineral processing test work within the mineral permits owned by E3 Metals. Given a favourable distribution of contiguous Permit coverage and completion of advanced characterization studies to study the drawdown effect of the liquid resource (particularly laterally), it is possible that E3 Metals does not have to acquire Freehold Land in order to produce Li-brine from aquifers within the properties. It is also possible that E3 Metals would have to negotiate with Freehold Land owners to gain access to oil and gas well infrastructure on Freehold Land. The pre-existing Freehold agreements associated with hydrocarbon exploitation may reduce the number of agreements to be negotiated.

In Alberta, lithium is categorized as a mineral resource and therefore falls under the Alberta Mines and Minerals Act and Regulations (Metallic and Industrial Minerals Tenure Regulation 145/2005, Metallic and Industrial Minerals Exploration Regulation 213/98). As such, potential Li-brine production would follow current royalty rates of 1% gross mine-mouth revenue before payout; after payout, the greater of 1% gross mine-mouth revenue and 12% net revenue.

Lastly, there is currently no Li-brine production in Alberta, and as such,, the exact procedure for permitting/land use/tenure/environment/consultation has not been tested through the permitting process. Consequently, there is no guarantee the government will grant a Li-brine production permit.

26.0 Recommendations

E3 Metals Clearwater and Exshaw properties are classified as an early stage exploration project. A review of historical Li-brine assay data shows that there have been a limited number of Devonian brine samples collected, analyzed and reported within the E3 Metals permit area. For example, the Innisfail and Garrington fields (Clearwater), Mikwan (Exshaw West), and Ewing Lake and Fenn West fields (Exshaw East) do not seem to have had any Devonian brine testing to date. Fortunately, it is possible to conduct further Li-brine assay testing because petro-operators in the property areas are actively producing petroleum from Devonian age reservoir rocks, and have shown interest in cooperating with Li-brine exploration companies.

To advance the project, E3 Metals will need to gain access to the brine to: verify and determine the best grades of Li-brine; conduct bench-scale testing of existing technologies to prove viability of the resource; and perform mineral resource estimations. Accordingly, the authors recommend further work be conducted on these properties by way of a two-phase approach with a total estimated cost of CDN\$540,000. These costs are outlined in Table 8 and summarized in the text that follows.

26.1 Phase One Exploration Work

Recommended Phase One work involves: 1) E3 Metals negotiating access to the brine with the oil and gas companies; 2) compilation and implementation of Geographical Information System with the intent of delineating high brine-yielding wells for formation water sampling; and 3) conducting a formation water geochemical sampling program at the Clearwater and Exshaw properties. The total cost of the Phase One work is estimated at CDN\$105,000. The results of the Phase One work – defining access to the brine and confirmation of lithium mineralization – will be reviewed to determine whether E3 Metals advances to Phase Two exploration.

The sampling program should emphasis sample collection from within the Leduc and Nisku formation aquifers. The primary objective of the brine sampling program is to verify the Li content of historically sampled wells and to test the brine in other parts of the properties to fully quantify the areas (and wells) with elevated specialty elements. Oil/gas fields/pools in the property area that have no current Li data for Devonian formation waters include the: Innisfail, Garrington, Mikwan, Ewing Lake and Fenn West fields/pools.

A secondary objective of brine sampling program is to collect a mini-bulk water sample(s) of 200-litres or more for potential Phase Two bench top test work that will focus on the extraction and recovery of lithium and other elements of interest. The sampling program should realistically collect approximately 35-60 brine samples from up to 20 separate wells. The sampling program should include a valid QAQC protocol including duplicate samples and sample control blanks to confirm the mineralization and laboratory process.

Table 8. Summary of Phase One and Phase Two recommendations to advance the Clearwater and Exshaw oilfield lithium-brine properties.

Phase	Item	Description	Cost Estimate (CDN\$)	Totals (CDN\$)
Phase One	Access management planning	Negotiate formationwater access with the oil and gas companies	\$5,000	\$105,000
	Sampling/analytical program	GIS sampling delineation program followed by collecting 35-60 formation water samples from up to 20 separate wells for geochemical analysis	\$100,000	
Phase Two	Aquifer characterization and geological investigations	Define the aquifer geometry and determination of the specific yield of the aquifer	\$200,000	\$435,000
	Recoverability test work	Laboratory-scaled test work to explore and optimize recovery processes	\$150,000	
	Land management planning	Initiate surface disposition and environmental studies	\$35,000	
	Mineral resource estimations and NI 43-101 Technical Report	Using the results from Phase One work, in conjunction with reservoir characterization, prepare maiden inferred resource estimations	\$50,000	
			Total	\$540,000

26.2 Phase Two Exploration Work

Pending the results of Phase One exploration work and confirmation of lithium-enriched brine at the Clearwater and Exshaw properties, the ultimate purpose of the Phase Two work is to prepare a NI 43-101 compliant mineral resource estimate. To do so, E3 Metals will have to show reasonable prospects of eventual future extraction. Critical to this NI 43-101 clause, it is imperative that E3 Metals define: 1) the aquifer geometry and specific yield of the aquifer; 2) consider/initiate metallurgical/extraction test work and collaborative agreements with petro-operators to show that lithium can be extracted from Alberta oilfield brine; and 3) conduct land management planning to initiate potential pilot test work. The total cost of the Phase Two exploration work is estimated at CDN\$435,000.

Aquifer geometry and hydrogeologic characterization of the aquifer (e.g., porosity, permeability, brine composition, and transmissivity) are required to conduct a proper evaluation of brine resource. Aquifer characterization and geological investigations are estimated to cost CDN\$200,000.

Laboratory bench-scaled test work should be conducted to optimize the elemental recovery process. Initial extraction experiments should focus on those techniques that eliminate traditional methods of invasive mining or evaporation ponds that require significant land, water, and energy use. The cost of the preliminary laboratory-scaled testing is expected to cost CDN\$150,000.

It is also recommended that Phase 2 include preliminary land management planning studies estimated at CDN\$35,000. This work would include investigation into co-habitation with petro-operators on issues including surface infrastructure and dispositions, and environmental studies. The assessment would also include discussion on factors or risks of how the petro-operation activity levels could affect any future lithium-brine operation at the Clearwater and Exshaw properties.

With respect to resource estimations, as per CIM Best Practice Guideline for Brine Resources (1 Nov 2012), preparation of a resource estimate and ensuing Technical Report requires participation of a variety of Qualified Persons with relevant experience in brine geology such as geologists, hydrogeologists and geochemists. The disclosure of the mineral resource estimation must reflect the input of the entire team, and is estimated to cost CDN\$50,000.

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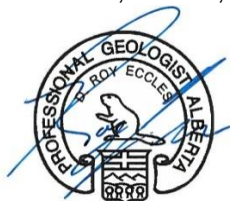
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28.0 Certificates of Authors

I, D. Roy Eccles, P.Geol., do here by certify that:

1. I am a Senior Consulting Geologist and Operations Manager of APEX Geoscience Ltd., Suite 110, 8429 – 24th Street, Edmonton, Alberta T6P 1L3.
2. I graduated with a B.Sc. in Geology from the University of Manitoba in Winnipeg, Manitoba in 1986 and with a M.Sc. in Geology from the University of Alberta in Edmonton, Alberta in 2004.
3. I am and have been registered as a Professional Geologist with the Association of Professional Engineers, Geologists and Geophysicists of Alberta since 2003.
4. I have worked as a geologist for more than 25 years since my graduation from University and have been involved in all aspects of mineral exploration, mineral research and mineral resource estimations for metallic, industrial, specialty and rare-earth element mineral projects and deposits in Canada.
5. I have read the definition of “Qualified Person” set out in National Instrument 43-101 (“NI 43-101”) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a “Qualified Person” for the purposes of NI 43-101. My technical experience with respect to Li-brine in Alberta includes: collaborative industry studies involving a variety of Qualified Persons with relevant experience in brine geology such as geologists, hydrogeologists and geochemists, that confirmed the Devonian petroleum system in Alberta contains enriched lithium and other elements of interest; and Government of Alberta AGS studies documenting the spatial location of lithium-enriched brine in Alberta and hypotheses on the source origins of the lithium.
6. I am responsible for and have supervised the “*Geological introduction to the lithium-brine potential at E3 Metals Corp. Clearwater and Exshaw properties, south-central Alberta*” (the “Technical Report”) with an effective date of 18 May 2017. I conducted a personal site inspection of the Clearwater and Exshaw (East and West) properties on March 14th 2017. I also reviewed oil and gas production values at the Clearwater and Exshaw properties to confirm that the wells are currently active (to March 2017), and to verify that the energy companies continue to extract large volumes of formation water associated with hydrocarbon production.
7. I am not aware of any scientific or technical information with respect to the subject matter of the Technical Report that is not reflected in the Technical Report, the omission to disclose which makes the Technical Report misleading.
8. I have read National Instrument 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.
9. Applying all of the tests in section 1.5 of both NI 43-101 and 43-101CP, I am independent of the issuer, the vendor and the Property (including 1975293 Alberta Ltd., Savannah Gold Corp. and E3 Metals Corp.).
10. I have not had any prior involvement with the Property that is the subject of the Technical Report.
11. I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by them for regulatory purposes, including electronic publication in the public company files or their websites.

Dated this 18 May 2017
Edmonton, Alberta, Canada



D. Roy Eccles, M.Sc., P.Geol.

CONSENT OF QUALIFIED PERSON

BY SEDAR

TO: Ontario Securities Commission
Alberta Securities Commission
British Columbia Securities Commission

AND: E3 Metals Corp. (formerly Savannah Gold Corp.)

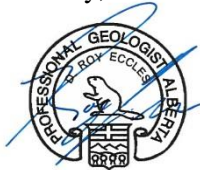
Dear Sir/Madam:

E3 Metals Corp. (the “Company”)

I, D. Roy Eccles, do hereby consent to the public filing of technical report entitled “*Technical Report: Geological introduction to the lithium-brine potential at E3 Metals Corp. Clearwater and Exshaw properties, south-central Alberta*”, and effectively dated May 18th, 2017 (the “Technical Report”) by E3 Metals Corp. (the “Issuer”), with the TSX Venture Exchange under its applicable policies and forms in connection with the fundamental acquisition by E3 Metals of 1975293 Alberta Ltd. pursuant to a share purchase agreement dated May 8, 2017 entered into by the Issuer as publically announced May 8, 2017, and I acknowledge that the Technical Report will become part of the Issuer's public record.

Dated this 24th day of May, 2017.

Sincerely,



D. Roy Eccles, M.Sc., P.Geol.
Chief Operations Officer
APEX Geoscience Ltd.
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Edmonton, Alberta, T6P 1L3 Canada
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