NI 43-101 TECHNICAL REPORT

MORAN LAKE PROJECT

Central Mineral Belt, Newfoundland and Labrador, Canada

Consolidated Uranium Inc.

402 – 217 Queen Street West Toronto, ON, M5V 0R2

> Terrane Geoscience Inc. Suite 207 – 390 King St. Fredericton, NB E3B 1E3



Stefan Kruse, Ph.D., P.Geo. Project Number – 21-0012-F

Effective Date: November 5, 2021 Signing Date: December 14, 2021

1.	SUMMARY	6			
1.1	Issuer and Purpose	6			
1.2	Author and Qualified Person Site Inspection	6			
1.3	Property Location and Description7				
1.4	Tenure Maintenance and Permitting	7			
1.5	Access	7			
1.6	Environmental and Property-Related Uncertainties	8			
1.7	Regional Geology	8			
1.8	Mineralization	9			
1.9	Historical Exploration	10			
1.10	D Recommendations	11			
2.0	Introduction	12			
2.1	Issuer and Purpose	12			
2.2	Authors and Qualified Person Site Inspection	12			
2.3	Sources of Information	13			
2.4	Units of Measure	14			
3.0	Reliance of Other Experts	15			
4.0	Property Description and Location	16			
4.1	Description and Location	16			
4.2	Agreements and Royalties	16			
4.3	Tenure Maintenance	20			
4.4	Permitting	21			
4.5	Environmental Liabilities and Significant Factors	22			
4.6	Labrador Inuit Lands	23			
4.7	Innu Settlement Area	24			
4.8	Other Stakeholders	24			
5.0	Accessibility, Climate, Local Resources, Infrastructure and Physiography	27			
5.1	Site Topography, Elevation and Vegetation	27			
5.2	Climate	28			
5.3	Local Resources and Infrastructure	28			
6.0	History	30			
6.1	Previous Ownership	30			
6.2	Mineral Deposits/Occurrences	34			
6.3	Geochemical Surveys	36			
6.4	Trenching and Rock Channel Sample Geochemical Surveys	38			
		^			



6.5	Ge	ophysical Surveys	.43
6.6	Dia	amond Drilling	.47
6.7	His	storical Resources at the Moran Lake Property	.55
6.8	His	storical Mineral Processing and Metallurgical Test Work	.59
7.0	Geol	ogical Setting and Mineralization	.60
7.1	Ce	ntral Mineral Belt: Geological Framework	.60
7.2	Pro	operty Geology	.63
7	.2.1	Bedrock Geology	.63
7	.2.2	Structural Geology	.67
7	.2.3	Surficial Geology	.69
7.3	Mi	neralization	.71
7	.3.1	Moran Lake C-Zone	.71
7.4	Lo	wer C-Zone	.75
7.5	Are	ea 1	.76
7	.5.1	Armstrong	.76
7	.5.2	Other Mineral Occurrences	.77
8.0	Depo	osit Types	.79
8.1	Ma	agmatic-related Mineralization	.79
8.2	Me	etamorphic–Metasomatic-related Mineralization	.80
8.3	Se	diment-hosted Mineralization	.81
9.0	Expl	oration	.82
10.0	Drilli	ng	.83
11.0	Sam	ple Preparation, Analyses and Security	.84
11.1	1 Pre	e-2000 Drilling Analyses, QA/QC and Security	.84
11.2	2 Po	st-2005 Drilling Analyses, QA/QC and Security	.85
11.3	3 Ad	equacy of Sample Collection, Preparation, Security and Analytical Procedures	.87
12.0	Data	Verification	.88
12.1	1 Da	ta Verification Procedures	.88
12.2	2 Qu	alified Person Site Inspection	.88
12.3	3 Va	lidation Limitations	.90
12.4	4 Ad	equacy of the Data	.90
13.0	Mine	ral Processing and Metallurgical Testing	.91
14.0	Mine	ral Resource Estimates	.92
15.0	Mine	ral Reserve Estimates	.93



16.0	Mining Methods	94
17.0	Recovery Methods	95
18.0	Project Infrastructure	96
19.0	Market Studies and Contracts	97
20.0	Environmental Studies, Permitting and Social or Community Impact	98
21.0	Capital and Operating Costs	99
22.0	Economic Analysis	100
23.0	Adjacent Properties	101
23.1	1 Developed Prospects	101
2	3.1.1 Western CMB Deposits	101
2	3.1.2 Eastern CMB Deposits	102
23.2	2 Other prospects	102
24.0	Other Relevant Data and Information	104
25.0	Interpretation and Conclusions	105
26.0	Recommendations	107
27.0	References	109
28.0	Certificate of Author	114

LIST OF TABLES

Table 4.1 – Mineral License Summary	16
Table 4.2 – Option Agreement Payment Schedule	17
Table 6.1 - Historical summary of submitted mineral assessment exploration work for the M	oran
Lake property	32
Table 6.2 – Mineral occurrences in the Moran Lake property	34
Table 6.3 – Select results from channel samples for the Moran Lake property	39
Table 6.4 – Summary of historical drilling on the Moran Lake Property.	53
Table 6.5 – Selected drill intersections from the Moran Lake property	54
Table 6.6 - Summary of mineral resource modelling and estimation methods used for histo	orical
estimates for the Moran Lake property	57
Table 6.7 – Historical mineral resource estimates for the Moran Lake Property	58
Table 26.1 – Recommendations for future exploration work at the Moran Lake Property	.108



LIST OF FIGURES Figure 4.2 – Moran Lake Project mineral tenure......19 Figure 6.2 – Bedrock and float grab samples on and proximal to the Moran Lake Project.......37 Figure 6.3 – Lake and stream sediment samples on and proximal to the Moran Lake Project...40 Figure 7.1 – Simplified bedrock geology of the Central Mineral Belt and Moran Lake Project. .61 Figure 23.1 – Adjacent properties and mineral occurrences in the Western CMB103



1. SUMMARY

1.1 Issuer and Purpose

This Technical Report has been prepared by Terrane Geoscience Inc. ("Terrane Geoscience") for Consolidated Uranium Inc., ("CUR", the "Issuer" or the "Company"), a company existing under the laws of Ontario and a reporting issuer in each of the provinces of British Columbia, Alberta and Ontario. CUR acquired the Moran Lake Project mineral tenure (licenses 011834M and 011835M) (the "Moran Lake Project") pursuant to an option agreement with Mr. Noel Murphy (the "Vendor") dated November 18, 2020 (the "Option Agreement"). The option was exercised effective as of October 17, 2021.

The Company has yet to conduct any exploration work on the Moran Lake Project. Accordingly, the intent of this Technical Report is to provide:

- A geological introduction to the Moran Lake Project.
- A summary of the historical exploration work.
- Recommendations for future exploration work programs.

The Technical Report was prepared in accordance with the Canadian Securities Administration's National Instrument 43-101 – *Standards for Disclosure of Mineral Projects* ("NI 43-101"). The effective date of this Technical Report is November 5, 2021.

1.2 Author and Qualified Person Site Inspection

The author of this Technical Report is Dr. Stefan Kruse Ph.D., P. Geo., of Terrane Geoscience Inc. The author is fully independent of CUR and is a Qualified Person ("QP") as defined in NI 43-101. Dr. Kruse assumes responsibility for the preparation and publication of all sections of this Technical Report.

A site visit to the Moran Lake Property was conducted for data verification purposes on May 12 and 13, 2021. The site visit included inspection of the Moran Lake property, Armstrong Lake camp and collection of verification samples from historical core. Independent verification samples were collected from core archived at the Newfoundland and Labrador ("NL") provincial government core library in Happy Valley-Goose Bay.



Verification of the historical drill hole database included spot checks of the digital drill hole database against drill records in assessment reports, filed with the Government of Newfoundland and Labrador.

1.3 Property Location and Description

The Moran Lake Project area is located 140 km SW of the town of Makkovik and 135 km NW of Happy-Valley Goose Bay ("HVGB"). The property is centered at 60° 59' 20.1" W, 54° 28' 8.3" N within NTS map sheets 13K06 and 13K07. The Moran Lake Project covers an area of 1877.3 ha and is defined by 75 contiguous map staked claims grouped into two licences (011834M and 011835M).

The Moran Lake Project mineral tenure (licences 011834M and 011835M) is subject to a 1.5% net smelter returns royalty (the "Royalty") pursuant to a royalty agreement between CUR and the Vendor dated November 5, 2021 (the "Royalty Agreement"). CUR has the right and option to repurchase 0.5% of the Royalty for a price equal to \$500,000. Other than the Royalty, the QP is not aware of any other royalties, back-in rights, payments or other agreements and encumbrances to which the Moran Lake Project is subject. The option was exercised effective as of October 17, 2021 and the Royalty Agreement was entered into on November 5, 2021.

1.4 Tenure Maintenance and Permitting

A map staked license is issued for a term of five years. However, a map staked license may be renewed and held for a maximum of 30 years provided the required annual assessment work is completed and reported upon and renewal fees are paid as required. Assessment expenditure begins at CDN \$200/claim in year 1, increasing by CDN \$50/year for five years. From year six to year 30, annual required assessment expenditure increases in a non-linear fashion to a maximum of CDN \$3000/claim after year 26.

Mineral exploration permits are issued by the provincial government of NL. Companies applying for approvals must be registered with the Provincial Registry of Companies at Service NL. Permits are issued on a program-by-program basis. CUR has not yet applied for permits to conduct exploration in the 2022 season.

1.5 Access

The nearest passenger airport to the Moran Lake Project is in HVGB. HVGB is generally serviced by regular passenger flights from Halifax, NS, Gander, NL, and Saint John's, NL. Local regional



flights connect to the coastal communities (Rigolet, Makkovik, Postville, Natuashish, Hopedale and Nain).

There is no road access to the Moran Lake property. Float plane support is available from the Otter Creek float plane base in HVGB. Float plane is the primary means of supply and fuel positioning for exploration activities in the Central Mineral Belt ("CMB"). Ski plane service may be available during the winter. Helicopter support is available from HVGB. Helicopter fuel is available in the coastal communities. Exploration activities in-land however generally require cached fuel, delivered via helicopter or float plane.

1.6 Environmental and Property-Related Uncertainties

CUR has only recently acquired its interest in the Moran Lake Project. Recommendations associated with this Technical Report are focused on verifying the geology and mineralization, and exploratory programs to work toward mineral resource classifications in accordance with CIM Definition Standards and Guidelines. To this extent, the QP is not aware of any major environmental liabilities or any other known significant factors or risks related to the Moran Lake Project that may affect access, title or the right or ability to perform work on the Moran Lake Project.

CUR should commit to Aboriginal consultation to ensure that Aboriginal groups are sufficiently consulted, and, where appropriate, accommodated. To the extent possible, the parties should work together with the Province of Newfoundland and Labrador toward a coordinated approach for Aboriginal consultation. The Moran Lake property overlaps the Labrador Inuit Settlement Area ("LISA" land. Mineral exploration within LISA is regulated by the Province of Newfoundland and Labrador however work permit applications within LISA are also circulated to the Nunatsiavut Government for review and comment.

There is an existing exploration camp and core storage yard located at Armstrong Lake in Labrador. The camp is in disrepair and will require demolition and removal.

1.7 Regional Geology

The Moran Lake Project and C-Zone deposit are located on the western end of the CMB, which is a NE-trending, 260 x 75 km belt of Proterozoic volcanic and sedimentary rocks with associated granites. The CMB straddles the Churchill, Nain, Grenville and Makkovik provinces in central Labrador and is developed on an Archean craton consisting of gneisses and granitoid intrusions,



mafic to felsic metavolcanics and minor mafic to ultramafic intrusions. The CMB consists of five main volcano-sedimentary Groups, variably separated by faults, unconformities, granites of various ages, or Archean rocks (Ryan, 1984). These are the Aillik, Moran Lake, Bruce River, Letitia Lake and Seal Lake groups.

The Moran Lake Group occurs in the central part of the CMB where it is interpreted as the lateral equivalent of the Aillik Group (Ryan, 1984). It has been divided into the Warren Creek and Joe Pond Formations. The sedimentary Warren Creek Formation is dominated by argillites, with lesser arenites, silicate facies iron formation and dolostones. The overlying Joe Pond Formation is a pillowed basalt sequence up to 2 km thick (Ryan, 1984).

The Bruce River Group unconformably overlies the Moran Lake Group and earlier granites. The group contains the Heggart Lake, Brown Lake and Sylvia Lake formations. The Heggart Lake Formation consists of conglomerates, sandstones (some hematite-bearing and red), and minor mafic and felsic lava flows, and defines a local graben (Ryan, 1984).

The C-Zone deposit is hosted in Aphebian mafic volcanic rocks of the Joe Pond Formation, which are unconformably overlain by Helikian sedimentary rocks of the Heggart Lake Formation. The Joe Pond Formation is in thrust contact with the structurally underlying Heggart Lake Formation, where the hanging wall is referred to as the Upper C-Zone and the footwall is referred to as the Lower C-Zone.

1.8 Mineralization

The Upper C-Zone deposit consists of uranium mineralization within strongly brecciated and altered mafic volcanic rocks and lesser Fe-carbonate-altered shear zones, collectively hosted by the Joe Pond Formation of the Moran Lake Group. The mineralized mafic volcanic rocks are structurally overlain to the southeast by conglomerate and sandstone of the Heggart Lake Formation. The mineralized mafic volcanic rocks of the Upper C-Zone are thrust to the northwest over younger, fluvial sedimentary rocks of the Heggart Lake Formation. This sandstone and associated conglomerate within the footwall of the thrust, host uranium mineralization proximal to the original unconformity with the underlying mafic volcanic rocks of the Joe Pond Formation (Sparks, 2017).

Uranium mineralization within the Lower C-Zone deposit is separated from that developed within the overlying Upper C-Zone by the C-Zone thrust fault (Gillies and Clarke, 2009) and represents



a distinctly different style of uranium mineralization (Sparkes and Kerr, 2008). The uranium mineralization broadly forms a moderately southeasterly dipping stratiform zone located proximal to the unconformity, but generally situated several metres above the actual contact. Within the mineralized zone, uranium is hosted within chloritic, fine- to medium-grained pale-green sandstone. The highest grades of uranium mineralization occur as patchy zones of disseminated uraniferous material. These zones display an irregular distribution, possibly representing a fluid front developed within the reduced sandstone (Sparks, 2017).

The Armstrong deposit is located approximately 3.5 km southwest of the Moran Lake C-Zone. Mineralization is associated with a N- to NE-trending shear zone hosting several anastomosing uraniferous fractures within variably altered pillow basalt of the Joe Pond Formation (Morgan et al., 2007; Sparks, 2017).

1.9 Historical Exploration

The Moran Lake Project has been explored by several companies since the 1950s. The Moran Lake C-Zone and Lake 202 mineral occurrences were discovered by prospectors for British Newfoundland Exploration ("Brinex") in 1957.

From 1957 to 1983, exploration was conducted by various groups including Brinex, Mokta Canada Ltd., Shell Canada Resources Ltd. ("Shell Canada Resources"), Canadian Nickel Company Ltd., and Saarberg-Interplan. This early work included various campaigns of geologic mapping, trenching, geochemical sampling, and geophysical surveys.

Mr. L. Murphy and Mr. N. Murphy staked the Moran Lake property in 2002. They completed airborne gravity and magnetic surveys, followed by reviewing and resampling historical drill core.

Crosshair Exploration and Mining Corp. ("Crosshair") optioned the property from L. and N. Murphy in 2004 and published a NI 43-101 compliant mineral resource estimate for the Moran Lake C-Zone based on resampling of Shell Canada Resources drill core (Roscoe and Cook, 2005). From 2006 to 2009, Crosshair completed exploration on the Moran Lake property including prospecting, geologic mapping, trenching, geochemical surveys, geophysical surveys, and drilling. NI 43-101 compliant reports with mineral resource estimates were prepared in 2007 and 2008 (Lacroix and Cook, 2007; Morgan and Giroux, 2008), and a vanadium mineral resource estimate was calculated based on resampling of historical core and additional drilling in 2009 and 2010 (Wallis et al., 2011). Crosshair's exploration license expired in 2013.



CUR optioned the Moran Lake property from the Vendor in 2020 (CUR news release) and exercised the option to acquire the Moran Lake Project on October 17, 2021.

Historical mineral resource estimations have been documented by past operators other than CUR. A Qualified Person has not done sufficient work to classify the historical estimations and therefore, the Qualified Persons and the Issuer are not treating any of the historical mineral resource estimations as current mineral resource estimates. The historical mineral resource estimates should not be relied upon.

1.10 Recommendations

Based upon the observation from the site visit and the historical exploration work it is the opinion of the author of this Technical Report that the Moran Lake Project is a "Property of Merit" warranting future exploration work.

A work plan is recommended to advance the Moran Lake Project with an estimated total cost of \$5,020,000.

Recommended work includes significant diamond drilling in order to achieve the following objectives:

- Twinning of selected existing holes for the purposes of verifying historical drill results and due diligence.
- In-fill and expansion drilling on the main C-Zone deposit area in order to expand and update the historical resource estimate.
- Exploration drilling on other target areas.



2.0 INTRODUCTION

2.1 Issuer and Purpose

This Technical Report has been prepared by Terrane Geoscience Inc. ("Terrane Geoscience") for Consolidated Uranium Inc. ("CUR", the "Issuer" or the "Company"), a company existing under the laws of Ontario and a reporting issuer in each of the provinces of British Columbia, Alberta and Ontario. CUR acquired the Moran Lake project mineral tenure (licences 011834M and 011835M) (the "Moran Lake Project") located in the Central Mineral Belt ("CMB") of Labrador, Canada pursuant to an option agreement with Mr. Noel Murphy (the "Vendor") dated November 18, 2020 (the "Option Agreement"). The option was exercised effective as of October 17, 2021 and the Royalty Agreement was entered into on November 5, 2021.

The Company has yet to conduct any significant exploration work on the Moran Lake Project. Accordingly, the intent of this Technical Report is to provide:

- A geological introduction to the Moran Lake Project.
- A summary of the historical exploration work.
- Recommendations for future exploration work programs.

The Technical Report was prepared in accordance with the Canadian Securities Administration's National Instrument 43-101-*Standards for Disclosure of Mineral Projects* ("NI 43-101"). The effective date of this Technical Report is November 5, 2021

2.2 Authors and Qualified Person Site Inspection

The author of this Technical Report is Dr. Stefan Kruse Ph.D., P. Geo., of Terrane Geoscience Inc. The author is fully independent of CUR and is a Qualified Person ("QP") as defined in NI 43-101. Dr. Kruse assumes responsibility for the preparation and publication of all sections of this Technical Report. The author has been involved in all aspects of mineral exploration and mineral project evaluations for uranium, gold and base metal projects and deposits in Canada and internationally.

Dr. Kruse has worked continuously as a geologist since his graduation from the University of Ottawa in 1999 and has been registered as a Professional Geologist with the Association of Professional Engineers and Geoscientists of New Brunswick (APEGNB; Membership Number



M6806) since 2009, Professional Engineers and Geoscientists of Newfoundland and Labrador (PEGNL; membership number 05330) and the Engineers and Geoscientists of British Columbia (EGBC; membership number 206205). Dr. Kruse is co-founder of Terrane Geoscience and a structural geologist specializing in structural and tectonic controls of mineralized systems.

Dr. Kruse completed a personal inspection at the Moran Lake Project on May 12 and 13, 2021. Dr. Kruse visited the property and confirmed mineralization and described geology through inspection and verification sampling of historical subsurface drill core stored at the Newfoundland and Labrador core library in Happy Valley-Goose Bay.

2.3 Sources of Information

A complete bibliography of all references cited in this Technical Report is presented in Section 27. This Technical Report supersedes and replaces any previous technical reports on the Moran Lake Project.

The author compiled and/or reviewed soil and rock geochemistry, geophysical interpretations and drilling results from numerous assessment reports filed as reports of work with the Newfoundland and Labrador department of Industry, Energy and Technology, Mines and Mineral Development Branch. Government publications, journal manuscripts, news releases, and internal reports were used to corroborate background geological information regarding the geological setting and mineral deposit potential of the Moran Lake Project and CMB.

The author has reviewed available government and miscellaneous reports. The author has deemed that these reports and information, to the best of his knowledge, are valid contributions. The information was used as background information to provide a geological introduction to the Moran Lake Project.

The author verified the status of the mineral claims in the name of the Company, as of November 5, 2021, using the Newfoundland and Labrador on-line Mineral Rights Inquiry Portal.

CUR provided the author with background information and communication with respect to the Option Agreement.



2.4 Units of Measure

With respect to units of measure, unless otherwise stated, this Technical Report uses:

- Abbreviated shorthand consistent with the International System of Units (International Bureau of Weights and Measures, 2006).
- U₃0₈ and V₂O₅ content is quoted in Imperial Pounds (lbs).
- 'Bulk' weight is presented in both United States short tons (tons; 2,000 lbs or 907.2 kg) and metric tonnes (tonnes; 1,000 kg or 2,204.6 lbs).
- Geographic coordinates are projected in the Universal Transverse Mercator (UTM) system relative to Zone 21 of the North American Datum (NAD) 1927.
- Currency in Canadian dollars (CDN\$), unless otherwise specified (e.g., U.S. dollars, US\$; Euros, €).



3.0 RELIANCE OF OTHER EXPERTS

This Technical Report was prepared by the authors for CUR. The author has relied upon information provided by Mr. Phillip Williams on behalf of CUR and Ms. Jaime Litchen of Cassels Brock & Blackwell LLP, legal counsel for CUR, regarding information on legal agreements and royalties affecting the Moran Lake Project, as described in Section 4 of this Technical Report.



4.0 PROPERTY DESCRIPTION AND LOCATION

4.1 Description and Location

The Moran Lake Project area is located 140 km SW of the town of Makkovik and 135 km NW of Happy-Valley Goose Bay (Fig. 4.1). The property is centered at 60° 59' 20.1" W, 54° 28' 8.3" N within NTS map sheets 13K/06 and 13K/07 (Fig. 4.1).

The Moran Lake Project covers an area of 1877.3 ha and is defined by 75 contiguous map staked claims (Fig. 4.1; Table 4.1) grouped into two licenses (011834M and 011835M).

Table 4.1 – Mineral License Summary

License Number	Number of	Issue Date	Renewal	Report Due	Expenditure
	Claims		Date	Date	Requirement
011834M	27	2002/07/22	2022/07/22	2022/09/20	\$57,600
011835M	27	2002/07/22	2022/07/22	2022/09/20	\$32,400

4.2 Agreements and Royalties

The Moran Lake Project mineral tenure (licences 011834M and 011835M) is subject to the following contingent payments set forth in the Option Agreement. CUR exercised the option to acquire the Moran Lake Project on October 17, 2021 (the "Exercise Date") and earned a 100% undivided interest in the Moran Lake Project, free and clear of all encumbrances, save and except as provided in the royalty agreement between the Issuer and the Vendor dated November 5, 2021 (the "Royalty Agreement"). Pursuant to the Option Agreement, CUR is required to make the payments to the Vendor as per Table 4.2 in the event that the applicable milestones are met.



Date	Cash Payment	CUR Share Delivery
In the event that the Uranium Spot Price equals or exceeds USD\$50 per pound, on the later of the Exercise Date or the fifth business day following the date of the Uranium Spot Price reaches such threshold	\$250,000	Such number of CUR Shares having a value of \$250,000 using the market price calculated two business days prior to the issuance of such CUR Shares.
In the event that the Uranium Spot Price equals or exceeds USD\$75 per pound, on the later of the Exercise Date or the fifth business day following the date of the Uranium Spot Price reaches such threshold)	\$375,00	Such number of CUR Shares having a value of \$375,000 using the market price calculated two business days prior to the issuance of such CUR Shares

Table 4.2 – Option Agreement Payment Schedule

Pursuant to the Royalty Agreement, the Vendor has retained a 1.5% net smelter returns royalty (the "Royalty") from the sale of the mineral products extracted or derived from the Moran Lake property. CUR has the right and option to repurchase 0.5% of the Royalty for a price equal to \$500,000. The Royalty Agreement was entered into on November 5, 2021. Other than the Royalty, the QP is not aware of any other royalties, back-in rights, payments or other agreements and encumbrances to which the Moran Lake Project is subject.

The author verified the status of the mineral claims in the name of the Company, as of November 5, 2021, using the Newfoundland and Labrador on-line Mineral Rights Inquiry Portal.





Figure 4.1 – Moran Lake Project location.





Figure 4.2 – Moran Lake Project mineral tenure (NL Geoscience Atlas, 2021).



4.3 Tenure Maintenance

The basic unit of map staking in Newfoundland and Labrador ("NL") is the claim. A claim is a 25 ha (500 m x 500 m) square bounded by the NAD 27 UTM grid. A maximum of 256 claims can be grouped into a map staked licence, provided that claim blocks are coterminous. There are no restrictions on the shape of mineral licenses. Each claim in a licence requires a staking fee of CDN\$65. This includes a non-refundable CDN \$15 recording fee and a CDN \$50 security deposit that is refunded upon submission and acceptance of the report covering the first year's work requirements and expenditures.

A map staked licence is issued for a term of five years. However, a map staked licence may be renewed and held for a maximum of 30 years provided the required annual assessment work is completed and reported upon and renewal fees are paid as required. Licences extended past year 20 have a maximum size of 100 claims.

Assessment work requirements to maintain claim in good standing are as follows:

- Year 1 CDN \$200/claim
- Year 2 CDN \$250/claim
- Year 2 CDN \$300/claim
- Year 3 CDN \$350/claim
- Year 4 CDN \$350/claim/
- Year 5 CDN \$400/claim
- Year 6 to 10 CDN \$600/claim
- Year 11 to 15 CDN \$900/claim
- Year 16 to 20 CDN \$12000/claim
- Year 21 to 25 CDN \$2500/claim
- Years 26 to 30 CDN \$3000/claim

Additionally, five-year renewal fees are:

- Year 5 CDN \$25/claim
- Year 10 CDN \$50/claim
- Year 15 CDN \$100/claim
- Year 15 CDN \$200/claim



In each year of the licence, the minimum annual assessment work must be completed on or before the anniversary date. The assessment report must then be submitted within 60 days after the anniversary date. If a report cannot be completed and submitted on schedule, a partial report acceptable to the Mineral Claims Recorder may be submitted and a (Condition 3) 60-day extension of time applied for in order to submit the completed report.

Excess assessment work above what is required to be completed on the licence in any one year is credited to the licence and can be carried forward to satisfy the expenditure requirements in future years. Excess expenditures incurred in years one to 20 can be carried forward for a maximum of nine years; however, no excess expenditure credit can be carried past year twenty. Excess expenditures incurred in years twenty-one to thirty can be carried forward for a maximum of five years.

4.4 Permitting

Mineral exploration permits are issued by the provincial government of Newfoundland and Labrador. Companies applying for approvals must be registered with the Provincial Registry of Companies at Service NL.

The permit applications require that accompanying maps, indicating the location of all drill holes, trenches, stripped areas and camps, are submitted as pdf files.

The location of trails, fuel storage sites and related activities must be provided as vector file formats compatible with ArcGIS, or with UTM coordinates with datum information (i.e. NAD27 or NAD83). Multiple site coordinates must be provided in spreadsheet form (e.g. MS Excel or equivalent). These locations must also be identified on accompanying maps. In some cases, drill and trenching "areas" may be accepted but they must be provided in vector (i.e. shapefile) format.

Once received, applications are reviewed and prepared for referral to departments/agencies that have land interests/uses in areas that overlap the exploration area. Such departments/agencies are requested to reply with any concerns or comments within 14 days.



Work on private property requires the permission of the land owner. Exploration work in Labrador may require Indigenous consultation. The province is responsible for conducting Indigenous consultation but applicants may be encouraged to contact Aboriginal groups to further discuss their plans.

Some activities may require registration for Environmental Assessment. These activities include but are not limited to:

- Bulk sample of a volume >1000 m³
- Work within 200 m of a scheduled salmon river
- Construction of new access trail/road

Additional permits may be required for water use, camp occupancy, fuel caches, camp food service, tree cutting etc..

Work on Labrador Inuit Lands requires an additional approved work plan from the Nunatsiavut Government.

Mineral exploration permits are issued on a program-by-program basis. CUR obtained a work permit for the 2021 unmanned aerial vehicle survey. No permits have been issued for the recommended 2022 work program.

4.5 Environmental Liabilities and Significant Factors

CUR has only recently acquired its interest in the Moran Lake Project. Recommendations in this Technical Report are focused on verifying the geology and mineralization, and exploratory programs to work toward mineral resource classifications in accordance with CIM Definition Standards and Guidelines. To this extent, the QP is not aware of any material environmental liabilities or any other known significant factors or risks related to the Moran Lake Project that may affect access, title or the right or ability to perform work on the Moran Lake Project.

If CUR were to advance the Moran Lake Project to the Pre-Feasibility Study level, the Company would have to consider preparing a comprehensive environmental impact study to ensure that the project is considered in a careful and precautionary manner so that the project does not cause significant adverse environmental effects.



Given the boreal forest environment in which the Moran Lake Project is located, exploration logistical work will require careful planning and execution to mitigate any environmental concerns identified by government agencies, Indigenous groups and/or the public.

CUR should commit to Aboriginal consultation to ensure that Aboriginal groups (see Section 4.6 - 4.8) are sufficiently consulted, and, where appropriate, accommodated. To the extent possible, the parties should work together with the Province of Newfoundland and Labrador toward a coordinated approach for Aboriginal consultation.

The is an existing exploration camp and core storage yard located at Armstrong Lake in Labrador within the Moran Lake Project area. The existing infrastructure include a former office building, core shed, storage building and float plane dock. The buildings are in disrepair and will require demolition and removal. The dock requires repairs and upgrades to be fully functional again.

4.6 Labrador Inuit Lands

The CMB overlaps significantly with the traditional homeland of the Labrador Inuit. The Nunatsiavut Government has joint regulatory authority over non-renewal resources under the Labrador Inuit Land Claims Agreement with the province of Newfoundland and Labrador. Four classes of land use are applicable to mineral exploration and development.

- LISA (Labrador Inuit Settlement Area): Mineral lands regulated by the province of NL.
 Exploration permits applications will be sent to the Nunatsiavut Government ('NG') for notification purposes only.
- LIL (Labrador Inuit Lands): Exploration permits issued by the NG and subject to the Standards for Exploration in Labrador Inuit Lands. Environmental bonds, archeological clearance and community consultation generally required for any exploration work. Provincial regulations also apply.
- EML (Exempt Mineral Lands): Land parcel encompassing coastal areas and towns. No staking or mineral exploration permitted.
- SML (Specified Material Lands): Inuit have the exclusive right to ownership of quarry materials and a 25 percent ownership interest in subsurface resources in this area.



License 011834M partially overlaps with the western margin of LISA lands (Fig. 4.3). The Moran Lake Project area is outside of LIL and thus was never subject to the 2008 three-year moratorium on uranium mining imposed by the Nunatsiavut Government.

4.7 Innu Settlement Area

To the south and west of the CMB are the traditional lands of the Innu Nation. As of 2008, negotiations towards an Agreement-in-Principle are ongoing between the Innu Nation and the provincial and federal governments. As part of its land claim talks, the Innu Nation also began negotiating self-government arrangements with the provincial and federal governments in 2006. A draft Land Claim Agreement-in-Principle document currently exists (<u>https://www.rcaanc-cirnac.gc.ca/eng/1331657507074/1539778707675</u>). Negotiations between the Innu Nation and provincial and federal governments are on-going. Approximate boundaries of the Innu Nation

4.8 Other Stakeholders

Southern Labrador is the traditional homeland of the NunatuKavummiut (also called the people of NunatuKavut or Labrador Metis). The NunatuKavummiut historical homeland overlaps part of the CMB but not the Moran Lake Project area directly.





Figure 4.3 – Moran Lake Project licences relative to Labrador Inuit Lands (NL Geoscience Atlas, 2021).





Figure 4.4 – Moran Lake Project licences relative to approximate boundaries of the Innu Nation Settlement Area (NL Geoscience Atlas, 2021; *Draft* Labrador Innu Land Claims Agreement, 2021).



5.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

The Moran Lake Project area is located 140 km SW of the town of Makkovik and 135 km NW of Happy-Valley Goose Bay ("HVGB"). The property is centered at 60° 59' 20.1" W, 54° 28' 8.3" N within NTS map sheets 13K06 and 13K07.

HVGB is a regional aviation hub, generally serviced by regular passenger flights from Halifax, NS, Gander, NL, and Saint John's, NL. Local regional flights connect to the coastal communities (Rigolet, Makkovik, Postville, Natuashish, Hopedale and Nain).

There is no road access to the Moran Lake Project. All exploration actives require helicopter and float plane support.

Float plane support is available from the Otter Creek float plane base in HVGB. Float plane is the primary means of supply and fuel positioning for exploration activities in the CMB. Ski plane service may be available during the winter.

Helicopter support is available from HVGB. Helicopter fuel is available in the coastal communities. Exploration activities in-land however generally require cached fuel, delivered via helicopter or float plane.

Regular ferry service for transporting passengers, vehicles and supplies from HVGB to the coastal communities is available.

5.1 Site Topography, Elevation and Vegetation

The Moran Lake Project area is characterized by typical northern glacial physiography and boreal forest. Elevation ranges from 40 to 300 m in the vicinity of the project area. Steep-sided rocky ridge and drainages are glacially sculpted and oriented NE–SW. Topographic lows are commonly boggy and/or densely vegetated. Typical forest cover comprises black spruce and alder.



5.2 Climate

Central Labrador is characterized by a sub-Arctic climate with long winters and short summers. The nearest inland weather station at Churchill Falls (https://www.weatheratlas.com/en/canada/churchill-falls-climate#temperature) records average temperatures of 8.4° to 19° C in July (warmest month of summer) to -15° to -27.3° in January (coldest month of winter). Monthly precipitation ranges from 0.8 mm to 114 mm. Snowfall in the winter ranges from 575 mm (April) to 768 mm (November). Freeze-up typically begins in late October and lasts until early to mid June. Multiple days of low fog are common during spring, summer and fall.

The operating season for summer field work generally ranges from mid-June to mid-October. Drilling can also be conducted in the winter months, generally January to early March.

5.3 Local Resources and Infrastructure

Local infrastructure is limited to facilities in the coastal communities of Postville and Makkovik, which include commercial airline service from HVGB and commercial ferry service from Lewisporte, Newfoundland, and HVGB.

Local workforce is limited due to the overall small population of Labrador (~27,000; <u>https://www.gov.nl.ca/fin/economics/pop-projections/</u>) but some skilled workers may be available due to the long running mining operations at Voisey's Bay and Labrador City.

Water is plentiful and readily accessible due to the climate and the extensive interconnected network of lakes and watercourses.

There is no electrical supply to the Moran Lake Project area but the Muskrat Falls hydroelectric facility is located ~140 km to the SSW of the Project area. The station at Muskrat Falls will have a capacity of over 824 MW and provide 4.9 TWh of electricity per year.





Figure 5.1 – Physiography of the Moran Lake Project Area (NL Geoscience Atlas, 2021).



6.0 HISTORY

The following exploration history is based on the Mineral Occurrence Database System (MODS, 2021) and mineral assessment reports available from Newfoundland and Labrador Department of Natural Resources. The majority of previous owners had larger claim blocks that include the current Moran Lake Project licences. This exploration history focusses on activities conducted on the current licences held by CUR (11834M and 11835M).

6.1 Previous Ownership

The Moran Lake property has been explored by several companies since the 1950s (Table 6.1). The Moran Lake C-Zone and Lake 202 mineral occurrences were discovered by prospectors for British Newfoundland Exploration ("Brinex") in 1957. Brinex conducted geologic mapping, trenching, sampling, and ground geophysical surveys on the property.

Mokta Canada Ltd., gained title in 1964 and completed geologic mapping, trenching, and scintillometer surveys before abandoning the property in 1969. In the early 1970s, Brinex conducted regional geophysical and lake geochemistry surveys in the Moran Lake area.

Commodore Mining Ltd., obtained rights to the property in 1976 and optioned it to Shell Canada Resources Ltd. ("Shell Canada Resources"). Shell Canada Resources completed geologic mapping, sampling, scintillometer surveys, geophysical surveys, and drilling on the Moran Lake Project. Their exploration license expired in 1982.

Exploration for a Brinex and Canico joint venture on parts of the Moran Lake Project (excluding the Moran Lake C-Zone occurrence) included a regional radiometric survey with follow-up geologic mapping and sampling conducted by the Canadian Nickel Company Ltd., in 1978. This work includes the discovery of the North Silas Lake and Area 1 mineral occurrences.

Saarberg-Interplan staked claims around the Moran Lake Project in 1983. They conducted a helicopter spectrometer survey and followed up on anomalies with prospecting, stream sediment geochemical surveys, and geophysical surveys. Most of this exploration work focused on the Moran Heights, Conglomerate Lake, Cecil Lake, and Duck Lake (Canico no. 15 and no. 16) mineral occurrences outside of the current CUR claim block.

Mr. L. Murphy and Mr. N. Murphy staked the Moran Lake property in 2002. They completed airborne gravity and magnetic surveys, followed by reviewing and resampling historical drill core.



Crosshair Exploration and Mining Corp., ("Crosshair") optioned the property from L. and N. Murphy in 2004 and published a mineral resource estimate for the Moran Lake C-Zone based on resampling of Shell Canada Resources drill core (Roscoe and Cook, 2005). From 2006 to 2009, Crosshair completed exploration on the property including prospecting, geologic mapping, trenching, geochemical surveys, geophysical surveys, and drilling. NI 43-101 reports with updated mineral resource estimates were prepared in 2007 and 2008 (Lacroix and Cook, 2007; Morgan and Giroux, 2008), and a vanadium mineral resource was estimated based on resampling of historical core and additional drilling in 2009 and 2010 (Wallis et al., 2011). Crosshair's exploration license expired in 2013.

CUR optioned the Moran Lake Project licences from the Vendor in 2020 (Option Agreement dated November 18, 2020) and exercised the option on October 17, 2021.



Table 6.1 – Historical summary of submitted mineral assessment exploration work for the
Moran Lake property. Report author listed where different than claim holder(s).

Assessment report	Claim holder	Report author	Year	Work completed on property
LAB_0327	Brinex	Sander Geophysics Ltd.	1971	Airborne spectrometer, EM, magnetic
013K_0155	Commodore Mining Ltd.	Shell Canada Resources Ltd.	1977	497m (8 DDH), trenching, prospecting, ground magnetic and EM
013K_0129	Brinex	-	1977	Regional He/U lake geochemistry
013K_0133	Brinex, Inco Ltd.	-	1978	Geologic mapping
013K_0156	Commodore Mining Ltd.	Shell Canada Resources Ltd.	1978	EM, magnetic, track etch
013K_0148	Commodore Mining Ltd.	Shell Canada Resources Ltd.	1979	3132m (30 DDH)
013K_0149	Commodore Mining Ltd.	Shell Canada Resources Ltd.	1979	1193m (17 DDH)
LAB_0437	Brinex, Canico	Canadian Nickel Company Ltd.	1979	Airborne spectrometer, prospecting
013K_0274	Commodore Mining Ltd.	Shell Canada Resources Ltd.	1980	Historical core review
LAB_0463	Brinex, Canico	Canadian Nickel Company Ltd.	1980	Airborne spectrometer, prospecting
013K_0166	Saarberg Interplan Canada Ltd.	-	1984	Airborne spectrometer, prospecting, stream sediment geochemistry
013K_0275	Cameco Corp.	-	2003	Reviewing historical core
013K_0277	L. Murphy	Sander Geophysics Ltd.	2003	Airborne gravity and magnetic
013K_0278	N. Murphy	Sander Geophysics Ltd.	2003	Airborne gravity and magnetic
013K_0279	L. Murphy	Altius Resources Inc.	2003	Resampling historical core, prospecting
013K_0280	L. Murphy	-	2004	Reviewing historical core
013K_0285	Crosshair Exploration and Mining Corp., L. Murphy	Crosshair Exploration and Mining Corp.	2005	Resampling historical core, prospecting



013K_0293	Crosshair Exploration and Mining Corp., N.G. Murphy, L. Murphy, Triassic Properties Ltd.	Crosshair Exploration and Mining Corp.	2006	Prospecting, airborne radiometric/magnetic, ground gravity
013K_0296	Crosshair Exploration and Mining Corp., N.G. Murphy, L. Murphy, Triassic Properties Ltd.	Crosshair Exploration and Mining Corp.	2007	14,827m (75 DDH), trenching, geologic mapping, lake sediment geochemistry, ground gravity, airborne radiometric/magnetic
013K_0329	Crosshair Exploration and Mining Corp.	-	2008	27,985m (148 DDH), sampling historical core, prospecting, till geochemistry, lake sediment geochemistry, alpha track, airborne EM, ground gravity, IP, MaxMin EM
013K_0313	Crosshair Exploration and Mining Corp.	-	2009	11,919m (60 DDH), channel sampling, geologic mapping, prospecting, lake and stream sediment geochemistry, till geochemistry, biogeochemistry, soil gas hydrocarbon
013K_0338	Crosshair Exploration and Mining Corp.	-	2010	Resampling core for vanadium, metallurgical study
013K_0341	Crosshair Exploration and Mining Corp.	-	2012	1734m (9 DDH)
013K_0346	Crosshair Energy Corp.	-	2012	1000m (5 DDH)



6.2 Mineral Deposits/Occurrences

The licences held by CUR (11834M and 11835M) include nine recognized mineral occurrences (Table 6.2; Fig. 6.1).

Table 6.2 – Mineral	occurrences v	within the	Moran L	ake Pro	ject area (MODS.	2021).
	occurrences i						2021

Name	Number	Commodi ty	Status
Area 1	013K/07/11007	Uranium	Developed
	0131007/0 007	Oranium	prospect
Armstrong	013K/07/U 009	Uranium	Indication
CVG Trend	013K/07/U 017	Uranium	Prospect
EM Target	013K/07/U 018	Uranium	Prospect
Lake 202	013K/07/U 003	Uranium	Showing
Moran Lake	013K/07/11002	Uranium	Developed
C-Zone	013K/07/0 002 Oraniun		prospect
North Silas	013K/07/11006	Uranium	Indication
Lake	0101007/0 000	Oranium	maleation
Poz Pond	013K/07/U 010	Uranium	Prospect
Trout Pond	013K/07/U 011	Uranium	Prospect





Figure 6.1 – Uranium mineral occurrences on and proximal to the Moran Lake Project licenses (NL Geoscience Atlas, 2021).



6.3 Geochemical Surveys

Documented geochemical and surficial survey results are predominantly in the assessment reports submitted by Crosshair. Through prospecting, Crosshair confirmed anomalous uranium concentrations at known mineral occurrences, extended known mineralized zones, and discovered new mineral occurrences. In 2007 and 2008, Crosshair conducted numerous surficial surveys over known deposit areas and new targets to test various geochemical surveys.

Prospecting by Crosshair in 2005 and 2006 confirmed anomalous uranium mineralization at known mineral occurrences and identified new mineral occurrences (Fig. 6.2). Grab samples from the Area 1 mineral occurrence grade up to 2.21% U_3O_8 with boulders up to 5.79% U_3O_8 ; polymetallic mineralization includes 0.20% U_3O_8 , 5.2% copper, 61.6 g/t Ag, and 0.53 g/t Au. Around the North Silas Lake and CVG Trend mineral occurrences ("Area 2" from Crosshair reports), samples from outcrop and subcrop grade 0.094% to 0.778% U_3O_8 (Morgan and Froude, 2007).

At the Armstrong mineral occurrence, 17 grab samples average $0.303\% U_3O_8$ over 200 m strike length and seven chip samples along a shear zone average $0.166\% U_3O_8$ (Morgan and Froude, 2007). Additional prospecting in 2007 sampled outcrop up to 3190 ppm U with 685 ppm V and discovered the nearby Dislocated and Eaton Showings with samples up to 2800 ppm U with 1134 ppm V. Prospecting south of the Armstrong mineral occurrence in 2008 found several float samples with assay grades 0.119% to 0.336% U_3O_8 and an outcrop sample with 0.052% U_3O_8 (Gillies and Clark, 2009).

In 2008, Crosshair prospected the C-Zone corridor, including and surrounding the Area 1, Trout Pond, Poz Pond, CVG Trend, and EM Target mineral occurrences. They identified new mineralized trends: a 125 m long trend northwest of Trout Pond with assays between 0.012% and 0.130% U_3O_8 ; a 500 m long trend between Trout and Poz Ponds with assays between 0.001% and 0.414% U_3O_8 ; a 370 m float trend east of Poz Pond with assays ranging between 0.001% and 11.30% U_3O_8 (Gillies and Clark, 2009); mineralization at the EM Trend with a sample with 0.110% U_3O_8 ; and defined at least 300 m at the CVG Trend with grab sample assays ranging between 0.01% and 0.22% U_3O_8 and local high grade samples containing up to 7.59% U_3O_8 (Gillies and Clark, 2009). Prospecting at the Moran Lake C-Zone and Lake 202 occurrences returned assays up to 0.744% U_3O_8 .




Figure 6.2 – Bedrock and float grab samples on and proximal to the Moran Lake Project licenses (Crosshair geochemical database).



Crosshair conducted alpha track surveys and till geochemistry at the Area 1 and Moran Lake C-Zone occurrences in 2007. At Area 1 they identified two discrete zones of anomalous radioactivity with corresponding anomalous uranium concentrations in till. At the C-Zone, there are several discrete spots of anomalous radioactivity and uranium in till geochemistry strongly corresponds with known mineralization.

Geochemical surveys conducted in 2008 at the Moran Lake property include stream sediment geochemical, till geochemical, and biogeochemical surveys. Anomalous uranium concentrations occur in stream sediment samples south of the Armstrong mineral occurrence (Fig. 6.3). Till geochemistry with anomalous uranium is associated with known mineralization and several new targets around the Moran Lake C-Zone and Armstrong mineral occurrences (Fig. 6.4). A biogeochemical survey of black spruce outer bark around the Moran Lake C-Zone mineral occurrence identified anomalous uranium concentrations but no apparent vanadium anomaly along the known mineralized trend.

6.4 Trenching and Rock Channel Sample Geochemical Surveys

Shell Canada Resources chip sampled C-Zone trenches previously excavated by Mokta Company Ltd. in 1977 and found $0.100\% U_3O_8$ over 1 m and $0.098\% U_3O_8$ over 1.5 m.

Crosshair conducted mechanized trenching in 2007 at the Armstrong mineral occurrence and in 2008 at the Trout Pond, Poz Pond, EM Target, and CVG Trend mineral occurrences (Table 6.3; Fig. 6.5).



Table 6.3 – Select results from channel samples for the Moran Lake property (Gillies and Clarke, 2009).

Trench	Mineral occurrence	U ₃ O ₈ %	Length (m)
Starfish	Trout Pond	0.051	1.5
Deano	Poz Pond	0.028	2.4
Sparkman	EM Target	0.053	6.1
Skinny	EM Target	1.642	6.4
CVG trench #1	CVG Trend	0.064	2.0
CVG trench #2	CVG Trend	0.035	1.5
CVG trench #3	CVG Trend	0.114	2.0
CVG trench #3	CVG Trend	0.026	4.0





Figure 6.3 – Lake and stream sediment samples on and proximal to the Moran Lake Project licenses (Crosshair geochemical database).





Figure 6.4 – Till samples on and proximal to the Moran Lake Project licenses (Crosshair geochemical database).





Figure 6.5 – Trench and drill hole locations on and proximal to the Moran Lake Project licenses (Crosshair trench and drill database).



6.5 Geophysical Surveys

Initial targets on the Moran Lake property were radiometric targets based on airborne spectrometer surveys in the 1970s and 1980s. These radiometric anomalies included the Moran Lake C-Zone, Lake 202, and North Silas Lake mineral occurrences, which were followed up by prospecting and geologic mapping.

Fugro Airborne Surveys completed 7,312 km and 675 km airborne radiometric and magnetic surveys in 2005 and 2006, respectively. Flight lines were at 340° with 100 m line spacing. Characteristics of known mineral occurrences were used to identify targets for follow up prospecting. Radiometric targets included the Area 1 and Armstrong mineral occurrences (Fig. 6.6). Magnetic anomalies were locally associated with mineralization, including the CVG Trend mineral occurrence (Fig. 6.7).

Lineament interpretation of airborne magnetic data identified potential structures, dykes, and stratigraphy. This interpretation was used along with radiometric anomalies to identify primary exploration targets. Specifically, radiometric anomalies associated with apparent cross-structures appeared to correspond to uranium mineralization.

An airborne gravity survey completed by Sander Geophysics Ltd. in 2003 located a gravity anomaly (with no corresponding magnetic anomaly) extending northeast from the Moran Lake C-Zone. Crosshair interpreted this anomaly, along with the breccia and style of alteration, to indicate potential for iron oxide copper gold ("IOCG") mineralization. Geoscott Exploration Consultants Inc., Eastern Geophysics Ltd., and MWH Geo-Surveys Inc. completed ground gravity surveys at the Moran Lake C-Zone and surrounding mineral occurrences in 2005–2007 to increase resolution on the gravity anomaly for drill targeting (Fig. 6.8). Woods Geophysical Consulting Inc. completed a 3D inversion of this gravity data and interpreted a 9 km by 2.5 km by 700 m gravity anomaly with a peak amplitude ~10 mGal buried at a depth of 400 m. They interpreted this anomaly as a single body with a moderate density contrast. Additional gravity inversion modelling in 2009 by Crosshair modelled a similar body but at greater depth (at least 1000 m). Three deep diamond drill holes (>800 m) failed to intersect IOCG-style mineralization or another apparent source of this gravity anomaly.





Figure 6.6 – Regional radiometric survey (Total count U ratio) image (Morgan and Froude, 2007).





Figure 6.7 – Regional magnetic survey (1st vertical derivative) image (Morgan and Froude, 2007).





Figure 6.8 – Regional airborne gravity survey (Bouger correction) image (Eaton and Morgan, 2008).



In 2007, Carriere Process Management Ltd., evaluated ground and airborne gravity data along with IP / resistivity data collected by Peter E. Walcott and Associates at the Moran Lake C-Zone. They identified several high priority targets with gravity anomalies that are not related to geology (e.g. mafic intrusion) and correspond to IP anomalies. The shape and depth of target gravity anomalies are estimated from modelling.

Additionally, electromagnetic surveys were completed to identify conductors that may be related to mineralized horizons. Fugro Airborne Surveys completed an airborne electromagnetic survey in 2007 for Crosshair, these survey data were processed by Condor Consulting Inc. who identified targets based on geophysical characteristics of known mineral occurrences. SJ Geophysics and Geoscott Exploration Consultants Inc., completed ground MaxMin EM surveys in 2007 at the Moran Lake C-Zone to identify conductors that may indicate uranium mineralization. This MaxMin survey identified a 550 m north-northeast-trending EM anomaly that led to the discovery of the EM Target mineral occurrence.

Crosshair completed 3D modelling of all airborne, ground, and borehole geophysical data in 2009 and identified several drill targets, only some of which were tested.

6.6 Diamond Drilling

The following drill hole locations and assay data are summarized from the drill hole database provided by N. Murphy (Figs. 6.9 to 6.12). Historical diamond drilling on the Moran Lake property was completed by Shell Resources Canada in 1977–1979 and by Crosshair in 2006–2012 (Table 6.4). Select assay results are presented in Table 6.5, assay intersections represent downhole lengths and are not true width intersections. Select drill hole assay values were verified for accuracy from assessment reports.

There is approximately 15 m uncertainty in drill hole collar locations, different GIS datasets plot in different locations and there are multiple coordinate columns in the database. This location discrepancy is likely due to issues converting between NAD27 and NAD83 datums, drill hole collar locations should be verified prior to additional exploration or resource modelling.

Shell Canada Resources conducted several drilling programs at the Moran Lake C-Zone occurrence in the late 1970s. In 1977 they completed a small (497 m) drill program at the C-Zone, following up on geologic mapping, trenching, and scintillometer surveys. They found uranium mineralization in a fault zone with assay results up to 0.202% U_3O_8 over 3.34 m. Shell Canada



Resources returned in winter 1978 to test mineralization in the fault zone with 1,542 m of drilling in 17 holes. Uranium-bearing quartzite, later defined as the Upper C-Zone, was found and this mineralization was further drill tested in summer 1978 with a 1,581 m drill program. Drilling in winter 1979 tested low grade uranium mineralization (up to 0.022% U_3O_8 over 8.12 m) along an unconformity, later defined as the Lower C-Zone.

Crosshair completed several large drill programs from 2006–2008 defining the Moran Lake C-Zone resource and exploring new targets. In 2006 and 2007, drilling primarily focused on expanding the Moran Lake C-Zone resource with smaller resource expansion drilling in 2008. Exploration drilling in 2006–2008 confirmed the along-strike extension of uranium mineralization from the Moran Lake C-Zone southwest to Area 1, intersecting mineralization at both Trout and Poz Pond. This mineralized trend was tested further southwest at the Armstrong mineral occurrence. Following unsuccessful exploration drilling at the Armstrong mineral occurrence in 2007, Crosshair successfully intersected mineralization in 2008. Drill testing of mineralization.

Crosshair completed two small drill programs in 2012. This drilling focused on expanding the vanadium resource at the Moran Lake C-Zone and Armstrong mineral occurrences. They successfully expanded known vanadium mineralization between the Moran Lake C-Zone and Area 1 mineral occurrences but failed to intersect significant mineralization at the Armstrong mineral occurrence.





Figure 6.9 – Drill collar locations, northern C-Zone (Crosshair drill database).





Figure 6.10 – Drill collar locations, Southern C-Zone, Poz Pond and EM target areas (Crosshair drill database).





Figure 6.11 – Drill collar locations, Area 1 and Trout Pond target areas (Crosshair drill database).





Figure 6.12 – Armstrong Lake drill collar locations (Crosshair drill database).



Company	Year	Drill hole series	Total drill	Total	Area
			holes	(m)	
Shell Canada	1977	C-01 to C-08	8	497	C-Zone
Resources Ltd.					
Shell Canada	1978	C-09 to C-25	17	1542	C-Zone
Resources Ltd.	(winter)				
Shell Canada	1978	C-26 to C-38	13	1581	C-Zone
Resources Ltd.	(summer)				
Shell Canada	1979	C-39 to C-55	17	1193	C-Zone
Resources Ltd	(winter)				
Crosshair	2006	ML-01 to ML-19	19	2797	C-Zone
	(winter)				
Crosshair	2006	ML-20 to ML-58; ML-A1-	56	12,026	C-Zone;
	(summer)	01 to ML-A1-15; ML-A2-			Area 1;
		01 to ML-A2-02			Trout
					Pond
Crosshair	2007	ML-59 to ML-84; ML-A1-	34	9405	C-Zone;
	(winter)	16 to ML-A1-19; ML-DN-			Trout
		01 to ML-DN-02; ML-AR-			Pond,
		01 to ML-AR-02			Armstrong
Crosshair	2007	ML-85 to ML-173; ML-A1-	116	18,598	C-Zone;
	(summer)	20 to ML-A1-45			Trout
					Pond
Crosshair	2008	ML-174 to ML-182; ML-	45	10,334	C-Zone;
	(winter)	AR-03 to ML-AR-32; ML-			Armstrong;
		A1- 46 to ML-A1-49; ML-			Area 1
		GV-02 to ML-GV-03			
Crosshair	2008	ML-183 to ML-187; ML-	17	3311	C-Zone;
	(summer)	A1-50 to ML-A1-55 ; ML-			Area 1;
		EM-01 to ML-EM-06			EM Target
Crosshair	2011	ML-11-188 to ML-11-196	9	1734	C-Zone
Crosshair	2012	ML-12-197 to ML-12-199;	5	952	Area 1; C-
		ARS-12-001 to ARS-12-			Zone;
		002			Armstrong

Table 6.4 – Summary of historical drilling on the Moran Lake Property.



Table 6.5 – Selected drill intersections from the Moran Lake property (Crosshair drill database).

Drill hole	From	То	Length	U ₃ O ₈	V ₂ O ₅	
	(m)	(m)	(m)	%	%	
C-Zone						
ML-20	69.4	98.2	28.80	0.138	0.158	
	Including 0.54	9% U3O8 over 8	3.40 m			
ML-32	68.4	96.8	28.40	0.145	0.118	
	Including 1.20	1% U ₃ O ₈ over 3	3.10 m			
ML-82	110.9	114.4	3.50	0.501	0.287	
ML-87	122.3	127.6	5.30	0.780	0.133	
ML-90	50.5	59.07	8.57	0.455	0.058	
ML-102	135.2	140.45	5.25	0.362	0.044	
ML-122	90.85	93.25	2.40	1.764	0.170	
ML-157	98.21	105	6.79	0.366	0.084	
ML-163	38.7	54	15.30	0.026	0.435	
Armstrong						
ML-AR-04	270.9	276.65	5.75	0.075	0.081	
ML-AR-26	182.95	185.6	2.65	0.686	0.191	
ML-AR-27	193.6	197.15	3.55	0.136	0.282	
Area 1						
ML-A1-16	26	37.5	11.50	0.110	0.157	
Including 0.323% U ₃ O ₈ over 3.00 m						
ML-A1-55	307.36	337.49	30.13	0.036	0.032	
Including 0.105% U ₃ O ₈ over 4.08 m						



6.7 Historical Resources at the Moran Lake Property

Four historical mineral resource estimations have been completed on the Moran Lake Project (Tables 6.6 and 6.7). The QP has not done sufficient work to classify the historical estimations as current mineral resources, and neither the QP nor the Issuer are treating any of the historical estimations as a current mineral resource and they should not be relied upon.

Roscoe Postle Associates Inc., completed a NI 43-101 compliant technical report in support of a mineral resource estimate (Table 6.7) for uranium at the Moran Lake Upper C-Zone based on historical data and resampling of historical core (Roscoe and Cook, 2005). For mineral resource estimation they assumed uranium mineralization is moderately dipping narrow vein mineralization with a minimum width of 1.5 m and density factor 2.7 t/m³. Assays are predominantly from Shell Canada Resources, Crosshair assays are used for intervals not analyzed by Shell Canada Resources. A cut-off grade of 0.10% U₃O₈ was used. Due to the broad spacing between drill holes, mineral resource setimated from blocks on cross-sections. The inferred mineral resource estimate was 124,000 t at 0.25% U₃O₈ containing 688,000 lbs U₃O₈ (Roscoe and Cook, 2005). The historical mineral resource estimate listed above has been included simply to demonstrate the mineral potential of Moran Lake Project. A thorough review of all historical data performed by a QP, along with additional exploration work to confirm results would be required to produce a current and compliant mineral resource "and is not treating it, or any part of it, as a current mineral resource estimate.

In 2007 Lacroix and Associates completed a NI 43-101 technical report in support of a mineral resource estimate (Table 6.7) for uranium at the Moran Lake Upper C-Zone and Lower C-Zone (Lacroix and Cook, 2007). This mineral resource estimate was based on a 3D block model with ordinary kriging used to interpolate grades with 10 m x 10 m x 4 m blocks. Upper C-Zone mineralization is hosted in several narrow vein-like structures that was modelled based on a wireframe of a mineralized envelope with an external cut-off grade 0.015% U₃O₈. The Lower C-Zone mineralization is hosted and modelled in a discrete sheet-like structure. Upper C-Zone had a reported indicated resource of 3.75 million t at 0.039% U₃O₈ containing 3.19 million lbs U₃O₈ with a block cut-off of 0.015% U₃O₈. The Lower C-Zone had a reported inferred resource of 4.29 million t at 0.027% U₃O₈ containing 2.52 million lbs U₃O₈ with a block cut-off of 0.015% U₃O₈. A thorough review of all historical data performed by a QP, along with additional exploration work to confirm



results would be required to produce a current and compliant mineral resource estimate. The author of this Technical Report considers this estimate to be a "historical resource" and are not treating it, or any part of it, as a current mineral resource estimate.

Morgan and Giroux (2008) completed a NI 43-101 technical report with an updated mineral resource estimate for the Moran Lake C-Zone (Table 6.7) along with initial mineral resources for the Armstrong and Area 1 deposits. They modelled three packages in the Moran Lake Upper C-Zone (the Upper C Main, Upper C Mylonite, and Upper C West), Moran Lake Lower C-Zone, two packages in Armstrong (Armstrong Z1 and Armstrong Z3), and Trout Pond. These mineral resources are based on 3D block models with ordinary kriging used to interpolate grades into 10 m x 10 m x 4 m blocks. The Moran Lake Upper C-Zone had a reported indicated resource of 6.92 million t at 0.034% U₃O₈ and 0.077% V₂O₅ or 5.19 million pounds of U₃O₈ and 11.75 million pounds of V_2O_5 . A cut-off grade of 0.015% U_3O_8 was used for all zones other than the Lower C-Zone which employed a cut-off grade of 0.035%. The total inferred mineral resource reported for the Moran Lake Upper and Lower C-Zones, Trout Pond, and Armstrong was 8.17 million t at 0.032% U₃O₈ and 0.088% V₂O₅ or 5.82 million pounds of U₃O₈ and 15.81 million pounds of V₂O₅. A thorough review of all historical data performed by a QP, along with additional exploration work to confirm results would be required to produce a current and compliant mineral resource estimate. The author of this Technical Report considers this estimate to be a "historical resource" and is not treating it, or any part of it, as a current mineral resource estimate.

Wallis et al., (2011) completed a NI 43-101 technical report with an updated vanadium mineral resource estimate (Table 6.7) within and outside of the uranium mineral resource at the Moran Lake C-Zone. The uranium resources were was not updated at the time. The reported vanadium mineral resources were based on 3D block models (10 m x 10 m x 4 m) with grades interpolated using ordinary kriging. For the additional vanadium resource outside of the 2008 uranium resource a cut-off grade of 0.15% V₂O₅ was used. The reported indicated vanadium resource included 7.79 million t at 0.180% V₂O₅ or 30.92 m lbs V₂O₅. An additional inferred vanadium resource included 21.57 million t at a grade of 0.171% V₂O₅ or 81.33 million lbs V₂O₅. A thorough review of all historical data performed by a QP, along with additional exploration work to confirm results would be required to produce a current and compliant mineral resource estimate. The author of this Technical Report considers this estimate to be a "historical resource" and is not treating it, or any part of it, as a current mineral resource estimate.



 Table 6.6 – Summary of mineral resource modelling and estimation methods used for historical estimates for the Moran Lake property.

	Roscoe and	Lacroix and Cook,	Morgan and Giroux,	Wallis et al.,
	Cook, 2005	2007	2008	2011
Drill holes	30	133	296	242
Assay	not recorded	9899	21642	19,961
number				
Domains	single	Upper and Lower C-	Upper C-Zone Main,	Within / outside
	moderately	Zones	Mylonite, West; Lower	U resource;
	dipping narrow		C-Zone; Armstrong Z1,	Upper and
	vein		Z3; Trout Pond	Lower C-Zones
Block size	Minimum 1.5 x	10 x 10 x 4	10 x 10 x 4	10 x 10 x 4
(m)	12.5–25			
Interpolation	-	Ordinary kriging	Ordinary kriging	Ordinary kriging
method				
Capping	-	1.6%; 0.32% U ₃ O ₈	0.28–1.11% U ₃ O ₈ ;	0.75%; 0.30%
		(Upper C-Zone; Lower	0.19–0.67% V ₂ O ₅ (table	V ₂ O ₅ (inside;
		C-Zone)	17-3 in report)	outside
				mineralized
				solid)
Density g/cm ³	2.7	2.83 (Upper C-Zone);	2.60-2.84 (Tables 17-8;	2.83
		2.73 (Lower C-Zone	17-10, 17-12 in report)	



Deposit	Category	Mt	U ₃ O ₈	V ₂ O ₅			
Poscoe and Cook 2005							
C Zono	Inforred	0 1 2 4	0.25				
		0.124	0.25	-			
Lacroix and Cook, 2007							
Linner C. Zene	Indicated	3.747	0.0386	0.077			
	Inferred	4.288	0.0267	0.063			
Lower C-Zone	Inferred	2.032	0.0461	0.042			
Morgan and Giroux, 2008							
Upper C-Zone	Indicated	6.92	0.034	0.077			
UC - Main	Inferred	1.01	0.02	0.082			
UC - Mylonite	Inferred	3.77	0.025	0.108			
UC - SW	Inferred	0.54	0.026	0.075			
Lower C-Zone	Inferred	1.45	0.050	0.058			
Trout Pond	Inferred	0.40	0.055	0.114			
Armstrong	Inferred	1.00	0.041	0.057			
Wallis et al., 2011							
C-Zone within U	Indicated	6.920	0.034	0.078			
resource	Inferred	5.320	0.024	0.089			
Lower C-Zone	Inforrad	1 450	0.050	0.059			
within U resource	merreu	1.430	0.050	0.000			
C-Zone outside U	Indicated	7.790	-	0.180			
resource	Inferred	21.570	-	0.171			

Table 6.7 – Historical mineral resource estimates for the Moran Lake Property.¹

¹The QP has not done sufficient work to classify the historical estimations as current mineral resources, neither the QP nor the Issuer are treating any of the historical estimations as a current mineral resource and they should not be relied upon.



6.8 Historical Mineral Processing and Metallurgical Test Work

Metallurgical work was completed by Saskatchewan Research Council on a composite containing 0.108% U_3O_8 and 0.173% V_2O_5 . After one hour over 80% of the uranium leached and 93% leached after seven hours. Vanadium leaching was comparably poor, after one hour 9% of the vanadium leached and 11.4% leached after seven hours (Lacroix and Cooke, 2007).

Additional metallurgical and mineralogical work on vanadium mineralization was conducted by Société Générale de Surveillance (SGS) in 2010. Vanadium is concentrated in hematite with minor amounts in rutile. In metallurgical tests, ore responded poorly to upgrading techniques and required high concentration acid to leach vanadium (e.g., 44% extraction with 100 g/L acid vs. 93% extraction with 250 g/L acid). Roasting ore allowed for vanadium extraction with less aggressive leach conditions, however this technique is likely not economical.

The metallurgical test work information presented above is for background historical information only. The QP has not verified the results of the metallurgical test work, and therefore, the QP and the Issuer do not view the metallurgical test work as current or relevant going forward. Furthermore, it is not known if the sample feeds were representative or if there were any processing factors or deleterious elements that could have a serious effect on potential future economic extractions.



7.0 GEOLOGICAL SETTING AND MINERALIZATION

7.1 Central Mineral Belt: Geological Framework

The Moran Lake Project and C-Zone deposit are located on the western end of the CMB, which is a NE-trending, 260 x 75 km belt of Proterozoic volcanic and sedimentary rocks with associated granites. The CMB straddles the Churchill, Nain, Grenville and Makkovik provinces in central Labrador and developed on an Archean craton consisting of gneisses and granitoid intrusions, mafic to felsic metavolcanics and minor mafic to ultramafic intrusions. The CMB consists of five main volcano-sedimentary groups, variably separated by faults, unconformities, granites of various ages, or Archean rocks (Ryan, 1984). These are the Aillik, Moran Lake, Bruce River, Letitia Lake and Seal Lake Groups (Fig. 7.1).

The Aillik Group occurs in the northeastern portion of the CMB and was formerly divided into the Upper Aillik and Lower Aillik Group (Ryan, 1984). This stratigraphy was revised by Ketchum et al. (2002) who redefined the Lower Aillik Group, renaming it the Post Hill Group. The Post Hill Group consists of quartzite, argillite and variably deformed, locally pillowed basalts. The Aillik Group (formerly upper Aillik Group) is less deformed and metamorphosed and consists of older sedimentary rocks interlayered with dacite to rhyolite flows, overlain by pillowed to possibly subaerial basalt flows, overlain in turn by subaerial rhyolites and volcaniclastic sandstone, dominantly of pyroclastic origin (Gower and Ryan, 1987). Two samples of Aillik Group rhyolite and one of a porphyry intrusive into the rhyolite have been dated, with results of 1861, 1856 and 1807 Ma respectively (Scharer et al., 1988). Sinclair et al., (2002) and Hinchey (2007) suggest that the younger 1807 Ma age may be related to a ~1800 Ma magmatic event, and not Aillik Group stratigraphy. In addition, Hinchey and Rayner (2008) reported three U-Pb zircon dates from the Aillik Group, including, 1) a felsic tuff from Aillik Bay that yielded a date of 1861 ± 6 Ma; 2) a rhyolite from the eastern side of Kaipokok Bay that yielded a date of 1883 ±7 Ma; and 3) a rhyolite from Ford's Bight area that yielded a date of 1876 ± 6 Ma These new dates for felsic volcanic rocks have extended the timing of the initiation of volcanism to ca., 1883 Ma (Hinchey and Davis, 2013).

The Moran Lake Group occurs in the central part of the CMB (Fig. 7.1), where it is interpreted as the lateral equivalent of the Aillik Group (Ryan, 1984). It has been divided into the Warren Creek and Joe Pond Formations. The sedimentary Warren Creek Formation is dominated by argillites, with lesser arenites, silicate facies iron formation and dolostones. The overlying Joe Pond Formation is a pillowed basalt sequence up to 2 km thick (Ryan, 1984).





Figure 7.1 – Simplified bedrock geology of the Central Mineral Belt and Moran Lake Project area. Modified from Wardle (1991) and Nostrand and MacFarlane (2011).



The Bruce River Group (Fig. 7.1) unconformably overlies the Moran Lake Group and earlier granites. The group contains the Heggart Lake, Brown Lake and Sylvia Lake Formations. The Heggart Lake Formation consists of conglomerates, sandstones (some hematite-bearing and red), and minor mafic and felsic lava flows, and defines a local graben (Ryan, 1984). The Brown Lake Formation contains a basal conglomerate distinguished by its bright red weathering colour and abundant red sandstone clasts. This is overlain by a >1 km thick volcaniclastic sandstone. The Sylvia Lake Formation is approximately 8 km thick and consists of two megacycles of mafic to felsic volcanics, both dominated by the felsic component (Ryan et al., 1987). Mafic volcanics vary from basalt to trachyte, are purple to green, flow-layered and in some instances autobrecciated; welded to non-welded ignimbrites and airfall material comprise the felsic volcanics. Data presented by Ryan (1984) indicate that Sylvia Lake Volcanics belong to the shoshonite association. Fluorite is locally present. Ignimbrite from the Sylvia Lake Formation has been dated at 1649 Ma (Scharer et al., 1988).

The Seal Lake Group crops out extensively in the western portion of the CMB and may be up to 14 km thick (Fig. 7.1; Ryan, 1984). The group contains interlayered quartzite, arkose, shales and oxidized, amygdaloidal basalts, all intruded by diabase to gabbro sills. The Seal Lake Group is interpreted to have been deposited in a rift basin under variable terrestrial to shallow marine conditions. A sill within the group has been dated at 1250 Ma (Wilton, 1996).

Numerous A-type granitoid plutons have intruded the above groups and are widely distributed in the CMB. Geochronological and geochemical work by Kerr (Kerr, 1988; Kerr and Krough, 1990; Kerr et al., 1992) has enabled division of the plutons into three main suites. The oldest suite varies from 1799 to 1837 Ma, clustering around 1802 Ma (Kerr et al., 1992). A 1719 Ma, fluorite-bearing granite suite, the Strawberry Intrusive Suite, occurs in the northeastern CMB. This suite also has A-type chemistry (Kerr et al., 1992). The third major suite intruded at approximately 1650 Ma, and consists of scattered intrusions in the CMB, as well as the Trans Labrador Batholith (Fig. 7.1). The Bruce River Group has been intruded by the 1647 Ma Otter Lake-Walker Lake Granite (coarse-grained monzonite to monzogranite) and the undated Crooked River Granite (medium-grained biotite-muscovite granite), both of which are considered to be high-level intrusive equivalents of Sylvia Lake Formation (Ryan, 1984; Ryan et al., 1987). A layered mafic complex in the northeastern CMB, the Adiavik Intrusive Suite (Gower et al., 1982), has been dated at 1649 Ma (Kerr and Krough, 1990). A series of gabbroic plugs and dikes collectively known as the Michael Gabbro intrudes volcanic and granitic rocks between the Bruce River Group and the Labrador Sea (Ryan, 1984). More recent U-Pb age dating by Hinchey and Davis (2013) of the



Measles Point Granite which cuts the Aillk Group yielded an igneous crystallization age of 1873 \pm 10 Ma and a metamorphic overprinting age of 1787 \pm 5 Ma

The Trans Labrador Batholith is an ENE-trending, 400 km long by 75 km wide belt of incompletely examined plutonic rocks which straddles the Grenville Front and forms the southern border of the CMB (Fig. 7.1; Ryan, 1984; Hoffman, 1988; Kerr, 1989). Parts of the batholith have intruded after extrusion of the Moran Lake Group and prior to extrusion of the Bruce River Group. The batholith contains, among other phases, gray quartz monzonite, pink to red, medium- to coarse-grained, potassic leucogranite, megacrystic (potassium and plagioclase feldspar) granite, locally with rapakivi textures, hornblende granodiorite and differentiated diorite (Ryan, 1984). Much of the batholith is dominated by A-type granitoids (Kerr, 1989).

7.2 Property Geology

Property geology below is summarized from Gillies and Clarke (2009).

7.2.1 Bedrock Geology

The C-Zone deposit is hosted in Aphebian mafic volcanic rocks of the Joe Pond Formation, which are unconformably overlain by Helikian sedimentary rocks of the Heggart Lake Formation. The Joe Pond Formation is in thrust contact with the structurally underlying Heggart Lake Formation, where the hanging wall is referred to as the Upper C-Zone and the footwall is referred to as the Lower C-Zone (Fig. 7.2). A tectono-stratigraphic section for the Moran Lake Project area is shown in Figure 7.3 (Lacroix and Cook, 2007).

7.2.1.1. Upper C-Zone

The Upper C-Zone is hosted within mafic volcanic rocks of the Joe Pond Formation which are variably altered and deformed but form distinct, mappable packages. Adjacent to the unconformity, the rocks are dominantly hematite and Fe-carbonate altered and usually contain up to 5% pyrite. Alteration intensity is variable with local preserved green mafic volcanic rock while other areas exhibit pervasive alteration. More intensely altered areas are typically weakly to moderately brecciated, exhibiting vein-style networks containing angular fragments of hematite and Fe-carbonate altered rock in a specularite \pm carbonate matrix (Gillies and Clarke, 2009).

The Joe Pond Formation-Heggart Lake Formation unconformity is exposed in two areas near the northeast end of the Upper C-Zone. In one location, it is obscured by a porphyritic mafic dyke and



in the second location it appears weakly sheared suggesting late, local structural modification along the unconformity (Gillies and Clarke, 2009).

The Heggart Lake Formation, stratigraphically overlying the Joe Pond Formation, comprises hematized polymictic conglomerate and minor arkosic sandstone. Conglomerates are generally matrix-supported, containing round to sub-round, pebble and rare cobble sized clasts of quartz porphyry, milky white quartz, mudstone, sandstone, diorite and mafic volcanic rock. Sedimentary bedding generally strikes east and dips shallowly to moderately southwards (Gillies and Clarke, 2009).

Local NNE to NE striking, steeply dipping shear zones are noted in this area as well. The lower limit of the hematite + Fe-carbonate altered and brecciated mafic volcanic rocks is delineated by a NE–SW trending shear zone, referred to as the Lower Shear Zone (Fig. 7.4). Deformation fabrics associated with the Lower Shear Zone varies from cataclastite to protomylonite. The Lower Shear Zone appears to be overprinted by an intense, pervasive Fe-carbonate alteration with distinct rusty orange weathering and minor amounts of pyrite, trace chalcopyrite and malachite. This brittle-ductile shear zone is also offset by E–W trending faults that likely post-date the main mineralization event. Both Fe-carbonate alteration and deformation intensity decrease toward the northwest and the rocks grade into partially hematized, dark maroon to red coloured mafic volcanic rock with up to 1% pyrite. Field observations suggest that the intense Fe-carbonate alteration along this gradational contact. This overprinting relationship is also implied by the presence of relict hematite alteration in brecciated fragments and porphyroclasts in the Fe-carbonate brittle-ductile shear zone (Gillies and Clarke, 2009).





Figure 7.2 – Property-scale geology of the Moran Lake Project. Geology from Morgan and Froude (2007).





Figure 7.3 – Tectono-stratigraphic summary of the Moran Lake Project area, simplified from Lacroix and Cook (2007).



7.2.1.2. Lower C-Zone

The Lower C-Zone mineralization occurs within the footwall of the C-Zone thrust fault hosted by sedimentary rocks of the Heggart Lake Formation. The Lower C-Zone is hosted by a matrix-supported conglomerate consisting of subangular, pebbles and cobbles of what appear to be Heggart Lake Formation sandstone, mudstone and rare polymictic conglomerate. Bedding generally strikes N–NE with a moderate dip to the SE. Moderate to strong sericite \pm epidote \pm chlorite alteration occurs locally in sedimentary units either near the thrust contact or adjacent to the unconformity. In general, this alteration is associated with steeply dipping, bedding parallel to subparallel ductile deformation, interpreted from weakly developed cleavage to moderate schistosity (Gillies and Clarke, 2009).

The Lower C-Zone unconformity is only exposed by later structural modification in a N–S trending fault, but the Zone overall is generally interpreted to trend E–W based on diamond drilling (Gillies and Clarke, 2009).

Uranium mineralization in the Lower C-Zone is generally focused within green coloured, sericite + epidote ± chlorite altered sedimentary units of the Heggart Lake Formation proximal to the unconformable contact with mafic volcanic rocks of the Joe Pond Formation. In addition, mafic volcanic rocks near the unconformity exhibit hydrothermal vein mineralization assumed to be associated with north-northwest trending faults (Gillies and Clarke, 2009).

7.2.2 Structural Geology

The C-Zone corridor exhibits evidence for a complex polyphase deformational history. Overall, deformational structures hosting mineralization through the corridor can be broken into four types (Gillies and Clarke, 2009):

- 1) Upper C-Zone type
- 2) CVG gabbro dyke type
- 3) Other shear-hosted type
- 4) Lower C-Zone type

The Upper C-Zone mineralization is hosted in brecciated, hematite + Fe-carbonate altered mafic volcanic rocks. This unit is likely fault-modified by interpreted E–W and WNW–ESE regional faults.



The brecciated/altered rocks are truncated at the southwest by a WNW–ESE trending regional fault (Gillies and Clarke, 2009).

The Upper C-Zone deposit is the least structurally modified area within the corridor and therefore it has retained the bulk of the continuous uranium mineralization. A remobilization event is interpreted based on the observation of a late mineralized fracture system cross-cutting earlier ductile shears and later fracture systems. Shear zones that cut the brecciated rock and remobilize mineralization generally trend ENE and W. Mineralization intensity is variable in the later shears, ranging from very weak to more intense than the surrounding rock and the controls are not obvious. Chlorite ± specularite fractures that cut these shear zones are intensely mineralized along the fracture planes or at intersection points with the foliation. The most common orientation of mineralized fractures is E–W, NW–SW and NNE–ESE (Gillies and Clarke, 2009).

The CVG gabbro dyke style of mineralization is hosted within fractured and veined, partially hematite + carbonate altered gabbro adjacent to its contact. On a broad scale, the mineralization appears to be hosted in a regional northeast trending, sinistral brittle shear zone. This sinistral shear zone is weakly hematized and moderately mineralized along the S and C planes. Definitive timing of mineralization is uncertain but is presumed to be later than the Upper C-Zone primary mineralization (Gillies and Clarke, 2009).

Other shear-hosted mineralization is generally found within mafic volcanic rock of the Joe Pond Formation and includes occurrences such as Armstrong and north of Area 1. The alteration associated with shear zones includes chlorite + carbonate + quartz but is devoid of hematite and Fe-carbonate. These shear zones are generally oriented N–S with sinistral sense S/C fabrics, and NE–SW conjugate dextral sense S/C fabrics (Gillies and Clarke, 2009).

The Lower C-Zone mineralization is typically hosted in reduced (sericite \pm epidote \pm chlorite alteration) sandstone and lesser conglomerate of the Heggart Lake Formation. Evidence suggests that thrusting along the unconformity has stacked mineralization. Intensification of mineralization is correlated to a maroon, hematite overprint likely associated with the thrusting event (Gillies and Clarke, 2009).

All of the structural styles of mineralization discussed above are bound by regional, NNE-trending thrust faults. These first-order structures are: the main C-Zone thrust and the interpreted thrust bounding the wedge-shaped unit of Joe Pond Formation mafic volcanic rocks between sedimentary rocks of the Heggart Lake Formation (Fig. 7.2). With the exception of the Lower C-



Zone, mineralization is restricted to the area bound by these two regional thrust faults indicating that these thrusts may post-date all mineralizing events in the C-Zone corridor. In addition, a third regional thrust fault, with similar geometry, is located in the South Armstrong area, south of the Moran Lake Group-Bruce River Group unconformity (Gillies and Clarke, 2009).

The Armstrong South area also displays a complex deformational history. Penetrative fabrics developed locally within well-exposed rocks of the Brown Lake Formation exhibit elevated radioactivity. The earliest observed deformation event observed in the Armstrong South is an axial planar cleavage related to gentle-open folding. These structures are very discrete and only weakly developed in the competent massive sandstones of the Brown Lake Formation. The bedding cleavage relationship is indicative of a long-limb position with the antiform present to the north. Bedding measurements collected in the area support gentle-open folding of the rocks. A second, more-penetrative, fabric is more widely developed in rocks of the Brown Lake Formation. This fabric is typically defined by chlorite-sericite development along discrete bedding plane boundaries, bedding sub-parallel shear bands and locally as restricted zones of steeper shearing and fabric development (Gillies and Clarke, 2009).

7.2.3 Surficial Geology

The area was affected by the Pleistocene Wisconsin glaciation, with ice directions to the east and northeast. The central portion of the project area is covered by a till veneer generally less than 1.5 m thick with local ground moraine material and boulder tills (Fig. 7.4). Glacial striae are generally oriented NE–SW, parallel to the dominant landform elongation direction. A second E–W oriented set of striations indicate a second ice-flow direction.





Figure 7.4 – Surficial Geology of the Moran Lake Project Area. Geology from Batterson (2000) and McCuaig (2007).



7.3 Mineralization

Nine mineral occurrences are documented on the Moran Lake Project licenses (see Table 6.2; Fig. 6.1) according to the NL Mineral Occurrence Databases (MODS, 2021). The Armstrong, Area 1, Trout Pond, Poz Pond, EM Target and Lake 202 occurrences are hosted in the Joe Pond Formation of the Moran Lake Group. Other occurrences such as the CVG and North Silas showing are hosted in the Heggart Lake Formation of the Bruce River Group (Sparks, 2017). The C-Zone deposit straddles the unconformity between the Moran Lake Group (Upper C-Zone) and Bruce River Group (Lower C-Zone).

Historical channel samples, drilling and mineral resource estimates are presented in Section 6. The historical drill hole intersections represent downhole widths (not true widths). As a cautionary statement, the QP has not completed enough work to verify the accuracy of the historical uranium intersections and grades, and recommends that the Issuer conduct future work to validate the historical exploration results. Additionally, the QP has not done sufficient work to classify the historical mineral resource estimations as current mineral resources, and neither the QP nor the Issuer is treating any of the historical mineral resource estimations as a current mineral resource estimate and they should not be relied upon.

7.3.1 Moran Lake C-Zone

7.3.1.1. Upper C-Zone

The Upper C-Zone deposit consists of uranium mineralization within strongly brecciated and altered mafic volcanic rocks and lesser Fe-carbonate-altered shear zones, collectively hosted by the Joe Pond Formation of the Moran Lake Group. The mineralized mafic volcanic rocks are structurally overlain to the southeast by conglomerate and sandstone of the Heggart Lake Formation. The mineralized mafic volcanic rocks of the Upper C-Zone are thrust to the northwest over younger, fluvial sedimentary rocks of the Heggart Lake Formation. The sandstone and associated conglomerate within the footwall of the thrust host uranium mineralization proximal to the original unconformity with the underlying mafic volcanic rocks of the Joe Pond Formation (Sparks, 2017).

The mafic volcanic rocks of the Joe Pond Formation locally contain rare lenses of chert and lesser siltstone and sulphidic black shale. Between the Upper and Lower C-Zone deposits, the mafic rocks are generally unaltered, and similar rocks are locally preserved as relict zones within the Upper C-Zone alteration. Less-altered mafic rocks have dark green chlorite and brownish-beige



sericite alteration that are interpreted as a regional metamorphic assemblage. Marginal to the main zone of mineralization, the mafic volcanic rocks are cut by numerous white quartz–carbonate veins that postdate the development of the hematite alteration and associated brecciation (Sparks, 2017).

Alteration assemblages observed in the Upper C-Zone deposit include (Sparks, 2017):

- Phase 1A: Pale-pink to orange to maroon hematite-albite
- Phase 1B: White Fe-carbonate-quartz-albite alteration
- Phase 2: Dark-purple hematite-filled fractures and brecciation ± uranium
- Phase 3: Fe-carbonate alteration
- Phase 4: White carbonate-quartz veining

The lower stratigraphic limit for the hematite alteration and brecciation is commonly defined by the Lower Shear Zone (Fig. 7.5), which is the site of pervasive Fe-carbonate alteration (Phase 3). Locally, this Fe-carbonate alteration overprints the dark-purple hematite-rich matrix of breccias correlated with Phase 2, and therefore postdates the development of that alteration. Phase 1–3 alteration assemblages are cross-cut by centimetre-scale, white carbonate–quartz veins (Phase 4) representing one of the youngest alteration events within the deposit.

Breccia development in the Upper C-Zone deposit is interpreted to be a result of hydrothermal processes (Cook,1980; Ryan, 1984). Although the alteration and brecciation form the most characteristic features associated with the Upper C-Zone mineralization, not all breccias are uraniferous. Geochemical data indicates that breccias are consistently associated with elevated vanadium, but elevated uranium values are generally associated with crosscutting fractures or intersections of mineralized chert. Whether or not the uranium and vanadium are linked to a single mineralizing event has yet to be determined (Sparks, 2017).




Figure 7.5 – Cross section through the Upper and Lower C-Zone deposits. View towards the NE. Modified from Sparks (2017).



Uranium mineralization occurs in four main settings within the Upper C-Zone (e.g., Eaton et al., 2008). The most widespread mineralization occurs in close spatial association with Phase 2 hematitic alteration and associated brecciation. This style of uranium mineralization is generally characterized by broad, relatively low-grade intersections in drill core. Mineralization is also locally associated with the development of brecciated quartz–carbonate veins, in association with minor pyrite and chalcopyrite (Morgan and Giroux, 2008; Sparks, 2017).

Higher grade uranium mineralization within the deposit is associated with discontinuous chert lenses that are interpreted to represent a primary unit within the volcanic sequence (Eaton et al., 2008). These rocks are strongly magnetic and contain disseminated pyrite and lesser magnetite throughout. The mineralized chert is generally affected by a pervasive hematite alteration, resulting in a distinctive brick-red color. Alteration is interpreted as part of the earlier Phase1 assemblage, as it is subsequently overprinted by extensive specularite and/or white Fe-carbonate in fractures or breccia. Uranium mineralization is predominantly confined to dark-red specularite-filled fractures and related breccia; however, rare occurrences of barren, dark-grey, specularite-filled fractures locally overprint the mineralization indicating the presence of two phases of specularite (Sparks, 2017).

Within the Upper C-Zone deposit, uranium mineralization is also developed within Fe-carbonatealtered shear zones. These zones are interpreted as altered mylonites and cataclasites (Eaton et al., 2008). The most significant of these shear zones is the Lower Shear Zone (Fig.7.5), which is generally less than 10 m wide, and is host to anomalous radioactivity with localized, higher grade, hematitic bands. The Fe-carbonate alteration, locally overprints and replaces earlier hematite alteration, and occurs as metre-scale zones having an intense penetrative fabric. In rare instances, discrete zones of brecciation are observed within the Fe-carbonate alteration and are interpreted to represent the incomplete replacement of earlier brecciation rather than a later breccia event that overprinted the Fe-carbonate alteration (Sparks, 2017).

Drilling within the easternmost portions of the Upper C-Zone has intersected rare zones of hematite-rich brecciation within conglomerate of the Heggart Lake Formation. This style of mineralization closely resembles the dark-purple, specularite-rich brecciation associated with Phase 2 alteration and mineralization in the underlying Moran Lake Group, and implies that this phase of alteration post-dates the deposition of the Heggart Lake Formation. At the core of this mineralized zone, strong hematite alteration obscures the original nature of the host rock but the transition into less altered conglomerate, along the margin of the zone, allows the identification of



the original protolith. This mineralization is intruded by a relatively unaltered fine-grained mafic dyke (Sparks, 2017).

7.4 Lower C-Zone

Uranium mineralization within the Lower C-Zone displays a close spatial association with the unconformable contact between the Moran Lake and Bruce River groups (Fig. 7.5). At the unconformity the typical fine-grained, dark-green pillow basalt of the Moran Lake Group Joe Pond Formation contains extensive quartz–carbonate veins and a variably developed dark-purple to red alteration which extends 1–3 m below the unconformable contact and does not affect the overlying sandstone (Heggart Lake Formation of the Bruce River Group). The 'reddening' of the pillow basalt below the unconformity is inferred to be the result of paleoweathering and is unrelated to the extensive hematite alteration associated with the development of Upper C-Zone mineralization. Most of the sandstone sequence above the unconformity is oxidized and red, but locally becomes reduced for several metres immediately above the unconformity. This zone of reduced sandstone is the site of uranium mineralization within the Lower C-Zone deposit (Sparks, 2017).

Mineralization within the Lower C-Zone deposit is separated from that developed within the overlying Upper C-Zone by the C-Zone thrust fault (Gillies and Clarke, 2009; Fig. 7.5) and represents a distinctly different style of uranium mineralization (Sparkes and Kerr, 2008). The uranium mineralization broadly forms a moderately southeasterly dipping stratiform zone located proximal to the unconformity, but generally situated several metres above the actual contact. Within the mineralized zone, uranium is hosted within chloritic, fine- to medium-grained pale-green sandstone. The highest grades of uranium mineralization, occurs as patchy zones of disseminated uraniferous material. These zones display an irregular distribution, possibly representing a fluid front developed within the reduced sandstone (Sparks, 2017).

The Lower C-Zone also displays evidence of a later mineralizing event in which the reduced sandstone is overprinted by hematite–carbonate alteration, which is, in turn, associated with the development of finely disseminated uranium mineralization (Sparks, 2017).



7.5 Area 1

The Area 1 prospect is hosted within heavily oxidized mafic volcanic breccia of the Joe Pond Formation with chloritic, sericitic and minor iron carbonate alteration (Morgan and Giroux, 2008). The uranium mineralization is confined to narrow fracture zone fillings associated with quartz–carbonate veining with pyrite and chalcopyrite throughout. The geological setting as well as the alteration and mineralization styles are very similar to those which occur at the Moran Lake C-Zone developed prospect located 1.5 kilometers to the NE (MODS, 2021).

7.5.1 Armstrong

The Armstrong deposit is located approximately 3.5 km SW of the Moran Lake C-Zone. Mineralization is associated with a N- to NE trending shear zone hosting several anastomosing uraniferous fractures within variably altered pillow basalt of the Joe Pond Formation (Morgan et al., 2007; Sparks, 2017). The mafic volcanic host rocks consist mostly of interlayered volcanic flows, cut by several mafic dykes. The pillow basalt is interbedded with, or structurally juxtaposed against, black, locally sulphidic, argillite and lesser grey siltstone and chert, which resembles rocks of the underlying Warren Creek Formation. The argillite unit is bound on both sides by mafic volcanic rocks and is variably strained. The entire sequence is cut by numerous chloritic shear zones, which are preferentially developed within the argillite unit or along its contact with adjacent pillow basalt. Within the mafic volcanic rocks these shear zones are characterized by the presence of disrupted quartz–carbonate vein fragments hosted within a chlorite–sericite-rich matrix (Sparks, 2017).

Drilling intersected zones of mineralization within altered graphitic argillite and lesser chert close to their contact with the underlying mafic volcanic rocks. Both the pillow basalt and argillite units display similar hematite and associated Fe-carbonate–albite alteration. The alteration within the argillite is generally more extensive, and this unit hosts most of the uranium mineralization within the deposit (Sparks, 2017).

The metasedimentary and mafic volcanic rocks display variably developed hematite, Fecarbonate and albite alteration, which overprints an existing chlorite–sericite assemblage.

Although the host rocks surrounding the uranium mineralization display a strong penetrative fabric, analysis of autoradiographs by Sparks (2017) of the mineralization suggest the mineralization is not affected by the same degree of deformation. However, local 0.5 - 1.0 m wide, strongly foliated, shear zones separating the pillow basalt from adjacent argillite host



fragments of the Fe-carbonate–albite alteration. This suggests that the alteration is at least locally overprinted by post-mineralization deformation. Mineralized Fe-carbonate–albite alteration is crosscut by dark green chloritic fractures, implying that more than one generation of chlorite alteration is also present. The final stage of alteration is marked by the development of white carbonate veining, similar to that seen along strike in the Upper C-Zone deposit. Locally, mafic dykes cut the entire sequence and these appear to postdate the development of the foliation within the mafic volcanic rocks, but are locally affected by the development of network-style white carbonate veins (Sparks, 2017).

7.5.2 Other Mineral Occurrences

The North Silas Lake Indication consists of a uranium mineralized, moderately carbonatized, oxide rich andesite-basalt. Maximum assay values of 1370 and 1550 ppm uranium were obtained from the mineralized zone. This occurrence is 1 km southeast of the Moran C-Zone (MODS, 2021).

Sparks (2017) describes mineralization at the CVG Prospect as associated with E–W-trending gabbroic dykes, which intrude conglomerate of the Heggart Lake Formation. Four trenches were excavated along the magnetic anomaly exposing variably mineralized gabbroic dykes, which assayed up to $0.13\% U_3O_8$ over 0.5 m; however, limited diamond drilling in the area failed to intersect any significant uranium mineralization (Gillies and Clarke, 2009). The uranium mineralization is primarily concentrated along the margins of the dyke and is concentrated within brittle to brittle-ductile fractures and vein systems associated with Fe-carbonate alteration (Gillies and Clarke, 2009). Locally the alteration and related brecciation are observed to overprint the gabbroic dykes.

The Lake 202 occurrence is in mafic to intermediate flows of the Aphebian Moran Lake Group. Radioactivity is spotty and is confined to fractures and shear zones in the mafic flows which form the base of the Aphebian-Helikian unconformity between the Moran Lake Group and the Bruce River Group. The fractures are generally narrow (up to 5 cm) and contain pink carbonate, hematite, chalcopyrite and pyrite. The highest counts (up to 10 times background) were obtained over these fractures. The radioactivity occurs in two zones, the largest of which is approximately 100 m by 40 m in size (MODS, 2021).

Uranium mineralization at the Poz Pond occurrence is hosted within hematite rich brecciated mafic volcanic rocks of the Joe Pond Formation. The highest grades of mineralization are



generally associated with hematized chert lenses and a Fe-carbonate altered shear zone. The mineralization is fracture controlled and associated with hematite and chlorite-rich fractures. The geological, geophysical signatures and structural settings, as well as the alteration and mineralization styles, are similar to those found at the C-Zone. (Gillies and Clarke, 2009; MODS 2021)

The mineralization at Trout Pond and Poz Pond is separated by approximately 500 m. Drilling at Trout Pond intersected uranium mineralization over a minimum strike length of 600 m. The best drill hole intersection at Trout Pond was ML-AR-50 which intersected 0.096% U_3O_8 over 2.40 m between 52.60 m and 55.00 m (Gillies and Clarke, 2009; MODS 2021)

The EM Target area hosts the Sparkman and Skinny prospects. The EM trend refers to an area approximately 700 meters ENE of Poz Pond and is associated with an EM conductor located south of the C-Zone. Mineralization is associated with graphitic and pyritic argillite and chert, presumably within the Joe Pond Formation. Uranium mineralization was intersected in channel samples cut during 2008 trenching program. One prospecting sample was collected from the Sparkman Prospect prior to trenching that assayed 0.110% U₃O₈. No prospecting samples were collected from the Skinny Prospect since mechanized trenching and detailed channel sampling began almost immediately after its discovery. Selected channel sample results from the EM target area are described above in Section 6.3 (Gillies and Clarke, 2009; MODS 2021).



8.0 DEPOSIT TYPES

The following discussion is summarized from Sparks (2017).

The division of the uranium occurrences within the CMB remains broad in order to accommodate the diverse styles, ages and structural environments of uranium mineralization that have been described in the CMB. Sparkes and Kerr (2008) subdivide the uranium occurrences into magmatic, metamorphic–metasomatic and sedimentary formational environments.

8.1 Magmatic-related Mineralization

Magmatic-related styles of uranium mineralization within the CMB are generally minor, with the exception of the Moran Lake Upper C-Zone deposit.

Pegmatite-hosted mineralization developed within the Archean basement rocks represent a viable regional exploration target, most notably in areas where mineralized dykes occur within major structural zones. Pegmatite dykes hosting uranium mineralization have yet to be dated directly in the region, but in the eastern CMB, mineralized pegmatite dykes are inferred to be coeval with pegmatite dykes dated at ca., 1870 Ma (Sparkes and Kerr, 2008), and thus potentially represent some of the earliest uranium mineralization identified in the region (Sparks, 2017).

The Moran Lake Upper C-Zone deposit, and the nearby B Zone prospect, display several characteristics indicative of IOCG-style mineralization, such as the development of iron oxide-rich breccias in association with extensive alkali (Ca, Na) metasomatism. Mineralized breccias of the Moran Lake Upper C-Zone deposit are consistently elevated in vanadium and also contain local enrichment of uranium, and lesser copper and silver (Sparks, 2017).

Felsic volcanic rocks of the Sylvia Lake Formation, as well as those rocks correlated with the Aillik Group in the Benedict Mountains, host several occurrences of volcanic hosted uranium mineralization, which are inferred to be largely derived from the host volcanic succession, and therefore interpreted to be magmatic in origin. This mineralization is inferred to have been remobilized from the surrounding volcanic succession into permeable fault structures as well as along the margins of mafic dykes that intrude these rocks; this mineralization generally lacks any significant alteration aside from minor hematization of the adjacent wall rock (Sparks, 2017).



8.2 Metamorphic–Metasomatic-related Mineralization

This style of mineralization encompasses the greatest number of occurrences within the CMB, some of which are known to be of contrasting age, and in all likelihood this group could be further subdivided after more detailed study. The mineralization contained within this group includes cataclastic-breccia-hosted mineralization within the Two-Time Trend, the Kitts deposit and related occurrences along the Post Hill Trend, as well as the Michelin and Jacques Lake deposits. In addition, intrusive-hosted mineralization (e.g. Melody Hill prospect) is also included within this group. Most, if not all, examples contained within this group display an overriding structural control with respect to the development of uranium mineralization. The origin and nature of the mineralizing fluids related to the various mineralizing events are inferred to be at least partially related to metamorphic events, which in some cases can be bracketed based on existing U–Pb geochronology (Sparks, 2017).

High-grade uranium mineralization at the Kitts deposit represents some of the oldest mineralization in the region having a minimum age of ca. 1880 Ma (Sparkes et al., 2010). This style of mineralization is inferred to be developed within a structural corridor which, on a regional scale, defines the boundary between the Post Hill Group and the structurally overlying Aillik Group. Given the U–Pb age constraints and overriding structural control on the mineralization, its formation is inferred to be linked with the D1 deformational event, locally dated at ca. 1896 Ma, identified by Ketchum et al., (1997). The mineralization within the Post Hill Group developed along this structural zone commonly displays isoclinal folding as indicated by autoradiographs, thus indicating the presence of post-mineral deformation. However, to what degree this deformation has remobilized the uranium mineralization within the structural corridor has yet to be determined (Sparks, 2017).

Mineralization developed along the Post Hill Trend contrasts with that developed in the Michelin– Jacques Lake area, with the former lacking significant alteration associated with the development of uranium mineralization. In addition, mineralization developed within the Post Hill Group locally displays enrichment of Cu, Zn, Ag, and V along with anomalous Au and locally Mo, which further distinguishes it from mineralization observed within the area of the Michelin and Jacques Lake deposits. This metal enrichment is inferred to be linked to the rocks hosting the mineralization along the Post Hill Trend, as is locally observed within mineralization developed in the Warren Creek Formation of the Moran Lake Group (Sparks, 2017).



Within the Aillik Group, the development of albite-type mineralization represents one of the most economically significant styles of mineralization within the CMB. This style of metamorphic-metasomatic mineralization is currently bracketed between ca. 1860 and 1800 Ma, based on existing geochronological data, which broadly overlaps the ca. 1900–1700 Ma Makkovikian Orogeny (Hinchey and LaFlamme, 2009 and references therein). However, as seen within the Michelin deposit, subsequent remobilization of the uranium mineralization is evident based on U–Pb data from titanite, which highlight the presence of Grenvillian-related events overprinting the mineralization. This ca. 1000 Ma event is likely related to the extensional collapse of the Grenvillian Orogeny (Rivers et al., 2002). The full effect of this deformational event, on the overall development of the deposit, is not yet fully understood and requires further study. However, mineralizing events of a similar age have been identified elsewhere in Labrador, and in adjacent Québec (Crocker, 2014; Clark, et al., 2005), suggesting this period has some regional significance with respect to the development of mineralization in the region (Sparks, 2017).

8.3 Sediment-hosted Mineralization

This style of mineralization is primarily confined to units of the Bruce River Group, but minor occurrences are also locally developed within sedimentary rocks of the Moran Lake Group. The main occurrence within the Moran Lake Group is the Area 51 prospect. Here, a dolostone unit, immediately overlying Archean basement rocks, is host to anomalous radioactivity near its upper contact with overlying black shale. This mineralization is inferred to be associated with the circulation of uraniferous fluids within the sedimentary sequence; however, the timing of the mineralization remains unknown (Sparks, 2017).

Sediment-hosted mineralization within the Bruce River Group is much more significant with the most significant example being Moran Lake Lower C-Zone. This style of mineralization is primarily restricted to the ca. 1850 Ma Heggart Lake Formation (Sparkes et al., 2016), and displays many characteristics of typical sandstone-hosted uranium mineralization; the most notable of which is its development in association with reduced zones in an otherwise oxidized, sedimentary sequence. No true examples of unconformity-style mineralization have yet been identified in the region, and most sediment-hosted occurrences display a spatial association with regional fault structures (Sparks, 2017).



9.0 EXPLORATION

CUR conducted an unmanned aerial vehicle ('UAV') photogrammetric survey to generate a highresolution digital elevation model ("DEM") and orthophotos of selected portions of the property. These data will be used as a base map for future work and act as a base-line record of site conditions prior to any ground-disturbance work by CUR.

The UAV survey was flown using a DJI Matrice[™] 210 RTK drone equipped with a Zemuse[™] X5S camera. Ground control aerial targets were surveyed using a Trimble Geo7x GPS. Surveys were flown at an elevation of 120 m, with 70% image overlap (along and across line) for a final ground sample distance of 2.9 cm.

Final delivery of these data from the contractor is pending. CUR has not conducted any other exploration on the Moran Lake property.

A summary of the historical exploration programs completed by companies other than CUR is presented in Section 6. None of this work was conducted by or on behalf of CUR.



10.0 DRILLING

CUR has not yet conducted any drilling on the Moran Lake property. A summary of the historical diamond drill programs completed by companies other than CUR is presented in Section 6.6. None of this work was conducted by or on behalf of CUR.



11.0 SAMPLE PREPARATION, ANALYSES AND SECURITY

CUR has yet to conduct exploration work at the Moran Lake Project licenses. Pre-2000's historical exploration work on the Moran Lake Project was conducted by Brinex, Commodore Mining Ltd., and Saarberg Interplan Canada Ltd. From 2003–2004 airborne geophysics and various review studies were undertaken by L. Murphy and N. Murphy and Altius Resources Inc. The most significant drilling and exploration program was conducted from 2005 – 2012 by Crosshair Exploration and Mining Corp., (later Crosshair Energy Corp.).

Technical reports were prepared by Roscoe and Cook (2005), Lacroix and Cook (2007), Morgan and Giroux (2008) and Wallis et al., (2011). These reports were prepared in accordance with NI 43-101 (implemented February 2, 2001), but are older than the current CIM Definition Standards and Best Practice Guidelines for mineral resources and reserves (May 10th 2014 and November 29th, 2019). As this Technical Report replaces and supersedes the 2005 – 2011 reports, the author provides only a brief summary of sampling, analytical and Quality Assurance/Quality Control ("QA/QC") comments and observations herein.

11.1 Pre-2000 Drilling Analyses, QA/QC and Security

Drilling was conducted by Shell Canada Resources from 1978– 1979 (Mckenzie, 1979; Gordanier, 1979). Analyses were carried out by Atlantic Analytical Services Ltd. Laboratory certificates are available (assessment report 13K/0149) for the 1979 drill program but not for the 1978 program. No details of analytical procedures, methodology, QA/QC or security measures are documented for this early work. Atlantic Analytical determined the uranium content by fluorimetry in fused fluoride beads (Roscoe and Cook, 2005).

In 2005 (see Roscoe and Cook, 2005), Crosshair engaged in a re-sampling program to verify the analytical results from the 1970's Shell Canada drill core. Selected portions of 21 holes from the Upper C-Zone were sampled. In some cases, previously sampled core was quarter-sawn and re-sampled and samples were collected from previously unsampled core. In total, 687 samples were sent to SGS Laboratories in Don Mills, Ontario, for a multi package analysis including ICP, fire assay and whole rock analysis. The main emphasis was on the determination of U₃O₈, Cu, Ag and Au concentrations, and these plus historic values are incorporated in the data set used to estimate the mineral resource in the Upper C-Zone. For its re-sampling program, Crosshair selected the intervals to be sampled and the core was cut by government core library personnel. Sample intervals were determined by Tim Froude, V.P. Exploration for Crosshair and samples



were bagged, tagged and sealed by him, shipped by air to St. John's and then by ground transport on to SGS. Crosshair did not insert any blank or standard samples and relied upon internal quality control at SGS (Roscoe and Cook, 2005).

Correlation of the original Shell Canada Resources fluorimetry analyses for U_3O_8 with 2005 ICPMS analyses appears reasonable given the differences in methodology. Roscoe and Cook (2005) however note that some samples have unexplained variance and recommend more check work to fully understand the comparability of the two different sets of values. SGS is accredited to the ISO17025 Standard by Certificate number 456.

11.2 Post-2005 Drilling Analyses, QA/QC and Security

2006 diamond drilling totaled 21,486 m in 137 holes using BTW size core. All the holes were logged using a down-hole gamma probe and surveyed using a multishot instrument for dip and azimuth. Sampling of the holes was guided by the radiometric logs. Samples were generally 50 cm in length but shorter when required by geological contacts or exceptionally high radioactive zones (Lacroix and Cook, 2007).

Sample preparation for both rock and drill core was carried out by Eastern Analytical Limited of Springdale NL (Eastern) using standard industry methods. Laboratory QA/QC included standards, blanks and duplicate samples every 25 samples (Lacroix and Cook, 2007).

Two 250 g pulps were prepared, one analyzed for Au, Ag and Cu by Eastern and the second pulp forwarded to Activation Laboratories (Actlabs) in Ancaster, ON, for further uranium analysis. In addition, check analyses on 50 rejects prepared from the coarse crush were carried out and 300 pulps from Actlabs were re-assayed for uranium by SGS,

Actlabs is an internationally recognized independent laboratory that maintains internal QA/QC using standards, blanks and duplicates and is accredited under ISO/IEC 17025, which includes ISO 9001 and 9002 Certification (Lacroix and Cook, 2007). SGS has ISO/IEC 17025 accreditation. Eastern achieved ISO 17025 accreditation in February 2014 for Fire Assay Au, as well as multi-acid ore grade assays in Cu, Pb, Zn, Ag, Fe and Co. At the time of this work, Eastern was not ISO accredited.

Crosshair had an internal QA/QC program comprising standards, blanks and duplicates with additional duplicate assays completed at the end of the program. The program was instigated for all holes following ML-24. One sample of core for every 50 samples is quarter split with both



quarters sent for assay. A blank prepared from an unmineralized siliceous siltstone (from outside of Labrador) was inserted at pre-designated locations resulting in each 50 sample batch containing a blank (Lacroix and Cook, 2007). SGS is an internationally recognized independent laboratory

Pulps sent to Actlabs after preparation by Eastern were analyzed for uranium and 27 other elements using Instrumental Neutron Activation Analysis (INAA) and Inductively Coupled Plasma Spectrometry (ICP) for vanadium and 19 other elements. Uranium analyses that exceeded the upper limits for INAA analysis (> 10,000 ppm) were re-assayed using the fusion/XRF technique (Lacroix and Cook, 2007).

Sample security procedures included use of numbered security seals on sample shipment bags. Representative rock samples and the majority of the drill core are stored at the Crosshair camp at Armstrong Lake in Labrador. The core is either stored in racks or cross-piled. A selection of representative core from the 2007 program is stored in the Newfoundland and Labrador government core library in Goose Bay (Lacroix and Cook, 2007).

For the 2007 winter drill program Crosshair switched from analysis of uranium by INAA to Delayed Neutron Counting ('DNC'). Lacroix and Cook (2007) note a positive bias in the analytical results of reference standards as a result of the switch from INAA to DNC analysis. Overall, the 2007 results were 11% – 12% higher than those for 2006. Check assay analyses with INAA at SGS were also systematically 9% higher than DNC results from Actlabs. Lacroix and Cook (2007) recommended that the source of these discrepancies be investigated further.

During the 2008 winter program all drill core samples were shipped to the Actlabs facility in Happy Valley-Goose Bay for preparation. The pulps were then shipped to Actlabs Ancaster lab for uranium analysis by DNC method. Actlabs also analyzed the pulps for multi-element analysis using Inductively Coupled Plasma Mass Spectrometry (ICP/MS Ultratrace 4). Crosshair's QA/QC program and security measures in shipping were conducted in accordance with those outlined in the 2006 and 2007 program (Morgan and Giroux, 2008).

Analysis of duplicates indicated that the relative difference for 188 of 265 pair of samples was more than 25%. Most of the high differences are believed to be due to nugget effect related to fracture hosted mineralization (Morgan and Giroux, 2008).



Eight blank samples were above the two standard deviation limit but all values were less than 25 ppm. The results reflect low to negligible contamination during sample preparation procedures (Morgan and Giroux, 2008).

Four different reference standards were used in the 2008 program. Morgan and Giroux (2008) identified some issues with positive bias and some failed batches due to standards plotting outside of two Standard Deviations.

The 2009 and 2010 program focused of resampling and analyzing previously drilled core for vanadium. No new drilling was undertaken in this period. Details of the vanadium QA/QC program are presented in Wallis et al., 2011.

11.3 Adequacy of Sample Collection, Preparation, Security and Analytical Procedures

The QP has reviewed the adequacy of the historical exploration information as conducted by companies other than CUR and the visual, physical, and geological characteristics of the property. The QP has found no significant issues or inconsistencies that would cause one to question the validity of the data for its specific use as 'background information' during the preparation of this Technical Report.

Post-2005 historical exploration programs conducted at the Moran Lake Project used methods of sample collection, preparation, security, and analytical techniques that relate to reasonable industry standards for uranium exploration.

In the future, however, the author recommends that the sample collection, preparation, security, analytical procedures and QA/QC procedures of any CUR-led exploration program is completed in accordance with current CIM standards and guidelines and robust enough to develop confidence for any future mineral resource/reserve modelling and estimations.



12.0 DATA VERIFICATION

12.1 Data Verification Procedures

A site visit to the Moran Lake Project was conducted for data verification purposes on May 12 and 13, 2021. The site visit included inspection of Moran Lake Project, Armstrong Lake camp and collection of verification samples from historical core. Independent verification samples were collected from core archived at the NL provincial government core library in HVGB.

Verification of the historical drill hole database included spot checks of the digital drill hole database against drill record and assay certificates in assessment reports filed with the Government of NL. A few minor discrepancies were noted between drill log and database collar elevations.

12.2 Qualified Person Site Inspection

Diamond drill core from selected historical holes at the Moran Lake Project are stored at the NL provincial government core library in HVGB, managed by the Department of Industry, Energy and Technology. Eleven independent verification samples were collected from the 1978, 2006 and 2008 series drill holes (Table 12.1). Holes were selected from the Upper and Lower C-Zone. Intervals were selected to span a representative range of grades reported from the property. Quarter-core verification samples were collected, honoring the original sample intervals as much as possible. Samples were submitted to Activation Laboratories Ltd., in Ancaster Ontario for analysis by Delayed Neutron Counting ('5D-U308 Assay DNC' laboratory package) for uranium. Other elements, including copper and vanadium, were analyzed by Instrumental Neutron Activation Analysis ("INAA") or total digestion inductively coupled plasma - optical emission spectrometry ("ICP-OES") included in the 1H laboratory package.

Results of the verification samples are shown in Table 12.1. The samples confirm the general grade tenor and discrepancies are consistent with the expected natural inherent variability for uranium and IOCG-style deposits. Additionally, variability is expected based on sample size (quarter-core verification samples vs half-core original samples) and the different laboratories methods employed over the life of the project.



Table 12.1 – Results of independent verification samples.

	Drill		From		Sample	Sample	U_ppm	U_ppm	V_ppm	V_ppm	
Year	hole	Zone	(m)	To (m)	(orig)	(ver)	(orig.)	(ver.)	(orig.)	(ver.)	Lab Cert (orig.)
2006	ML-55	UC	45.16	45.66	23873	986467	240	289	96	99	A06-4529 revised
2006	ML-55	UC	64.66	65.16	23916	986468	332.14	494	1610	943	A06-4529 revised
2006	ML-55	UC	87.66	88.16	23967	986469	2040	1370	588	508	A06-4529 revised
	ML-										
2008	180	UC	208	208.5	D01652	986470	538	420	1265	1140	A08-1603
	ML-										
2008	180	UC	210.45	211	D01657	986471	256	199	414	429	A08-1603
2006	ML-11	UC	82	82.5	79963	986472	1560	1550	899.4	341	A06-0908
2006	ML-11	UC	77.5	78	79955	986473	172	121	815	381	A06-0908
2006	ML-20	UC	87.5	88	88552	986474	4850	2310	634.2	421	A06-2090
1978	C-23	UC	124.55	124.95	36569	986475	1300	1260	358	210	N/A
2006	ML-56	LC	288.2	288.7	15735	986476	879.6	699	342	306	06-4529 revised
2006	ML-12	UC	110.85	111.5	81327	986477	443.1	366	504.8	388	A06-0945



12.3 Validation Limitations

At the time of the site visit, historical drill collars were still snow covered and thus not available for verification. The author of this Technical Report was also unable to locate original drill collar survey metadata in order to verify survey methodology, vertical and horizontal datum, or equipment used. Historical GIS data included collar location discrepancies related to NAD83 vs NAD27 projection and multiple coordinates in database with no associated metadata.

Given the difficulty in validation of the historical drill hole collar locations, the QP states that there are limitations to the historical drill hole information. This pertains primarily to collar locations, but the QP recommends that lithological codes and thicknesses, and assay data are also fully validated prior to utilizing the drill hole data in any future mineral resource estimation work.

The author of this Technical Report recommends that CUR adopt rigorous QA/QC protocols if future exploration work is conducted. This would include insertion of additional standards and blanks, and the inclusion of duplicate sample/pulp analyses. It is also advisable to employ a secondary independent laboratory for the purpose of independent check-sampling.

12.4 Adequacy of the Data

This Technical Report has been prepared for CUR, which recently acquired an interest in the Moran Lake Project. The QP has reviewed the historical exploration information and the visual, physical, and geological characteristics of the property and has found no significant issues or inconsistencies that would cause one to question the validity of the data.

The author is satisfied, and takes responsibility, to include the exploration data including geochemical surveys and drill information as background information for this Technical Report.

The author recommends that the sample collection, preparation, security, analytical procedures and QA/QC procedures of any future Moran Lake exploration program is completed in accordance with current CIM Definition Standards and guidelines and robust enough to develop confidence for any future mineral resource/reserve modelling and estimations.



13.0 MINERAL PROCESSING AND METALLURGICAL TESTING

CUR has not conducted any mineral processing and/or metallurgical testing on the Moran Lake Project to date. A summary of the historical mineral processing and metallurgical testing is presented in Section 6.8. The historical test work was not verified by the QP and is not being treated as current or relevant by the QP nor CUR. It is presented only as background historical information.



14.0 MINERAL RESOURCE ESTIMATES

CUR has not completed a mineral resource estimate on the Moran Lake Project. Historical mineral resource estimates are presented in Section 6.7. The QP has not done sufficient work to classify the historical mineral resource estimations as current mineral resources, and neither the QP nor the Issuer is treating any of the historical mineral resource estimations as a current mineral resource and they should not be relied upon.



15.0 MINERAL RESERVE ESTIMATES



16.0 MINING METHODS



17.0 RECOVERY METHODS



18.0 PROJECT INFRASTRUCTURE



19.0 MARKET STUDIES AND CONTRACTS



20.0 ENVIRONMENTAL STUDIES, PERMITTING AND SOCIAL OR COMMUNITY IMPACT



21.0 CAPITAL AND OPERATING COSTS



22.0 ECONOMIC ANALYSIS



23.0 ADJACENT PROPERTIES

The QP has not verified the information including analytical results and resource estimations on adjacent properties. Mineralization on adjacent properties is not necessarily indicative of the mineralization on the Moran Lake Project.

23.1 Developed Prospects

The CMB is host to several significant uranium deposits. The closest developed prospect (~ 17 km to the NW) to the Moran Lake C-Zone, in the western CMB, is the Two Time Zone. The Central CMB hosts the Michelin deposit, the largest known uranium deposit in the belt. Other significant central CMB deposits include the Jacques Lake, Rainbow, Burnt Lake and Anna Lake deposits. The Posthill trend in the Eastern CMB host the Nash, Inda Lake, Gear Lake and Kitts deposits.

23.1.1 Western CMB Deposits

The Two Time Zone is located within brecciated and fractured granitic to dioritic plutonic rocks of the Kanairiktok Intrusive Suite. Uranium mineralization is breccia-hosted and occurs within an extensive zone of hematite, chlorite and carbonate alteration (MODS, 2021). Central CMB Deposits

The Michelin deposit is the largest uranium deposit in the CMB and is current controlled by Paladin Energy Ltd ("Paladin") through its wholly-owned subsidiary, Aurora Energy Ltd.

Uranium ± copper mineralization at the Michelin deposit is associated with shearing and broad zones of Na-Ca (albite-actinolite-calcite-clinopyroxene-epidote-rich) alteration. (Smith et.al, 2004; MODS 2021).

The Rainbow deposit is a satellite to Michelin, located 2.5 km southwest of the main zone. Similar to Michelin, the Rainbow deposit is hosted within volcaniclastic rocks of the Aillik Group. Mineralization consists of finely disseminated uraninite (or pitchblende) with narrow zones of variable grade (MODS, 2021).

The Jacques Lake deposit, also owned by Paladin, shares several characteristics with the Michelin deposit, including similar associated alteration styles and metavolcanic host rock. Uranium mineralization at the Jacques Lake deposit is spatially associated with the development



of actinolite–magnetite–carbonate \pm biotite \pm pyrite veining (Cunningham-Dunlop and Valenta, 2006) in highly strained intermediate volcaniclastic rocks of the Aillik Formation (Sparks, 2009).

The Anna Lake deposit was discovered and delineated by Bayswater Uranium Corp., between 2006–2008. Uranium mineralization at the Anna Lake deposit is hosted by a sulphidic, biotite-garnet schist along a possible structural contact with footwall quartz sericite schist and hematized granite. The mineralization has been delineated to a strike length of up to 1,300 m long by 500 m wide. Sulphide content within the mineralized zone averages 1%– 5% and occurs as pyrite, pyrrhotite and minor chalcopyrite (MODS, 2021).

The Burnt Lake North occurrence consists of numerous radioactive zones and patches of disseminated uranium mineralization (uraninite) within the Upper Aillik felsic pyroclastic Burnt Lake basin over a strike length of 3 km.

23.1.2 Eastern CMB Deposits

The Post Hill Trend contains the Nash, Inda Lake, Gear Lake and Kitts deposit. The Kitts deposit is located on Exempt Mineral Lands, and thus excluded from development.

Collectively the Nash, Inda and Gear deposits are owned by Paladin. The Post Hill deposits are classified at epigenetic vein and shear-controlled uranium, hosted in sulphide-rich argillite and mafic volcanic rock (https://www.findnewfoundlandlabrador.com/files/2017/03/Uranium-in-Labrador-Jan-2012.pdf).

23.2 Other prospects

The western CMB hosts greater than 175 known mineral occurrences, mostly comprising uranium and/or copper mineralization (Fig. 23.1). Currently the largest claim holder in the western CMB is Altius Resources Inc. One license adjacent to the Moran Lake Project is held by United Gold Inc. All other nearby claims are held by independent prospectors or small private groups.





Figure 23.1 – Adjacent properties and mineral occurrences in the Western Central Mineral Belt (NL Geoscience Atlas, 2021).

103



24.0 OTHER RELEVANT DATA AND INFORMATION

There is no other relevant data and information to report at this time.



25.0 INTERPRETATION AND CONCLUSIONS

The Moran Lake Project covers an area of 1,877.3 ha and is defined by 75 contiguous map staked claims grouped into two licenses (011834M and 011835M).

The Moran Lake Project and C-Zone deposit are located on the western end of CMB, a northeasttrending belt of Proterozoic volcanic and sedimentary rocks with associated granites. The C-Zone deposit is hosted in Aphebian mafic volcanic rocks of the Joe Pond Formation, which are unconformably overlain by Helikian sedimentary rocks of the Heggart Lake Formation. The Joe Pond Formation is in thrust contact with the structurally underlying Heggart Lake Formation, the hanging wall is referred to as the Upper C-Zone and the footwall is referred to as the Lower C-Zone.

The Upper C-Zone deposit consists of uranium mineralization within strongly brecciated and altered mafic volcanic rocks and lesser Fe-carbonate-altered shear zones, collectively hosted by the Joe Pond Formation of the Moran Lake Group. These mineralized mafic volcanic rocks are structurally overlain to the southeast by conglomerate and sandstone of the Heggart Lake Formation. The mineralized mafic volcanic rocks of the Upper C-Zone are thrust to the northwest over younger, fluvial sedimentary rocks of the Heggart Lake Formation. The Lower C-Zone mineralization occurs within the footwall of the C-Zone thrust fault hosted by sedimentary rocks of the Heggart Lake formation.

The Moran Lake Upper C-Zone deposit displays several characteristics indicative of IOCG-style mineralization, such as the development of iron oxide-rich breccias in association with extensive alkali (Ca, Na) metasomatism. Mineralized breccias of the Moran Lake Upper C-Zone deposit are consistently elevated in V and also contain local enrichment of U, with lesser Cu and Ag (Sparks, 2017).

Uranium mineralization in the Lower C-Zone is generally focused within green coloured, sericite + epidote ± chlorite altered sedimentary units of the Heggart Lake Formation proximal to the unconformable contact with mafic volcanic rocks of the Joe Pond Formation.

The geological setting of the Moran Lake Project is favorable for the formation of magmatic, sediment-hosted and metamorphic–metasomatic uranium deposits.

Having recently secured the right to acquire the Moran Lake Project, CUR has not had an opportunity to conduct any significant exploration at the property. Consequently, the QP was



largely limited to a review of historical data and information. Based on the review of historical data and information, the QP considers the Moran Lake Project prospective for uranium and vanadium mineralization. This contention is supported by the QP's understanding of the geological setting and record of historical work and discovery from the 1950's onward.

Diamond drill core from selected historical holes on the Moran Lake Project are stored at the Newfoundland and Labrador provincial government core library in HVGB, managed by the Department of Industry, Energy and Technology. Eleven independent verification samples were collected from the 1978, 2006 and 2008 series drill holes. Results of the verification samples confirm the general grade tenor and discrepancies are consistent with the expected natural inherent variability for uranium and IOCG-style deposits. Additionally, variability is expected based on sample size (quarter-core verification samples vs half-core original samples) and the different laboratories methods employed over the life of the project,

With respect to risks and uncertainties, the QP has not done sufficient work to verify the historical mineral resource estimations presented in Section 6, and therefore, the QP and Issuer are not treating any of the historical estimations as a current mineral resource.

The metallurgical test work information presented in Section 6 is for background historical information only. The QP has not verified the results of the metallurgical test work, and therefore, the QP and the Issuer do not view the metallurgical test work as current or relevant going forward. Furthermore, it is not known if the sample feed were representative or if there were any processing factors or deleterious elements that could have a serious effect on potential future economic extractions.

Any future exploration work and/or subsequent technical reports should be prepared in accordance with guidelines established by the CIM Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines (2019), CIM Definition Standards for Mineral Resources and Mineral Reserves (2014), and NI 43-101, Form 43-101F1 – *Technical Report* and related consequential amendments. Future technical reports that capture any new exploration work conducted by CUR should discuss any significant risks and uncertainties that could reasonably be expected to affect the reliability or confidence in the exploration information, mineral resource or mineral reserve estimates, or projected economic outcomes.



26.0 RECOMMENDATIONS

Based upon the observation from the site visit and the historical exploration work it is the opinion of the author of this Technical Report that the licenses of Moran Lake Project enclose a "Property of Merit" warranting future exploration work.

A work plan is recommended to advance the Moran Lake Project, summarized below in Table 26.1.

Recommended work includes significant diamond drilling in order to achieve the following objectives:

- Twinning of selected existing holes for the purposes of verifying historical drill results and due diligence.
- In-fill and expansion drilling on the main C-Zone deposit area in order to expand and update the historical resource estimate.
- Exploration drilling on other target areas.



Item	Description	Estimated Cost (CDN)		
Rebuild Armstrong	Construct 15 -person camp with float plane	\$400,000		
Lake Camp	dock, heli-pad and fuel cache			
Twin hole diamond	Diamond drill program totaling 600 m in 4-5 drill	\$420,000		
drill program	holes to verify historical drill results			
Infill diamond drill	Resource expansion diamond drill program	\$2,800,000		
program	totaling 4,000 m for deep deposit zone testing			
	and inter-mineralized zone exploratory drilling			
Exploratory	Diamond drill program(s) totaling 2,000 m to drill	\$1,400,000		
diamond drill	test exploratory targets			
program				
	Total	\$5,020,000		

Table 26.1 – Recommendations for future exploration work at the Moran Lake Property.


27.0 REFERENCES

- Batterson, M.J. 2000. Landforms and Surficial Geology of Map Sheet (NTS 13J/12), Newfoundland Department of Mines and Energy, Geological Survey, Map 2000-31, Open File 013J/12/0252.
- Clark, T., Gobeil, A. and David, J. 2005. Iron oxide-copper-gold-type and related deposits in the Manitou Lake area, eastern Grenville Province, Quebec: Variations in setting, composition, and style. Canadian Journal of Earth Sciences, Volume, 42, pp. 1829–1847.
- Cooke, B.J. 1980. Re-evaluation of Geology and Uranium Mineralization, C-Zone, Moran Lake Uranium Property, Central Mineral Belt, Labrador. Unpublished report, Shell Canada Resources Ltd. Newfoundland and Labrador Geological Survey, Assessment File, 13K/07/0274, 76 p.
- Crocker, M. 2014. A petrographic, geochemical, and geochronological study of rare earth element mineralization in the Red Wine Intrusive Suite, Labrador, Canada. Unpublished M.Sc. thesis, Memorial University of Newfoundland, Canada, 193 p.
- Cunningham-Dunlop, I.R. and Valenta, R.K. 2006. The exploration activities of Aurora-Energy Resources Inc. on the CMB uranium property, Labrador, Canada, during the period of January 2006 to August 2006. NI 43-101 Technical Report, 104 p.
- Gordanier, W.D. 1979. Central Mineral Belt Project; Report on Exploration, 1979, (Winter). Unpublished report, Shell Canada Resources Ltd., Newfoundland and Labrador Geological Survey, Assessment File 13K/0149, 148 p.
- Eaton, S.J., Morgan, J., Carriere, D., Cochrane, A., Caceres, R., Scott, W.J., McDowall, S., Wilton, D.H.C., Ross, K., Lacroix, P.A. and Cook, R.B. 2008. First and second year, second year supplementary and third, fourth and sixth year assessment report on geological, geochemical, geophysical and diamond drilling exploration for licences 9781M, 9783M, 10367M-10368M, 10715M-10720M, 10722M-10723M, 11395M, 11770M, 11833M-11835M, 12616M-12618M, 13427M and 13634M-13635M on claims in the Moran Lake Otter Lake area, central Labrador, 14 reports. Newfoundland and Labrador Geological Survey, Assessment File 13K/0329, 5268 p.



- Gillies, S.L. and Clarke, E.J. 2009. Exploration Assessment Report for Seventh Year (11833M, 11834M, 11835M), Fifth Year (9781M, 9783M), Fourth Year (10367M, 10368M, 10715M, 10716M, 10717M, 10718M, 10719M, 10720M, 10722M, 10723M, 11395M, 12616M, 12617M, 12618M), Third Year (11770M), Second Year (13427M, 13634M, 13635M) and First Year (14515M)CMB Uranium Project Central Labrador NTS 13K/2, 3, 6, 7, 10, 11 Diamond Drilling, Geological Mapping, Prospecting, Geochemical Exploration Surveys, Geophysical Modelling, Technical Reports. Newfoundland and Labrador Geological Survey, Assessment File, 13K/0313, 2723 p.
- Gower, C.F. and Ryan, A.B. 1987. Two stage felsic volcanism in the lower Proterozoic upper Aillik
 Group, Labrador, Canada: its relationship to syn- and post-kinematic plutonism. *In* Geochemistry and Mineralization of Proterozoic Volcanic Suites, *Edited by* T.C.
 Pharaoh, R.D. Beckinsale and D. Rickard, Geological Society of London Special
 Publication 33, pp. 210–230.
- Hinchey, A.M. 2007. The Paleoproterozoic metavolcanic, metasedimentary and igneous rocks of the Aillik domain, Makkovik Province, Labrador (NTS map area 13O/03). Current Research (2007) Newfoundland and Labrador Department of Natural Resources Geological Survey, Report 07-1, pp. 25–44
- Hinchey, A.M. and Rayner, N. 2008 Timing constraints on the Paleoproterozoic, bimodal metavolcanic rocks of the Aillik Group, Aillik domain, Makkovik Province, Labrador. In GAC-MAC 2008, Abstract v.33.
- Hinchey, A.M. and LaFlamme, C. 2009. The Paleoproterozoic volcano-sedimentary rocks of the Aillik Group and associated plutonic suites of the Aillik domain, Makkovik Province, Labrador [NTS map area 13J/14]. In Current Research. Government of Newfoundland and Labrador, Department of Natural Resources, Geological Survey, Report 09-1, pp. 159–182.
- Hinchey, A.M., and Davis, W.J., 2013. New U–Pb zircon geochronology for the Measles Point Granite, Aillik Domain, Makkovik Province, Labrador (NTS Map Area 13O/03) Current Research (2013), Newfoundland and Labrador Department of Natural Resources Geological Survey, Report 13-1, pp. 223–232



- Kerr, A. 1988. Geochemical characteristics and mineral potential of specialized granitoid plutons in the Trans-Labrador Batholith, eastern Labrador. Newfoundland Department of Mines and Energy, Mineral Development Division, Report 88-1, pp. 15–36.
- Kerr, A. 1989. Geochemistry of the Trans-Labrador granitoid belt, Canada. A quantitative comparative study of a Proterozoic batholith and possible Phanerozoic counterparts. Precambrian Research, v.45, pp.1–17.
- Kerr, A. and Krough, T. 1990. The Trans-Labrador granitoid belt in the Makkovik Province: new geochronological and isotopic data and their geological implications. Newfoundland Department of Mines and Energy Mineral Development Division, Report 90-1, p.237–249.
- Kerr, A., Krough, T., Corfu, F., Scharer, U., Gandhi, S.S. and Kwok, Y.Y. 1992. Episodic early Proterozoic granitoid plutonism in the Makkovik Province, Labrador: U-Pb geochronological data and geological implications. Canadian Journal of Earth Sciences, v.29, pp. 1166–1179.
- Ketchum, W.F.J., Culshaw, N.G. and Dunning, G.R. 1997. U–Pb geochronologic constraints on Paleoproterozoic orogenesis in the northwestern Makkovik Province, Labrador, Canada. Canadian Journal of Earth Science, Volume 34, pp. 1072–1088.
- Ketchum, J.W.F., Culshaw, N.G. and Barr, S.M. 2002. Anatomy and orogenic history of a Paleoproterozoic accretionary belt: the Makkovik Province, Labrador, Canada. Canadian Journal of Earth Sciences, v.39, pp. 711–730.
- MODS. 2021 Newfoundland and Labrador Mineral Occurrence Database. https://gis.geosurv.gov.nl.ca/mods/mods.asp)
- Lacroix, P.A., Cook, B.A. 2007. Technical report on the Central Mineral Belt uranium project, Labrador, NI43-101 technical report. 145 p.
- McCuaig, S.J. 2007. Surficial Geology of the Pocket Knife Lake map sheet (NTS 13K/06). Geological Survey, Department of Natural Resources, Government of Newfoundland and Labrador, Map 2007-02, Open File 013K/06/0290.
- McKenzie, W.L. 1979. Central Mineral Belt Project, Labrador. Drill logs, cross section & plan maps for the 1978 drilling program – Lab. 1 Moran Property. Shell Canada Resources Ltd., Newfoundland and Labrador Geological Survey, Assessment File 13K/0146, 212 p.



- Morgan, J.A., Froude, T. 2007. First, second, third and fifth year assessment report on geological, geochemical, geophysical, trenching and diamond drilling exploration for licences 9781M, 9783M, 10367M-10368M, 10715M-10720M, 10722M-10723M, 11395M, 11770M, 11833M-11835M and 12616M-12618M on claims in the Moran Lake Otter Lake area, central Labrador. Newfoundland and Labrador Geological Survey, Assessment File 13K/0296, 2326 p.
- Morgan, J.A., Giroux, G.H. 2008. Form 43-101 technical report on the Central Mineral Belt (CMB) uranium project, Labrador, Canada Prepared for Crosshair Exploration & Mining Corp. NI 43-101 technical report. 237 p.
- Rivers, T., Ketchum, J., Indares, A. and Hynes, A. 2002: The high pressure belt in the Grenville Province: architecture, timing and exhumation. Canadian Journalof Earth Sciences, Volume 39, pages 867–893.
- Ryan, A.B. 1984. Regional geology of the central part of the Central Mineral Belt, Labrador.Newfoundland Department of Mines and Energy, Mineral Development Division, Memoir 3, 185 p.
- Ryan, A.B., Baragar, W.R.A. and Kontak, D.J. 1987. Geochemistry, tectonic setting, and mineralization of high-potassium middle Proterozoic rocks in central Labrador, Canada. *In* Geochemistry and Mineralization of Proterozoic Volcanic Suites, *Edited by* T.C. Pharaoh, R.D. Beckinsale and D.Rickard, Geological Society of London Special Publication 33, pp.241–254.
- Roscoe, W.E. and Cook R.B. 2005. Report on the Moran Lake Uranium Property, Central Mineral Belt Newfoundland and Labrador, Canada. Report for Crosshair Exploration and Mining Corp. NI 43-101 technical report. 94 p.
- Scharer, U., Krogh, T.E., Wardle, R.J Ryan, A.B. and Gandhi, S.S. 1988. U-Pb ages of early and middle Proterozoic volcanism and metamorphism in the Makkovik Orogen, Labrador. Canadian Journal of Earth Sciences, v.25, pp. 1098–1107.
- Sinclair, G.S., Barr, S.M., Culshaw, N.G. and Ketchum, J.W.F. 2002. Geochemistry and age of the Aillik Group and associated plutonic rocks, Makkovik Bay area, Labrador: implications for tectonic development of the Makkovik province. Canadian Journal of Earth Sciences, v.25, pp. 731–748.



- Smith, R.L., Marshall, L., Butler, R. and Wilton, D.H.C. 2004. Report Covering Reconnaissance Geological Investigations Pertaining to Map-Staked Licences: 9410M, 9411M, 9482M,9412M, 9413M, 9414M, 9415M, 9416M, 9417M and 9441M; Located in the Central Mineral Belt of Labrador, Eastern Canada. NTS Sheets: 13L/01, 13L/08, 13K/03, 13K/06, 13K/09, 13J/12E, 13J12W and 13J/13., Newfoundland and Labrador Geological Survey, Assessment File LAB/01393, 212 p.
- Sparkes, G.W. and Kerr, A. 2008. Diverse styles of uranium mineralization in the Central Mineral Belt of Labrador: an overview and preliminary discussion. In Current Research. Government of Newfoundland and Labrador, Department of Natural Resources, Geological Survey, Report 08-1, pp. 193–227.
- Sparkes, G.W., Dunning, G.R. and McNicoll, V.J. 2010. New U–Pb age constraints and potential implications for the genesis of the Kitts uranium deposit, Central Mineral Belt, Labrador. In Current Research. Government of Newfoundland and Labrador, Department of Natural Resources, Geological Survey, Report 10-1, pp. 93–109.
- Sparkes, G.W, Dunning, G.R., Fonkwe, M. and Langille, A. 2016. Age constraints on the formation of iron oxide-rich hydrothermal breccias of the Moran lake area: evidence for potential IOGC-style mineralization within the Central Mineral Belt of Labrador. Current Research (2016) Newfoundland and Labrador Department of Natural Resources Geological Survey, Report 16-1, pp. 71–90
- Sparkes, G.W. 2017.Uranium mineralization within the Central Mineral Belt of Labrador: A summary of the diverse styles, settings and timing of mineralization. Government of Newfoundland and Labrador, Department of Natural Resources, Geological Survey, St. John's, Open File LAB/1684, 198 p.
- Wallis, C.S., Sparks, B.A., Giroux, G.H., 2011. Technical report on the Central Mineral Belt (CMB) uranium–vanadium project, Labrador, Canada. NI 43-101 technical report. 96 p.
- Wilton, D.H.C. 1996. Metallogeny of the Central Mineral Belt and adjacent Archean basement, Labrador. Government of Newfoundland and Labrador, Department of Mines and Energy, Geological Survey, Mineral Resource Report 8, 178 p.



28.0 CERTIFICATE OF AUTHOR

I, Stefan Kruse, Ph.D., P. Geo., do hereby certify that:

- 1. I am a Principal and Senior Structural Geologist of Terrane Geoscience Inc., Suite 207 390 King St. Fredericton, NB E3B 1E3 Canada.
- 2. I graduated with a B.Sc. Honors, Cum Laude Geology from the University of Ottawa in 1999, and a Ph.D. in Geology from the University of New Brunswick in 2007.
- I am and have been registered as a Professional Geologist with the Association of Professional Engineers and Geoscientists of New Brunswick (APEGNB; Member Number: M6806) since 2009; Professional Engineers and Geoscientists of Newfoundland and Labrador (PEGNL; membership number 05330) and the Engineers and Geoscientists of British Colombia (EGBC; membership number 206205).
- 4. I have worked as a geologist since my graduation from University and have been involved in structural and tectonic characterization of tectonically modified uranium, orogenic, magmatic and epithermal gold systems, porphyry and volcanogenic massive sulphide systems.
- 5. I have read the definition of "Qualified Person" set out in National Instrument 43-101 Standards for Disclosure for Mineral Projects ("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 includes geological evaluation of uranium deposits and underground and open pit structural characterization for mining optimization and geotechnical purposes.
- 6. I am responsible for all sections of the technical report entitled "NI 43-101 Technical Report, Moran Lake Project, Central Mineral Belt, Newfoundland and Labrador, Canada", with an effective date of November 5, 2021 (the "Technical Report"). I visited the Moran Lake Project on May 12 and 13, 2021 and can verify the mineral tenure, mineralization and the infrastructure at the Moran Lake Project.
- 7. As of the effective date of the Technical Report, to the best of my knowledge, information and belief, the Technical Report contains all relevant scientific and technical information that is required to be disclosed, to make the Technical Report not 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. I am independent of Consolidated Uranium Inc., the vendors of the Moran Lake Project, and the Moran Lake property applying all the tests described in section 1.5 of NI 43-101 and Companion Policy 43-101CP.
- 10. I have not had any prior involvement with the Moran Lake Project 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.

Signing Date: December 14, 2021 Fredericton, NB, Canada

Stefan Kruse, Ph.D., P. Geo.

