

TECHNICAL REPORT ON THE KEY LAKE SOUTH PROJECT WITH INITIAL MINERAL RESOUCE ESTIMATE FOR THE LOKI FLAKE GRAPHITE DEPOSIT, SASKATCHEWAN, CANADA

Prepared for: ABASCA RESOURCES INC.

> Report Date: May 29, 2025 Effective Date: April 10, 2025

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1 SUMMARY

1.1 Executive Summary

Understood Mineral Resources Ltd. (UMR) was retained by Abasca Resources Inc. (Abasca) to prepare an independent technical report on the Key Lake South (KLS) Property (the Property), located in Saskatchewan, Canada. Matt Batty, MSc, P. Geo, of UMR, is the author of this report and by virtue of his education, membership to a recognized professional association, independence from Abasca, and relevant work experience, Mr. Batty is eligible to be the Qualified Person (QP) for the Project as this term is defined by National Instrument 43-101.

The purpose of this report is to support the disclosure of the first Mineral Resource estimate for the Loki Flake Graphite Deposit (Loki Deposit, Loki, or the Deposit) located on the Property. It was prepared following the standards of the Canadian Securities Administrators' National Instrument 43-101 (NI 43-101) and Form 43-101F1.

Abasca is a Canadian exploration company, primarily engaged in the acquisition, evaluation, and development of uranium and graphite properties. Abasca is listed on the Toronto Stock Exchange Venture with the symbol ABA.V.

The Mineral Resource estimate for the Loki Flake Graphite Deposit is based on 22 diamond drill holes, totalling 5,801 m. The Mineral Resources are summarized in Table 1-1 and are reported at a break-even cut-off grade of 2.78% Cg within a conceptual open pit design. The effective date of the Mineral Resource estimate is April 10, 2025, coincident with the last assay received. No Mineral Reserves have been estimated at the Property.

Table 1-1: Loki Flake Graphite Mineral Resources 2025						
Category	Cg Grade Cut-off (%)	Tonnage (Mt)	Cg Grade (%)	Contained Cg (Mt)		
Inferred	2.78	11.31	7.65	0.86		

Notes:

 The reporting standard for the Mineral Resource Estimate uses the terminology, definitions and guidelines given in the Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Standards on Mineral Resources and Mineral Reserves (May 2014) as required by NI 43-101.

2. Reported Mineral Resources are constrained to a pit-shell generated in Whittle software above a cut-off grade of 2.78% Cg.

3. Numbers may not add up due to rounding.

4. The effective date of this Mineral Resource estimate is April 10, 2025.

5. The qualified person knows of no environmental, permitting, legal, title, taxation, socio-economic, marketing, political or other relevant factors that may materially affect the Mineral Resource Estimate in this report.

6. Mineral Resources are not Mineral Reserves and have not demonstrated economic viability.

1.2 Technical Summary

1.2.1 Property Description and Location

The KLS Project, which consists of 12 contiguous claims (23,977 Ha), is located approximately 540 kilometres north of Saskatoon, the largest city in the province of Saskatchewan, and 220 kilometres north-northwest of the town of La Ronge. The Key Lake Mine, a former uranium producer and the site of the Key Lake mill which processes Cameco's McArthur River ore, is located 15 kilometres northeast of the property. The project is approximately centered at UTM NAD83 Zone 13N grid coordinates 442500E, 6322500N, on NTS map sheets 74-G-01 and 74-H-04.

1.2.2 Accessibility, Climate, Local Resources, Infrastructure, and Physiography

The KLS Project is accessible all year round by provincial highway 914, which runs through the project area. The nearest communities of Pinehouse Lake and La Ronge are respectively located approximately 185 km and 400 km south of the project area by road. Supplies, groceries, fuel, and accommodations can be found in these communities. A fishing lodge on Costigan Lake, approximately 20 km south of the project area can also provide accommodations.

The topography over the project area is generally flat lying with low ridges and hills reaching up to several tens of metres in relief. The area is characterized by numerous lakes, creeks, and ponds. Annual temperatures generally range between -40°C in the winter to 35°C in the summer. Mean temperatures are -25°C and 25°C in the winter and summer, respectively. Average annual rain- and snowfall is 225 mm and 2,150 mm, respectively. Lake ice typically thaws in late April and returns in October.

1.2.3 History

The qualified person has not verified the information of the adjacent properties, and that the information of the adjacent properties is not necessarily indicative of the mineralization on the property that is the subject of the technical report.

Considerable exploration activity by multiple operators has occurred on the KLS Project. Early regional exploration activities between the late 60s and throughout the 70s focused on ground prospecting, lake water geochemistry, and airborne radiometric and electromagnetic (EM) surveys as well as some shallow drilling. Although these early activities led to the discovery of the nearby Gaertner and Deilmann deposits that comprise Key Lake, no significant uranium mineralization was discovered over the current KLS Project area during that time. During the early 80s, anomalous radioactivity in pegmatites was discovered during ground prospecting surveys over the KLS Project area and shallow follow-up drilling was done during the mid-2000s with limited technical success.

101159623 Saskatchewan Ltd. (SaskCo) acquired ownership of the property through staking in 2011 and 2012. Various compilation reports and interpretations of historical data were undertaken by SaskCo, both in-house and by independent consultants, in 2011, 2012, and 2013, resulting in identifying target areas and recommendations for future exploration work. Field programs, including airborne and ground geophysical surveys, geological mapping, soil and lake sediment geochemical surveys, and radon-soil-surveys were conducted by SaskCo in 2014 and 2015.

In 2016, SaskCo carried out a diamond drilling program to test geological features interpreted by the previous exploration data, including the 2014 HeliFALCON Airborne Gravity Gradiometer survey, EM surveys, geochemistry surveys, and geological mapping. A total of 4,553 metres were drilled comprising 26 NQ holes in two target areas: 15 holes totalling 2,744 metres in the Campbell target area and 11 holes totalling 1,809 metres in the Mustang target area. The best drillhole of

the Mustang drilling was 256 ppm U over 0.4 m from 48.8 to 49.2 m in hole KS-MS16-07. Drilling at the Campbell target area included multiple graphitic fault zone intersections up to 40 m in length. This was the discovery of what is now referred to as the Loki Flake Graphite Deposit, although only representative samples were collected through the zone and no samples were evaluated for graphite at the time. In 2022, Condor Consulting Inc. was engaged in further interpreting and modelling available geophysical survey data to assist with SaskCo's in-house technical team for structural analysis, target prioritizing, and detailed drillhole planning.

At the end of 2022, the Abasca Resources Inc. acquired the project through reverse takeover. Abasca continued uranium exploration efforts at KLS through winter and summer drill programs in 2023. In the fall of 2023, samples from the 2016 Campbell drill core were re-analysed for graphite, and based on these results, Abasca decided to delineate the area for graphite potential.

1.2.4 Exploration and Drilling

In 2023, Abasca completed an additional 25 holes totaling 10,135 m over winter and summer drill programs at KLS. Geochemical assays confirmed anomalous uranium intersections at the Mustang target area where 9 of the 11 drillholes intersected anomalous uranium (> 100 ppm U). KLS-23-004 intersected 1260 ppm U between 310.5 and 310.6 m.

In 2024, 20 holes totaling 5,499 m, were drilled into a 600 m section of the Loki Flake Graphite Zone at 100 m drill spacing. All holes intersected significant graphitic intervals similar to those drilled in 2016. An additional 2 holes, totaling 912 m, were drilled on a parallel conductor north of the Loki Zone. These holes also intersected a new graphite zone up to 50 m wide. A total of 5 holes were also drilled along the Mustang-Seager Lake trend, totaling 2,681 m. Drilling intersected pervasive silicification zones and local graphitic fault zones.

1.2.5 Geology and Mineralization

KLS is underlain by the prospective uranium hosting rocks of the Wollaston-Mudjatik contacting zone (WMCZ) in the southeastern Athabasca Basin. The world's largest high-grade uranium deposits are associated with the unconformity between the Athabasca Basin and the Wollaston-Mudjatik basement. Most of the uranium occurrences and deposits associated with the Athabasca Basin are located near the boundary between the Mudjatik and Wollaston domains as either unconformity-related or basement-hosted type. KLS is located in the southern strike extent of these deposits and in the same regional magnetic low structure that hosts them. Alteration at the KLS shows characteristics of both unconformity-type and basement-hosted deposits.

Uranium mineralization in the Athabasca Basin is generally of Helikian age (Mesoproterozoic of 1.6 - 1.0 Ga). Geochronological studies have determined that most deposits were formed in a time interval between 1,330 Ma and 1,380 Ma (Cumming and Krstic, 1992), and as early as 1,590 Ma at the Millennium Deposit (Cloutier et al, 2009) and 1,521 Ma at the McArthur River Mine (Cameco Corporation, 2012) with ages of remobilization near 1,350 Ma. Uranium deposits generally occur at the unconformity between the lowermost Athabasca Group and the underlying crystalline basement rocks and are commonly localized to the intersection of faults and the unconformity, or at a paleotopographic basement ridge. No significant uranium mineralization has been discovered at KLS.

Numerous fault zones with graphite mineralization occur at KLS, although most intersections do not exceed 5 m in length outside of the area near the Loki Flake Graphite Deposit. As of the effective date of this report, mineralization at the Loki Deposit has been identified within a volume of 740 m (strike) by 235 m (width) by 280 m (vertical, starting from 55 m below surface down to 335 m). The graphite mineralization is oriented along an 121° azimuth and -52° dip to the

southwest. The mineralization is observed to be continuous with and thickness ranging between 10 to 55 m with an approximate average of 35 m.

1.2.6 Data Verification

Abasca has a robust QA/QC process in place, as described in Section 11. Assay results were actively monitored throughout the drill programs and QA/QC results were summarized. Several failures for standard reference materials were documented, resulting in the re-assaying of entire sample batches. Most of the reference materials performed as expected within tolerances of 2 to 3 standard deviations of the mean grade. The Author is satisfied that the QA/QC process is performing as designed to ensure the quality of the assay data.

The Author validated the diamond drilling database through a series of digital queries and verified approximately 9% of the graphite samples in the database against the original laboratory certificates.

Mr. Batty visited the Property from January 28 to 29, 2025. During the QP's two-day site visit, he reviewed ongoing and recent core from the Deposit, confirmed the location of three collar locations with a handheld GPS, verified the geological setting, and reviewed drilling, logging, sampling, analytical and QA/QC procedures.

In Mr. Batty's opinion, the Loki Project exploration data are free of any material or systematic errors and are considered well validated and of sufficient quality for use in this Technical Report.

1.2.7 Mineral Processing and Metallurgical Testing

In the fall of 2023, samples from the 2016 Campbell drill core were re-analysed for graphite and a subset of the samples was also selected to determine the graphite flake size distribution by QEMSCAN, with the best result having a median passing percent 214 μ m.

Samples from KLS-24-052 were selected for graphite metallurgical testing, although the testing was not completed prior to this report.

1.2.8 Mineral Resource Estimation

The 2025 Mineral Resource estimate for the Loki Flake Graphite Deposit was completed by Matt Batty, MSc, P. Geo of UMR. The effective date of the enclosed mineral resource is April 10, 2025, coincident with the date the last assay received.

Samples were composited to 8 m lengths within the single modelled graphite domain. The composites were reviewed for outliers and declustered, resulting in a decided representative dataset for the domain. Major local lithologies observed in the deposit area were also modelled.

A block model was constructed to encompass the modelled wireframes and the blocks were populated using Ordinary Kriging (OK) as informed by the directional variogram. The lithology domains were assigned a density based on specific gravity measurements observed within the domains or observations from analogous deposits. A linear regression was used to assign density to blocks with estimated graphite grades.

The block model was validated via volume comparison, mean grade comparison, visual inspection, swath plots, and change of support comparison.

The Mineral Resource is entirely composed of Inferred Mineral Resources, totalling 11.31 million tonnes at an average grade of 7.65 % Cg for a total of 0.86 million tonnes Cg. The Mineral Resources are reported at a cut-off grade of 2.78% Cg within a conceptual open pit design. No Mineral Reserves have been estimated at the Property.

The reported material is classified as Inferred due to the uncertainty in the quality of the graphite (e.g. graphite flake size, uranium contamination, etc.), the general widely spaced drill pattern (~100 m), and the overall uncertainty in the spatial distribution of grades. The reported Inferred Mineral Resources approximates a drill hole spacing of 100 m.

In Understood's opinion, the estimation methodology is consistent with standard industry practice and the Inferred Mineral Resource Estimates for Loki Deposit are reasonable and acceptable.

1.2.9 Mineral Reserve Estimation

There are no current Mineral Reserve estimates on the Property.

1.2.10 Adjacent Properties

Situated immediately north of KLS is the Key Lake operation, a joint venture of Cameco Corporation (83%) and Orano (17%), operated by Cameco. Key Lake has been in operation since 1983 and has produced 535 million pounds of uranium concentrate (Cameco, 2022). The operation now processes ore from the McArthur River mine.

Exploration adjacent to KLS is primarily focused on greenfields uranium exploration. CanAlaska's Key Lake Extension property is immediately to the west of KLS and Forum's Highrock Lake project is to the east of KLS, where as Baselode Energy has two projects to the south, Bear and Catharsis.

The qualified person has not verified the information of the adjacent properties, and that the information of the adjacent properties is not necessarily indicative of the mineralization on the property that is the subject of the technical report.

1.2.11 Interpretation and Conclusions

The Author's related interpretation and conclusions are summarized below.

- The Loki Deposit is a broad graphite bearing shear-zone ranging in thickness along an orientation of 121° azimuth and -52° dip to the southwest. The QP created one vein wireframe to constrain the estimate in the predominate orientation of mineralization. The wireframe is approximately 740 m long in the strike direction with an upper contact 55 m below surface and extends to 335 m below surface. The thickness of the modelled graphite ranges between 10 to 55 m with an approximate average of 35 m.
- The 2025 Mineral Resource Estimate has an effective date of April 10, 2025, coincident with the date of the last assay result received from the analytical laboratory. The Mineral Resource is entirely composed of Inferred Mineral Resources, totalling 11.31 million tonnes at an average grade of 7.65 % Cg for a total of 0.86 million tonnes Cg. The resource was reported at a cut-off grade of 2.78% Cg within a conceptual open pit design.
- The reported material is classified as Inferred due to the uncertainty in the quality of the graphite (e.g. graphite flake size, uranium contamination, etc.), the general widely spaced drill pattern (~100 m), and the overall uncertainty in the spatial distribution of grades. The reported Inferred Mineral Resources approximates a drill hole spacing of 100 m.

- In conjunction with infill drilling, the testing of uranium contamination and graphite flake quality will be important for upgrading portions of the deposit from Inferred to Indicated or Measured Mineral Resources.
- The lithology domains were assigned a density based on specific gravity measurements observed within the domains or observations from analogous deposits. A linear regression was used to assign density to blocks with estimated graphite grades. The average density of graphite in the block model is 2.57 t/m³.
- Current and ongoing expansion drilling indicates the presence of significant graphite mineralization outside the current resource domain, and geophysical anomalies have been identified as potential targets for graphite mineralization.
- In the QP's opinion, the KLS Project exploration data are free of any material or systematic errors, well validated and of sufficient quality for use in this Technical Report.
- The QP identified uranium contamination of graphite mineralization as a potential risk. The QP believes that the likelihood of realizing this risk in a material sense is minimal given that the graphitic shear does not appear to host significant uranium grade (maximum uranium grade of 0.05% U₃O₈), but recognizes the risk remains until confirmed otherwise. Beyond this risk, the QP has not identified any other significant risks or uncertainties that could reasonably be expected to affect the reliability or confidence in the Mineral Resource.
- The QP is not aware of any environmental, permitting, legal, title, taxation, socio-economic, marketing, political, or other relevant factors that could materially affect the Mineral Resource Estimate that is not discussed in this Technical Report.

1.2.12 Recommendations

The Author's Mineral Resource related recommendations are summarized below.

- Mineral resources are uncertain because of variability at all scales and sparse sampling. Geostatistical techniques can be used to quantify the uncertainty and the expected reduction of uncertainty in resources as a function of data spacing. The QP recommends that a drill hole spacing study be completed on the deposit to inform drill hole spacing for Indicated Mineral Resource classification. After completion of the drill hole study, definition drilling should be planned and executed accordingly. The drill hole spacing study is estimated to cost \$45,000.
- The QP recommends future sample testing include impurity removal testing.
- Complete Market survey for product requirements and customer specifications. Based on these results, additional sampling and analysis may be required for input into future block models. The comprehensive testing and survey are estimated to cost \$120,000.
- Customer specifications for flake graphite are typically based on physical properties, particularly flake size, in addition to chemical characteristics. It is recommended that Abasca completes more comprehensive testing for graphite quality. The physical property testing is estimated to cost \$150,000.
- Additional delineation is recommended to demonstrate continuity with 2016 drilling. Drilling required is estimated to include approximately 6,000 m for \$2,000,000.

2 INTRODUCTION

Understood Mineral Resources Ltd. (UMR) was retained by Abasca Resources Inc. (Abasca) to prepare an independent technical report on the Key Lake South (KLS) Property (the Property), located in Saskatchewan, Canada. Matt Batty, MSc, P. Geo, of UMR, is the author of this report and by virtue of his education, membership to a recognized professional association, and relevant work experience, Mr. Batty is eligible to be the Qualified Person (QP) for the Project as this term is defined by National Instrument 43-101. Mr. Batty is independent from Abasca.

The purpose of this report is to support the disclosure of the first Mineral Resource estimate for the Loki Flake Graphite Deposit (Loki Deposit, Loki, or the Deposit) located on the Property. It was prepared following the standards of the Canadian Securities Administrators' National Instrument 43-101 (NI 43-101) and Form 43-101F1.

Abasca is a Canadian exploration company, primarily engaged in the acquisition, evaluation, and development of uranium and graphite properties. Abasca is listed on the Toronto Stock Exchange Venture with the symbol ABA.V.

2.1 Qualified Person Site Visit

This Technical Report was prepared by, and in parts under the supervision of, Matt Batty, MSc, P. Geo, of UMR, who visited the Property from January 28 to 29, 2025. During Mr. Batty's site visit, he examined recent drill core, confirmed collar locations, reviewed drilling, logging, sampling, analytical and QA/QC procedures, and reviewed site facilities.

By virtue of his education, membership to a recognized professional association (Association of Professional Engineers and Geoscientists of Saskatchewan), independence from Abasca, and relevant work experience, Mr. Batty is eligible to be the Qualified Person (QP) for the Project as this term is defined by National Instrument 43-101.

2.2 Sources of Information

This Technical Report is based on the following sources of information:

- Discussions with Abasca personnel,
- Inspection of the KLS Property as detailed above and in Section 12,
- Drill data, geologic models, cross sections, and other geologic data that were transferred to the QP via a data sharing platform on March 11, 2025, and April 11, 2025.
- Documentation and other sources of information listed in Section 27 including from the public domain.

2.3 Effective Date

The effective date of this report is April 10, 2025, coincident with the effective date of the Mineral Resource Estimate.

2.4 List of Abbreviations

Units of measurement used in this report conform to the metric system. All currency in this report is Canadian dollars (C\$) unless otherwise noted.

Abbreviation	Description	Abbreviation	Description
а	annum	kWh	kilowatt-hour
А	ampere	L	litre
bbl	barrels	lb	pound
btu	British thermal units	L/s	litres per second
°C	degree Celius	m	metre
C\$	Canadian dollars	М	mega (million)
cal	calorie	m²	square metre
cfm	cubic feet per minute	m³	cubic metre
cm	centimetre	μ	micron
cm ²	square centimetre	MASL	metres above sea level
d	day	μg	microgram
dia	diameter	m3/h	cubic metres per hour
DGM	discrete gaussian model	mi	mile
dmt	dry metric tonne	min	minute
dwt	dead-weight ton	μm	micrometre
°F	degree Fahrenheit	mm	millimetre
ft	foot	mph	miles per hour
ft²	square foot	MVA	megavolt-amperes
ft ³	cubic foot	MW	megawatt
ft/s	foot per second	MWh	megawatt-hour
g	gram	ОК	Ordinary Kriging
G	giga (billion)	oz	Troy ounce (31.1035g)
Gal	Imperial gallon	oz/st,opt	ounce per short ton
g/L	gram per litre	ppb	part per billion
Gpm	Imperial gallons per minute	ppm	part per million
g/t	gram per tonne	psia	pound per square inch absolute
gr/ft ³	grain per cubic foot	psig	pound per square inch gauge.
gr/m³	grain per cubic metre	RL	relative elevation
ha	hectare	S	second
hp	horsepower	st	short ton
hr	hour	stpa	short ton per year
Hz	hertz	stpd	short ton per day
in.	inch	t	metric tonne
in ²	square inch	tpa	metric tonne per year
J	joule	tpd	metric tonne per day

k	kilo (thousand)	US\$	United States dollar
kcal	kilocalorie	USg	United States gallon
kg	kilogram	USgpm	US gallon per minute
km	kilometre	V	volt
km ²	square kilometre	W	watt
km/h	kilometre per hour	wmt	wet metric tonne
kPa	kilopascal	wt%	weight percent
kVA	kilovolt-amperes	yd3	cubic yard
kW	kilowatt	yr	year

3 RELIANCE ON OTHER EXPERTS

This report has been prepared by the QP for Abasca. The information, conclusions, opinions, and estimates contained herein are based on:

- Information available to the QP at the time of preparation of this report,
- Assumptions, conditions, and qualifications as set forth in this report, and
- Data, reports, and other information supplied by Abasca and other third-party sources.

The Author carefully reviewed the available Property information and believes that the information used to prepare this Technical Report is valid and appropriate, considering the purpose of the current Technical Report, and therefore accepts responsibility for the information other than as described below.

The Author is not qualified to provide an opinion or comment on issues related to legal agreements, mineral titles, royalties, taxation, or environmental matters. For the purpose of this report, the QP relied on Abasca to provide all pertinent information concerning the legal status of Abasca, as well as current legal title information for the mineral claims and material environmental information that relate to the Property. Mr. Brian McEwan, Vice President of Exploration for Abasca, provided an internal memorandum summarizing the status of claims as of the effective date of this report. The memorandum is titled 'Abasca KLS Mineral Claims' and dated April 8, 2025. The relevant information related to these matters is summarized in Section 4 of this Technical Report.

The Author did not attempt to verify the legal status of the claims that comprise the Property. However, the mineral claim status is available online and was confirmed by the author via the Government's Mineral Administration Registry Saskatchewan ("MARS") website as of the signed date of this Report.

Except for the purposes legislated under provincial securities laws, any use of this report by any third party is at that party's sole risk.

4 PROPERTY DESCRIPTION AND LOCATION

The KLS Project is located approximately 220 kilometres north-northwest of the town of La Ronge (Figure 4-1). The Key Lake Mine, a former uranium producer and the site of the Key Lake mill which processes Cameco's McArthur River ore, is located 15 kilometres northeast of the property. The project is centered at UTM NAD 83 Zone 13N grid coordinates 442500E, 6322500N, on NTS map sheets 74-G-01 and 74-H-04.



Figure 4-1: Key Lake South Property Location Map

4.1 Land Tenure

Under Saskatchewan law, claims are staked through an online registry. The map-designated coordinates of the claims are the legal limits of said claims. The physical limits can be verified by consulting the Government's Mineral Administration Registry Saskatchewan ("MARS") website.

The KLS Project comprises twelve contiguous mineral dispositions, covering 23,977 hectares over National Topographic System (NTS) areas 74G01, 74A13, and 74H04 (Figure 4-2). A summary of the tenure information, as extracted from the MARS website, is presented in Table 4-1. All claims are 100 percent owned by Abasca and are in good standing with expiry dates varying between April 14, 2031, and September 12, 2031. The total annual assessment requirement is \$25 per hectare, totaling \$599,425.

Table 4-1: Mineral Dispositions.						
Mineral Disposition	Issuance Date	Size (Ha)	Annual Assessment (CND)	Expiration Date*		
S-112088	October 18, 2011	1754	\$43,850.00	September 12, 2031		
S-112288	October 17, 2011	1175	\$29,375.00	August 15, 2031		
S-112289	October 17, 2011	4143	\$103,575.00	August 15, 2031		
S-112290	October 17, 2011	4965	\$124,125.00	August 15, 2031		
S-112291	October 17, 2011	4901	\$122,525.00	August 15, 2031		
S-112430	June 14, 2012	194	\$4,850.00	April 10, 2031		
S-112431	June 14, 2012	175	\$4,375.00	April 10, 2031		
S-112432	June 14, 2012	148	\$3,700.00	April 10, 2031		
S-112433	June 14, 2012	101	\$2,525.00	April 10, 2031		
S-112434	June 14, 2012	345	\$8,625.00	April 10, 2031		
S-112435	June 14, 2012	2810	\$70,250.00	April 10, 2031		
S-112436	July 31, 2012	3266	\$81,650.00	June 12, 2031		
	Total	23.977	\$599.425.00			

*Expiration Date refers to the Review Date after all available banked expenditure credits have been used.



Figure 4-2: Mineral Dispositions of the Key Lake South Project.

4.2 Mineral Rights

In Canada, natural resources fall under provincial jurisdiction.

In Saskatchewan, mineral resources are owned by the Crown and managed by the Saskatchewan Ministry of Energy and Resources using the Crown Minerals Act and the Mineral Tenure Registry Regulations, 2012. Staking for mineral dispositions in Saskatchewan is conducted through the

online staking system, MARS. These dispositions give the stakeholders the right to explore the lands within the disposition area for economic mineral deposits.

Mineral dispositions for the KLS Project were staked between 2011 and 2012, prior to the implementation of MARS. Accordingly, ground staking methods were employed by a private company (101159623 Saskatchewan Ltd. or "SaskCo") to secure these dispositions, which have been held and explored by them until the end of 2022. The project was then transferred to Abasca Resources Inc. by reverse takeover of a TSX Venture listed corporation and is 100%-owned.

Mineral claims in good standing may be converted to mineral lease(s) upon application. Mineral leases allow for mineral extraction, have 10-year terms, and are renewable. Surface facilities constructed in support of mineral extraction require a surface lease. Surface leases have 33-year maximum terms and are also renewable.

Abasca does not have surface rights associated with the mineral claims that comprise the Property.

4.3 Royalties and Other Encumbrances

Abasca holds a 100% interest in the KLS Project. There are no additional royalties, back-in rights, or encumbrances on the project or potential production, other than the standard royalties due to the Government of Saskatchewan.

4.4 Permitting

Mineral exploration on land administered by the Ministry of Environment requires that surface disturbance permits be obtained prior to exploration activities, including 1) Crown Land Work Authorization, 2) Aquatic Habitat Protection Permit, 3) Temporary Work Camp Permit, and 4) Forest Product Permit. Additionally, the Saskatchewan Mineral Exploration and Government Advisory Committee (SMEGAC) have developed the Mineral Exploration Guidelines for Saskatchewan to mitigate environmental impacts from industry activity and facilitate governmental approval for such activities. Applications to conduct exploration work need only to address the relevant topics of those listed in the guidelines. The QP understands that Abasca has all required permits to conduct its proposed mineral exploration.

The Saskatchewan Ministry of Environment issued a permit (ENV# 24-13-M0305) authorizing Abasca to carry out its exploration activities and to construct and maintain a temporary work camp in the southwestern part of the project area.

4.5 QP Comment

There are no known environmental issues or liabilities potentially affecting the KLS Project and all the proper permits required to conduct exploration activities on the property for all exploration campaigns have been obtained.

The Author is not aware of any other significant factors or risks that would affect access, title, or the ability to perform work on the Property.

5 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

5.1 Accessibility

KLS is situated near the southeastern margin of the Athabasca Basin, approximately 15 km southwest of the Key Lake uranium mill and 185 km north of Pinehouse, Saskatchewan (see Figure 4-1 in section 4). The project is accessed by provincial highway 914 that goes through the western part of the project area. The western region of the project area can be accessed by historical trails whereas the central and eastern regions are best accessed by helicopter.

5.2 Climate

The Project is located on the margin of the Athabasca sedimentary basin region which is coincident with the Athabasca Plain Ecoregion and Boreal Shield Ecozone. The Athabasca Basin to the north of the project covers about 100,000 square kilometers in northern Saskatchewan and the northeastern corner of Alberta, Canada. Annual temperature of the basin and surrounding region generally ranges from -40°C in the winter to 35°C in the summer. The mean temperatures for January are -25°C and 18°C for July. Annual average rainfall is 225 mm and snowfall 2,150 mm. Lake ice thaws in late April and returns in late October.

Exploration activities can be carried out year-round, however access is limited to the project during the months of April and May due to the abundance of lakes, muskeg and wet conditions that occur during the spring thaw.

5.3 Local Resources

The KLS Project is accessible all year round by provincial highway 914, which runs through the project area. The nearest communities are Pinehouse Lake and La Ronge are respectively located approximately 185 km and 400 km south of the project area by road. Supplies, groceries, fuel, and accommodations can be found in these communities. A fishing lodge on Costigan Lake, approximately 20 km south of the project area can also provide accommodations.

5.4 Infrastructure

All infrastructure currently on the Project is non-permanent. The Government of Saskatchewan requires a surface lease be issued for all permanent structures. There is access to fresh water close to the project and the hydroelectric grid is located near the project within approximately 15 kilometres of mineralized zone which supplies electricity to the operations at Key Lake. The nearest wireless service via the signal from the Key Lake mill. Standalone wireless service is available in some parts of the project area, particularly in the north at the Loki Flake Graphite Deposit; however, a signal booster can be used in other parts of the project area.

5.5 Physiography

Topography is generally flat lying with low ridges and hills reaching up to several tens of metres in relief. A strong north-easterly structural grain is evident in the topography. The area is characterized by numerous lakes, creeks, and ponds. Soil thickness on the ridges and hills is minimal and bedrock exposure is scarce but is found within recent burns and along large ridges. Rare outcrops are typically clustered and covered in lichens and moss. The vegetation is characteristic of subarctic tundra, dominated by small coniferous and deciduous trees, as well as shade-tolerant shrubs with grasses and feathermoss carpets at their base. Low-lying areas between hills and ridges consist of poorly drained muskeg swamps with scattered tamarack and black spruce.

6 HISTORY

6.1 Prior Ownership

The claims defining the KLS property were originally staked in 2011 and 2012 by private company 101159623 Saskatchewan Ltd. ("SaskCo"). These claims partially overlap or wholly encompass claims previously held by various operators between 1969 and 2010, including Yukon Geothermal Company Ltd., Inexco Mining Co., Scurry-Rainbow Oil Ltd.–Western Mines Ltd., Getty Minerals Company Ltd., E&B Explorations Ltd., Uranerz Exploration & Mining Ltd., Minatco Ltd., International Uranium Corporation, and Denison Mines Corporation. The past operators did not have title to the claims when SaskCo completed the original staking.

In December 2022, Abasca acquired a 100% right, title and interest in the mineral claims that comprise the Key Lake South Project ("KLS") located in the southeastern Athabasca Basin Region in northern Saskatchewan, Canada from SaskCo for 25,639,288 common shares of the Company (the "Transaction"). The Transaction constituted a "reverse takeover" ("RTO") pursuant to the policies of the TSX Venture Exchange.

6.2 Exploration and Development History

The QP has not verified the information of the adjacent properties, and that the information of the adjacent properties is not necessarily indicative of the mineralization on the property that is the subject of the technical report. The reviewed historical results from 1969 to 2010 have not been verified by the author and there is a risk that any future confirmation work and exploration may produce results that substantially differ from the historical results. These results are considered relevant to assess the mineralization and economic potential of the property, not to the Mineral Resource disclosed in this document.

The following compilation of historical exploration activities in the Key Lake South area are modified from Zhou et al. (2018).

Early regional exploration activities between the late 1960s and throughout the 1970s focused on ground prospecting, lake water geochemistry, and airborne radiometric and electromagnetic (EM) surveys as well as some shallow drilling. Although these early activities led to the discovery of the nearby Gaertner and Deilmann deposits that comprise Key Lake, no significant uranium mineralization was discovered over the current KLS Project area during that time.

In the early 1980s, Uranerz Exploration and Mining discovered radioactive pegmatites during ground prospecting surveys with values ranging from 0.02% to 22% U_3O_8 at Davies Creek, located on the current S-112088 claim, and in outcrops along Highway 914 on the current S-112289 claim with values of 0.18% to 0.94% U_3O_8 . Radioactive sands and boulders ranging from 0.004% to 0.005% U_3O_8 (30 to 46 ppm U) and some radioactive gabbro and mafic dykes with values ranging from 0.025% to 0.861% U_3O_8 (200 to 7300 ppm U) were also discovered in the Twin Lakes area during this period.

In 2005, International Uranium Inc./Denison Mines Corp. (Denison) conducted ground HLEM and magnetic surveys at Twin Lakes, as well as a regional GeoTEM survey. A follow-up drill program of nine drill holes totalling 759 metres targeted a conductor at shallow depths. Drilling intersected massive graphite and massive sulphides but no anomalous radioactivity. Only a limited portion of the stratigraphy above the graphitic horizon was tested.

In 2006, Denison carried out an AeroTEM survey followed by HLEM surveys. Six holes were drilled along the Wollaston-Mudjatik transition to test a conductor located roughly parallel to and just west of Highway 914; Denison intersected some graphitic pelites that corresponded to the target

conductors and some associated weak uranium mineralization in pegmatite. Two of the holes were drilled on the claim now held as S-112289. Denison still controls a large portion of this conductor system but a strike extent of this conductor of nearly 6 kilometres occurs on the project's claim S-112289.

In the winter of 2009, Denison conducted HLEM and magnetometer surveys in the Graham Lake and Campbell Creek-Zimmer Lake areas and identified conductive units in both these areas.

SaskCo completed geological mapping and geochemical surface sampling in 2014 as well as a property-wide airborne HeliFalcon gravity survey, and together with historical data, culminated in 14 defined target areas prospective for uranium mineralization. Two target areas, Mustang and Campbell, were drilled in 2016 for a total of 4,553 metres. Additional geophysical compilation and re-processing was done in 2022, including 3D inversions of the airborne magnetic data and the 2014 HeliFalcon gravity survey.

Previous exploration in the area is summarized in Table 6-1, highlighting the most relevant historical exploration, organized by company and year. Report numbers refer to those in the Saskatchewan Mineral Assessment Database (SMAD). The drilling completed on the project prior to 2016 is summarized in Table 6-2. Drilling completed in 2016 and later is described in section 10.

Company	Report Year	Work Year(s)	Work Preformed	Assessment Report No.
Yukon Geothermal Company Ltd.	1969	1969	Airborne Radiometric Surveys and Ground Prospecting	74G01-0004
Inexco Mining Co.	1973	1973	Airborne Radiometrics, Geological and Geochemical Survey.	74H-0011
Scurry – Rainbow Oil Ltd – Western Mines Ltd.	1976	1976	Prospecting, Mapping, Lake Water and Sediment Sampling, VLF-EM and Magnetic Surveys	74H04-0027
Getty Minerals Company Ltd.	1976	1976	Airborne Radiometric Survey, Prospecting, Geologic Mapping, Lake Water and Sediment Sampling, VLF-EM, Magnetic and Track-Etch. Surveys.	74H04-0033
E&B Explorations Ltd.	1977	1977	Prospecting, VLF-EM, Magnetics, Lake Sediment Sampling	74G01-0014
Uranerz Exploration & Mining Ltd.	1977	1977	Prospecting, Lake Water and Sediment Sampling, Muskeg Geochemistry, Track ETCH.	74H-0020
Denison Mines Ltd.	1977	1977	Airborne EM, Magnetics, Drilling, EM, Radiometric Lake Sediment Sampling.	74H04-0025
Getty Minerals Company Ltd.	1977	1977	VLF-EM, Magnetic, Geological Mapping, Lake Sediment, Radon Survey, Prospecting, Stripping and Trenching.	74H04-0034
Scurry – Rainbow Oil Ltd – Western Mines Ltd.	1977	1977	Ground EM and Magnetic Surveys, Deep Over Burden Drilling and Analyses	74H04-0035
E&B Explorations Ltd.	1978	1978	Drilling (78-S-1 to 78-S-6)	74G01-0015, 74G01-0021
E&B Explorations Ltd.	1978	1978	EM, and Magnetics	74G01-0016

Table 6-1: Previous Work Conducted on the Key Lake South Project.

Company	Report Year	Work Year(s)	Work Preformed	Assessment Report No.
Denison Mines Ltd.	1978	1978	Drilling, Ground EM, Max/Min, Magnetics, Radiometric Surveys, Prospecting, Geological Mapping, Lake Sediment Sampling	74H04-0028, 74H04-0029
Scurry – Rainbow Oil Ltd – Western Mines Ltd.	1978	1978	Diamond Drilling (CS-78-01 to CS-78- 15), Airborne EM	74H04-0048
Scurry – Rainbow Oil Ltd – Western Mines Ltd.	1978	1978	Prospecting, Geological Mapping, VLF- EM	74H04-0053
E&B Exploration	1979	1979	Drilling, EM, and Magnetics, Overburden Drilling	74G01-0028
Getty Minerals Company Ltd.	1979	1978- 1979	Ground EM, Magnetics	74H04-0044
Scurry – Rainbow Oil Ltd – Western Mines Ltd.	1979	1979	Diamond Drilling (CS-79-01 to CS-79-33)	74H04-0058
Getty Minerals Company Ltd.	1980	1979- 1980	Drilling: SB-8-1 to SB-8-05	74A13-0033
Getty Minerals Company Ltd.	1980	1980	Drilling: HRN-80-101 to HRN-80-106	74H04-0063
Getty Minerals Company Ltd.	1980	1977- 1980	Summary Report (Geology, Geophysics and Drilling Activities)	74H04-0064
Uranerz Exploration & Mining Ltd.	1981	1981	Doppler Satellite Survey	74G-0009
Scurry – Rainbow Oil Ltd – Western Mines Ltd.	1981	1981	Diamond Drilling (CS-81-01 to CS-81-08)	74H04-0060
Uranerz Exploration & Mining Ltd.	1982	1982	Airborne INPUT EM and Magnetic Survey	74G01-0040
Minatco Ltd.	1984	1984	Prospecting, Mapping, Ground Radiometric survey, Petrography.	74B16-0045
Uranerz Exploration & Mining Ltd.	1984	1980- 1984	Radiometric Prospecting	74G-0013
Uranerz Exploration & Mining Ltd.	1984	1980- 1984	Assays and Analysis Certificates	74G-0014
Minatco Ltd.	1984	1983- 1984	Drilling, Track ETCH, Prospecting, and Mapping	74G01-0032
Minatco Ltd.	1984	1984	Prospecting, Gridline Radiometric Survey, EM, Magnetics	74G01-0033
Uranerz Exploration & Mining Ltd.	1989	1989	Drilling, HLEM, TDEM, Boulder and Outcrop Sampling.	74H-0020
International Uranium Corp.	2005	2005	Diamond Drilling (KS05-01 to KS05-09)	74H04-0103
International	2006	2006	Diamond Drilling (KS06-10 to KS06-15)	74G01-0035

Company	Report Year	Work Year(s)	Work Preformed	Assessment Report No.
International Uranium Corp.	2006	2006	Max-Min, Magnetic	74G01-0039
International Uranium Corp.	2006	2004- 2006	Airborne EM and Mag (AeroTEM)	74H04-0106
Denison Mines Corp.	2009	2009	Line Cutting and Ground Geophysics	74H04-0119
Denison Mines Corporation	2009	2009	Airborne EM and Mag (VTEM)	74H04-0121
101159623 Saskatchewan Ltd.	2014	2014	HeliFALCON Airborne Gravity Gradiometer Survey Geological Mapping Surveys Soil / Lake Sediment Geochemistry Surveys and Soil Radon Surveys	MAW00529

Table 6-2: Drillhole Locations of the 1978 to 2006 Programs at KLS

Drillhole ID	Easting	Northing	Elevation	Azimuth	Inclination	EOH
CS-78-07	449102.5	6328216	534	115	-45	128.02
CS-78-08	449076.5	6328054	535	85	-45	150.57
CS-78-09	449124.7	6327951	535	85	-45	126.8
CS-78-10	449127.9	6327391	539	85	-61	117.96
CS-78-11	449021.5	6328251	534	115	-45	123.75
CS-78-12	448383.0	6326687	540	130	-55	194.16
CS-78-13	446911.0	6324997	547	150	-60	123.75
CS-78-15	448965.5	6328200	535	115	-60	124.05
CS-79-01	449893.0	6328303	535	80	-45	121.01
CS-79-15	437074.0	6322924	566	270	-50	122.2
CS-79-16	437169.0	6322869	569	270	-50	122.5
CS-79-17	436367.0	6318360	575	290	-50	122.8
CS-79-18	436280.0	6318400	574	290	-50	122.8
CS-79-20	448551.0	6328233	535	85	-60	121.92
CS-79-21	448779.3	6328210	534	85	-55	145.39
CS-79-22	449036.5	6328301	535	115	-50	125.88
CS-79-23	448973.9	6328336	534	115	-50	122.83
CS-79-24	448753.5	6327526	537	85	-50	122.83
CS-79-25	448855.2	6327509	535	85	-50	122.83
CS-79-26	448950.2	6327525	539	85	-50	138.07
CS-79-27	449048.5	6327530	539	85	-50	138.07
CS-79-28	449403.0	6328533	530	137	-55	138.07
CS-79-29	449479.0	6328453	530	137	-55	138.07
CS-79-31	441114.0	6327107	571	310	-50	122.8
CS-79-32	443781.0	6325663	572	310	-50	122.8
CS-79-33	443853.0	6325623	577	310	-50	122.8
CS-81-01	446331.0	6322890	548	85	-45	120.7
CS-81-02	446224.0	6322880	553	85	-45	144.17

Drillhole ID	Easting	Northing	Elevation	Azimuth	Inclination	EOH
CS-81-03	446117.0	6322866	553	85	-45	134.32
CS-81-04	445991.0	6322852	555	85	-45	138.99
CS-81-05	445866.0	6322838	557	85	-45	148.13
DDH-78-S-1	436416.0	6320464	563	265	-60	41.76
DDH-78-S-2	436484.0	6320664	564	257	-60	99.7
DDH-78-S-3	436557.0	6320489	566	266	-60	124.05
DDH-78-S-4	436574.0	6320873	572	269	-60	94.49
DDH-78-S-5	436676.0	6320575	570	0	-90	169.77
KS05-01	444920.0	6324110	557	315	-70	107
KS05-02	445003.0	6324308	555	315	-70	20
KS05-03	445288.0	6324022	556	315	-70	83
KS05-04	445405.0	6324191	556	315	-70	80
KS05-05	446298.0	6324862	553	185	-70	101
KS05-06	446103.0	6324869	545	185	-60	104
KS05-07	445903.0	6324887	546	185	-70	89
KS05-08	446085.0	6324655	555	185	-70	89
KS05-09	445804.0	6323404	551	60	-70	86
KS06-10	436863.0	6320431	570	282	-65	275
KS06-11	437038.0	6321207	570	282	-65	239
KS06-12	437773.0	6324977	560	282	-65	335
KS06-13	438458.0	6324819	575	282	-65	524
KS06-14	438694.0	6327744	555	297	-65	380

6.3 Historical Resource Estimates

No historical resources estimate exist on the Project.

6.4 Past Production

No production has occurred on the Project.

7 GEOLOGY AND MINERALIZATION

7.1 Regional Geology

The KLS Project lies just outside the current southeastern margin of the Athabasca Basin, Saskatchewan, Canada (Figure 7-1). The basin hosts the world's largest high-grade uranium deposits (Jefferson et al., 2007). The Athabasca Group consists of the late Paleoproterozoic fluviatile terrestrial quartz sandstone with local conglomerate that are flat-lying and relatively undeformed which is underlain in unconformity with the crystalline basement rocks of Archean to Paleoproterozoic (Card et al., 2007). The Athabasca Group sedimentary sequences are currently persevered in oval shape at surface with approximate dimensions of 450 km east-west by 200 km north-south and reaches a maximum thickness of approximately 1,500 m near the center.



Figure 7-1: Geological Domains in Northern Saskatchewan in the vicinity of the Athabasca Basin and Key Lake South Project.

The basement rocks of the eastern Athabasca Basin and surrounding areas include highly deformed granitoid gneiss, migmatite and intrusions of the Mudjatik Domain which are recognized as mainly Archean aged. These rocks were uncomfortably overlain by the gneisses and migmatites of the Wollaston Domain which are recognized mainly Paleoproterozoic aged.

The Paleoproterozoic gneisses and migmatites were deformed, altered, and metamorphosed along with the adjacent Archean rocks during the Trans-Hudsonian Orogeny (locally 1.75-1.93 Ga, Card et al., 2006, 2018). The Trans-Hudsonian orogeny was followed by a protracted period

of erosion, weathering, and the development of a paleo-weathering profile over the deformed and metamorphosed Archean and Paleoproterozoic rocks. The paleo-surface is defined by red hematitic and bleached alteration which transitions down to chlorite alteration and then to fresh basement rocks (Jerfferson et al., 2007). Locally, the gneisses were crosscut by uraniferous pegmatites and mafic intrusions.

7.2 Local and Property Geology

The eastern part of the project area is underlain by the 2.6 Ga Archean Zimmer Lake Granite, which extends northeast to Key Lake mine, where the Gaertner and Deilmann deposits lie on its northwestern flank. The far western part of the project is underlain by Mudjatik granitoid gneiss, presumed to also be of late Archean age. The central part of the project is underlain by metamorphic rocks of the Paleoproterozoic Wollaston Group. Meta-pelites and -arkoses predominate, with minor intrusions. Local hematite and chlorite altered gneiss outcrops were interpreted to be "regolith" (Ray, 1977). Preservation of the regolith suggests that these rocks were once overlain by Athabasca Group.

The Wollaston metamorphic rocks are associated with a broad magnetic low trending southwesterly from Key Lake across the project. Most of the known uranium deposits in eastern Athabasca Basin are associated with this magnetic low zone, which extends across the basin. Drilling confirms that the EM conductors found in the various ground and airborne surveys are due to graphite. Locally, the metamorphic rocks are cut by uraniferous pegmatites and mafic intrusions.

Uranium exploration at KLS is targeting basement-hosted deposits such as Eagle Point, Millennium, Triple R, and Arrow. These deposits are found in Paleoproterozoic metamorphic rocks associated with reactivated graphitic fault zones. Mineralization occurs between a major lower reverse fault such as the Collins Bay Thrust at Eagle Point or the Mother Fault at Millennium and a narrow upper reverse fault such as the Eagle Point Fault or at Millennium the reverse fault associated with the graphitic marker.

The P-Patch deposit within Key Lake mine area is another example of a basement-hosted deposit associated with faulting and graphitic zones. The mineralization is situated within strongly bleached, argillitized, chloritized, and hematized pegmatoids, and pelitic to semi-pelitic gneisses immediately below a graphitic pelitic gneiss unit.

The Key Lake Mine, situated approximately 15 kilometres north of the project, produced over 200 million pounds of uranium at a grade averaging $2.3\% U_3O_8$ between 1983 and 1997. Key Lake comprised the Gaertner and Dielmann ore bodies, which were hosted in the both the Athabasca sandstone and the basement gneiss. The two ore bodies were controlled by the intersection of the Key Lake Fault Zone with the unconformity surface.

The qualified person has not verified the information of the adjacent properties, and that the information of the adjacent properties is not necessarily indicative of the mineralization on the property that is the subject of the technical report.

7.3 Mineralization

All significant uranium mineralization in the Athabasca Basin region is spatially related to the unconformity of the Athabasca Group and the underlying crystalline Paleoproterozoic and Archean basement. Within the eastern Athabasca Basin, most of the uranium occurrences are proximal to the boundary between the two litho-structural basement domains, the Archean Mudjatik Domain to the west and Paleoproterozoic Wollaston Domain to the east.

The generally higher grade of metamorphic phases of Archean rocks and their unconformable contact with the overlying Paleoproterozoic rocks disclose the region endured intensive deformation and metamorphism prior to the Trans-Hudson Orogeny. However, the preserved structural futures are mainly the results of the Trans-Hudson Orogeny during 1.93 to 1.75 Ga which severely over printed the previous structural results.

Five sets of structural phases were interpreted around the Key Lake mine, the northeast trending shear zones, the northeast trending folds, the northwest trending folds, the northeast trending brittle faults and the north to northwest trending brittle faults (Harvey and Bethune, 2007). It is reasonable to assume the first three phases of northeast trending compression structures were the result of the Trans-Hudson Orogen of locally about 1.93 to 1.75 Ga. The large granite intrusions and pegmatite veins that resulted from this could be the source of uranium mineralization. Following the tectonic conversion of deformation and metamorphism, the region experienced a long uplift and erosion period to form the unconformity base of the Athabasca Basin. Beneath the basal unconformity, red hematitic and bleached clay-altered regolith grades down through chloritic altered to fresh basement gneiss.

The northeast trending brittle faults which locally reactivated the early shear zones are directly related to uranium mineralization in the southeast of the Athabasca Basin and surrounding areas during the relatively stable tectonic setting of the Athabasca Group. The basement graphitic and altered gneisses constitutes weak zones during regional compressive deformation and late reactive extensive deformation. The graphitic and altered rocks in the reactive brittle fault zones can be interpreted as the channels to conduct deep crustal heat upward and to generate convection of hydrothermal fluids for alteration and mineralization. Reduced basement fluids mixed with oxidized basin fluids causing uranium precipitation in the unconformity, egress style with fluids upward, and in basement fractures, ingress style with fluids downward (Jefferson et al., 2007).

At KLS, graphite mineralization is localized along the brittle reactivated structures that are primary targets for uranium exploration. Typically, the graphite mineralization in the region is not greater than 5 m in thickness; however, drilling intersections observed in the Loki Flake Graphite Deposit in the northern part of the project area include wider intervals.

7.4 Loki Flake Graphite Deposit

One mineral deposit has been discovered at KLS, the Loki Flake Graphite Deposit, which is characterized by a strongly graphitic shear zone. Graphite mineralization within the shear zone is generally bound by silicified metapelitic rocks of the Wollaston Domain and pegmatite, which are situated within the hanging wall over granitic gneiss that is presumed to be Archean. Due to the competent bounding host rocks, the contacts of the graphite mineralization are typically sharp with local gradational contacts, especially toward the lower contact. Local intervals of higher-grade graphite are commonly intersected in along the contacts of the mineralized zone, with the hanging wall being the most common to be higher-grade.

Unlike most of the major graphitic shear zones in the region that trend northeast, the Loki Deposit is hosted in one that is northwest-trending and is coincident with a regional folded contact of the Wollaston and Mudjatik Domains. This conductive shear zone extends for at least 4 km along strike, although mineralization is currently only known to extend for 2 km due to limited drilling. The known depth-extent of these graphitic structures is also limited by the drilling and presumed to extend beyond 500 m, although it is assumed that the thickness of the structure may decrease with depth.

As of the effective date of this report, mineralization at the Loki Deposit has been identified within a volume of 740 m (strike) by 235 m (width) by 280 m (vertical, starting from 55 m below surface down to 335 m). The graphite mineralization is oriented along an 121° azimuth and -52° dip to the southwest. The mineralization is observed to be continuous with and thickness ranging between 10 to 55 m with an approximate average of 35 m.

8 DEPOSIT TYPES

8.1 Unconformity-Related Uranium Deposits

The Athabasca Basin hosts numerous high-grade uranium deposits (e.g., McArthur River and Arrow). Uranium deposits in the region have been described as one of two major types: egressstyle and ingress-style unconformity-related (Jefferson *et al.*, 2007). The two styles are differentiated based on the location of mineralization (Figure 8-1). Egress-style deposits occur at and/or above the Athabasca-Basement unconformity, where as mineralization of ingress-style deposits occurs within the basement rocks. Due to this association, they are also referred to as sandstone-hosted or basement-hosted deposit.

Both styles feature common characteristics, including, 1) Proximity to unconformity surface between Athabasca Sandstone and basement rocks and 2) presence of re-activated shear- or fault-zones +/- graphite. Mineralization typically occurs as pitchblende and uraninite with lesser uranium-oxide minerals. Alteration around the egress-deposits is characterized by a relatively large halo of clay alteration and may extend several hundreds of metres, where as ingress-deposits have a very narrow halo that generally does not extend more than 50 metres. Both styles also feature a prominent redox boundary with strong hematite alteration distal to the mineralization and chlorite alteration proximal to the deposit.

At KLS, ingress-style deposits are the uranium exploration targets as the Project lies within 15 km south of the current margin of the Athabasca Basin.



Figure 8-1: Unconformity-related uranium mineralization model (Jefferson et al., 2007).

8.2 Flake Graphite Deposits

Natural flake graphite deposits are typically associated with metasedimentary rocks. The formation of the graphite has generally been described as the transformation of organic materials, accumulated during sedimentation, into graphite during amphibolite to granulite facies metamorphism. Graphite deposits are therefore typically stratabound and hosted in paragneisses and marbles (Harben and Kuzvart, 1996).

Graphite can also be accumulated in shear zones associated with carbon cycling at orogenic boundaries, like those near the Wollaston-Mudjatik geological Domain boundary. At these

boundaries, biogenic carbon has been hydrothermally remobilized during the final stages of orogenesis into these shear zones (Toma *et al.*, 2024), providing localized concentrations of natural flake graphite. At KLS, the Loki Deposit is interpreted to be such a shear zone, with concentrations of graphite mineralization bound within the zone between the competent basement rocks of the Wollaston Domain.

9 EXPLORATION

Between 2014 and 2016, SaskCo compiled historical data and conducted field programs at KLS which included geological mapping, surface sampling, as well as a property-wide HeliFalcon gravity survey, and a targeted MWH ground gravity survey. This work was done with the intent of targeting basement-hosted uranium deposits. Several prospective graphitic corridors were identified, and two target areas were selected for follow-up drill testing: Mustang and Campbell. These targets were drilled in 2016 and resulted in the discovery of what is now referred to as the Loki Flake Graphite Deposit.

Exploration conducted by Abasca at KLS has been exclusively drilling-related. A summary of SaskCo's exploration surveys that led to the discovery of the Loki Deposit from Zhou *et al.* (2018) is described below.

9.1 Airborne Geophysical Surveys

9.1.1 HeliFALCON Airborne Gravity Gradiometer Survey

In April and May 2014, CGG Ltd. conducted a high-sensitivity HeliFALCON® Airborne Gravity Gradiometer (AGG) survey over all 12 claims of the KLS Project (CGG, 2014). The survey was carried out using a Eurocopter AS350-B3. A total of 25 production flights were flown for a combined total of 2,995 line-kilometres of data. Final data processing was completed from the Perth, Australia office of CGG Ltd. in June 2014.

The KLS Project was flown in an east-southeast to west-northwest direction (117°/297°) with a traverse line spacing of 100 metres and a tie line spacing of 2,000 metres at 027°/207°.

During the survey of the KLS Project, the helicopter was maintained at a mean height of 35 metres above the ground with a nominal survey speed of 150 kilometres/hour. Terrain clearance was provided by the radar altimeter at interval of 0.1s.

Terrain clearance for the survey averaged slightly above the nominal clearance of 35 metres, having a mean value of 45.3 metres across the survey area.

The survey specifications are summarized in Table 9-1.

Table 5-1. 2014 All borne Gravity Survey Specification						
Key Lake South Uranium Project Survey Specifications						
Total Delivered Kilometres (km)	2995					
Clearance Method	Barometric					
Nominal Terrain Clearance (m)	35					
Traverse Line Direction (deg.)	117/297					
Traverse Line Spacing (m)	100					
Tie Line Direction (deg.)	027/207					
Tie Line Spacing (m)	2000					
Real-Time Differential GPS	Novatel OEMV L-band Positioning					
GPS Base Station Receiver	Novatel OEM4 L1/L2					
Altimotoro	King KRA405 Radar Altimeter					
Altimeters	Rosemount 1241M Barometric Pressure Sensor					
Laser Scanner	Riegl LMS-Q140I-80					

Table 9-1: 2014 Airborne Gravity Survey Specification

Terrain corrections were derived from the digital terrain model grid for every data point in the survey. A terrain density of 1.00 g/cm³ was used to compute the terrain correction channels, which were then multiplied by the chosen correction density before being subtracted from the data.

9.1.2 Airborne Gravity Results

Because the KLS Project is located outside of the Athabasca Basin, a standard density of 2.67 g/cm³ was applied (a correction density of 2.00 g/cm³ is typically selected for the Athabasca Basin's sandstone cover). The transformation of the results into Vertical Gravity (gD) and Vertical Gravity Gradient (gDD) was accomplished using two methods: Fourier domain transformation and the Method of Equivalent Sources.

After reviewing the results, the best representation of the gD and gDD data for the KLS project was selected as the Fourier result (density 2.67 g/cm³), illustrated in Figure 9-1 (gD) and Figure 9-2 (gDD) with a structural interpretation overlay. The 2014 helicopter-borne high-sensitivity HeliFALCON® Gravity Gradiometer survey provided a new layer of project-wide data and allowed for an initial interpretation of major basement lithologies, structures, and possible zones of hydrothermal alteration.

Data interpretation by CGG Airborne (2015) identified small gravity highs and lows in the vicinity of EM conductors and proposed them as possible zones of hydrothermal alteration. The Gzz (and shallow depth slice of Gz) response was used to identify the small gravity anomalies thought to be derived from the small density changes due to alteration. CGG considers the high number of small Gzz anomalies to be a result of density variations within the pelite and psammite units, which may mask the subtle ± 0.2 g/cc variations expected from silicification and de-silicification alteration.

The large gravity high seen in the vertical gravity results, as per Figure 9-1, and is interpreted as a dense rock mass, less amenable to the development of structures required to control uraniumrich hydrothermal fluids. The conclusion decreases the prospectivity of conductors present within the northern portion of claim S-112435 until further analysis suggests otherwise. On the other hand, the potential of the northeast-trending conductors occurring along the southern boundary of the gravity high is heightened by this interpretation, because a structure marking a competency contrast may provide a favorable conduit for hydrothermal fluids.



Figure 9-1: 2014 Vertical Gravity Results (gD) with Structural Interpretation (Zhou et al. 2018)


Figure 9-2: 2014 Vertical Gravity Results (gDD) with Structural Interpretation (Zhou et al 2018)

The gravity survey has also outlined gravimetric lows along areas of EM conductors not previously tested by diamond drilling. The gravity lows may be due to hydrothermal alteration, and they are highly prospective for uranium mineralization.

9.2 Ground Geophysical Surveys

9.2.1 2016 Ground Gravity Survey

In March 2016, MWH Geo-Surveys was contracted to carry out a ground gravity survey on three grids spanning the Mustang trend: Mustang South, Seager Central, and Seager North (Figure 9-3). A total of 1,027 stations at approximately 100 metres spacing were surveyed.

The following field procedures are taken from the logistics report (MWH, 2016):

LaCoste & Romberg gravity meters serial numbers 371, 697& 792 were used on this project. These meters are electronically nulled, are equipped with highly accurate electronic levels and feature one micro-gal resolution. Data is sent via a Bluetooth wireless link to a hand-held field PC running proprietary GControl gravity data logging software. GControl collects a gravity reading sample every 2 seconds and subsequently averages the collected samples to mitigate the effects of high frequency noise caused by wind and ice motion. All gravity readings were taken within loops to and from a gravity base established at the Abasca campsite. To determine the absolute gravity value of the new Abasca base, multiple ties were made between the new base and through a series of intermediate sites, the Canadian Gravity Standard Network base in LaRonge (base# 9547-1977; value: 981,380.330).

A total of 971 unique stations and 56 repeats (not including base ties) were collected on 3 grids; Mustang, Seager Central and Seager North during 9 survey production days. Access to gravity sites was by snowmobile and on foot.

The Bouguer slab gravity at a density of 2.5 was used for this project.

In 2016, Bingham Geoscience conducted an interpretation of the 2016 ground gravity survey (Figure 9-4, Figure 9-5, Figure 9-6) that was conducted in three areas of the Mustang trend. Residual gravity lows were detected in the Mustang South, Seager Central, and Seager North sectors. These gravity low anomalies may be indicative of zones of alteration, clay development, and potential uranium mineralization along electromagnetic (EM) conductors. Anomalies MS1, SC3, and SN1 have coincident (or nearby) well-defined reinterpreted MaxMin conductors and are ranked as priority targets.



Figure 9-3: Bouguer Gravity Results of 2016 Ground Gravity Survey (MWH, 2016)



Figure 9-4: Residual Gravity Interpretation Mustang Ridge South Block, KLS (Modified from Zhou et al., 2018)





Mustang Ridge Central Block Key Lake South Project Residual Ground Gravity Interpretation (2016)

Figure 9-5: Residual Gravity Interpretation Mustang Ridge Central Block, KLS (Modified from Zhou *et al.*, 2018)



RESOURCES INC. Residual Ground Gravity Interpretation (2016)

Figure 9-6: Residual Gravity Interpretation Mustang Ridge North Block, KLS (Modified from Zhou et al., 2018)

9.3 Geochemical Surveys

9.3.1 2014 Soil Sampling Program

A soil survey was conducted in 2014; a total of 804 samples were collected in two separate areas of the property:

- A grid at the north end, subdivided into Area A (on claim S-112088) and Area B (on claims S-112088 and S-112290), covered a zone where an EM conductor, untested by diamond drilling, coincides with an airborne gravity low and a magnetic low (Figure 9-7 and Figure 9-8).
- A grid in the southwest corner of the property, Area C, is located on claim S-112289 (Figure 9-9 and Figure 9-10). This grid covered a structurally complex area, as evidenced from geophysics, where two parallel north-south trending EM conductors display a break/offset of 400 to 700 metres.

Sampling grids were designed to cover portions of a previously established cut and picketed grid having a line-spacing of 200 metres and stations marked every 50 metres. Sample location coordinates were uploaded into the GPS units that were used to navigate to the sample sites. The samplers chose a suitable sample location close to the GPS coordinates for that sample site and collected the black A1 organic soil layer by hand or with a spade. The samples were collected in Kraft paper sample bags and labelled with the predetermined sample ID.

The A1 horizon was occasionally just below the plant litter and could be easily scraped up. Elsewhere, the A1 horizon was most easily accessed by pulling up the surface vegetation by hand and collecting the black soil at the root base. Where identified, the A1 horizon varied in thickness from 1 to 6 cm. At lower elevations where a distinct A1 soil horizon could not be identified, peat samples were taken in lieu of soil. All samples were described for colour, sand content, and the percentage of peat.

All samples were sent to Saskatchewan Research Council (SRC) in Saskatoon, SK for ICP-MS analysis. Samples were air dried, mortared then sieved to 180 microns. Initial samples were analyzed after both partial and total digestion. Partial digestion was suggested as a means of avoiding interference that arise from conducting ICP-MS on totally digested samples. For partial digestion, a 0.250 g pulp was digested with 2.25 ml of 8:1 ultrapure HNO3:HCl for 1 hour at 95 C. For total digestion, a 0.125 g pulp was gently heated in a mixture of ultrapure HF/HNO3/HClO4 until dry and the residue dissolved in dilute ultrapure HNO3.



Figure 9-7: Areas A and B: Boron in Soils (Zhou et al., 2018)



Figure 9-8: Areas A and B: Uranium in Soils (Zhou et al., 2018)



Figure 9-9: Area C: Boron in Soils (Zhou et al., 2018)



Figure 9-10: Area C: Uranium in Soils (Zhou et al., 2018)

9.3.2 Soil Survey Results

The samples containing peat have high values for Loss on Ignition (LOI). Samples with high LOI values (therefore high in organics) generally have higher values for most elements, except for boron, cobalt, and uranium; those elements weren't as affected by high LOI values. The influence of LOI was not affected by the type of digestion, whether using partial or total digestion. Figure 9-11 shows plots of Nickel, Uranium, Vanadium, and Zinc Assays vs. Loss on Ignition (LOI).

Based on a review of the plots for each element, it was decided to treat the geochemistry results as two groups:

- Samples with < 85% LOI were classified as soils and;
- Samples with ≥ 85% LOI were classified as peat, except for area C where only three samples had ≥ 85% LOI.

To remove the LOI influence, each assay was normalized by the corresponding LOI result, the standard deviation was calculated, then the data was sorted based on the third standard deviation percentile.

The treatment of the samples is considered appropriate since the survey procedure could have distinguished soil samples from vegetation (peat) samples using the field notes. However, initially plotting all the samples with LOI allowed for a quantitative separation of soil and vegetation samples.



Figure 9-11: Nickel, Uranium, Vanadium, and Zinc Assays vs. Loss on Ignition (LOI) (Zhou et al., 2018)

9.3.3 Interpretation of Soil Survey Results

The geochemical interpretation considered the following as elements of interest: As, B, Co, Cu, Pb, Mo, Ni, U, V, and Zn.

In Areas A and B, a compilation of the soil geochemical results returned four prominent multielement anomalies, S1 to S4, which are shown in Figure 9-12. Anomalies S1 and S2 (Campbell target) are considered strong exploration targets due to the coincidence of high metal content with favourable geophysics and interpreted structures. Four anomalies in what were classified as peat samples are also outlined but are not considered reliable.



Figure 9-12 Compilation Plan Map of Areas A and B with Soil, Peat, and Radon Anomalies Overlaid with Interpreted Structure and EM Conductors (Frostad., 2018)

In Area C (Mustang target), the soil geochemical results returned five prominent multi-element anomalies, S5 to S9, which are shown in Figure 9-13. Anomaly S7 constitutes a high-priority target due to its coincidence with geophysics and a nearby lake sediment anomaly.



Figure 9-13: Compilation Plan Map of Area C with Soil, Peat, and Radon Anomalies Overlaid with Interpreted Structure and EM Conductors (Frostad, 2018)

Table 9-2 shows the element associations for each interpretated anomaly by Frostad (2015) and Table 9-3 summarizes their characteristics. The geochemical anomalies were selected by noting groups of samples with higher concentrations of numerous elements above what was considered background for each area. A definition of anomalous concentration for each element was not made and a ranking of the soil/vegetation anomalies based on concentrations was not attempted.

Soil/Peat			Anomalous Element Concentration								
Anomaly ID	Area	As	В	Со	Cu	Pb	Мо	Ni	U	v	Zn
S1 (North)	А										
S1 (South)	А										
S2	А										
\$3	А										
P1	А										
P2	А										
S4	В										
Р3	В										
P4	В										
S5	С										
S6	С										
S7	С										
S8	С										
S9	С										

Table 9-2: Element Association Defining Soil and Peat Anomalies (Frostad, 2015)

Area	Name	Size	Orientation	Intensity	Geophysical Correlation	Geological Correlation	Geochemical Signature
	S1	2 km × 75 m	N-S	Strong	Strong airborne magnetic and gravity structure		North: B, Mo, Ni, V South: Cu, Mo, Ni, Ph, V, Zn
	S2	400 m	Round		Significant bend and break in the EM conductor that lies on the south side of a magnetic high.	Magnetic high may represent granite	Highest U values of the survey: up to 104 ppm U (project average= 1.5 ppm U. All elements of interest are elevated except Pb.
A	S3	150m	Round		None	Anomaly may be associated with a N-S fault or may be due to topographic low capturing metals from S2 anomaly.	All elements of interest are elevated with the exception of copper and zinc. Strongly anomalous at 18.6 ppm U.
	P1 and P2	Soil samples w >85%	LOI, anomalie	es not consid	dered reliable as may be distal from source		
в	S4	700 m × 200 m	Arcuate	Strong	coincident large-scale bend in an EM conductor, a magnetic low, and a gravity low.	Near hole CS-78-11 that intersected 167 ppm U over 3.7 metres in a clay-altered fault zone.	All elements of interest are elevated.
	P3 and P4	Soil samples w >85%	LOI, anomalie	es not consid	dered reliable as may be distal from source		
	S5	400 m × 50 m × 100 m	N-S	Strong	Along an EM conductor and coincident with a strong magnetic low and a moderate gravity low response.		Elevated in all elements of interest with the exception of lead and zinc.
	S6	600 m	N-S	Strong	Same orientation as nearby EM conductor. Located along the eastern edge of a magnetic high as well as the eastern edge of a small gravity high response.	Coincides with an interpreted NE- trending fault.	Elevated in all elements of interest. Coincides with highway so may be due to contamination.
С	S7	1 km × 100 m	N-S		Parallel to EM conductors. Within a magnetic low that sits between the major break of the EM conductors.	May be showing where hydrothermal alteration of graphite has suppressed an EM response.	All elements of interest have elevated concentrations except As.
	S8	~ 800 m × 50 m	N-NW		Cross-cuts two EM conductors. At the western edge of a magnetic high and a gravity high.	Interpreted to be associated with a fault.	
	S9	400 m × 50 m × 100 m		Weak	At the southern terminus of an EM conductor		Anomalous in Co, Mo, Ni, U and V.

9.3.4 2014 Lake Sediment Survey

A lake sediment sampling survey was conducted in 2014 in Area C, on claim S-112289, proximal to the 2014 soil sampling grid. A total 65 samples were collected (Figure 9-15).

A lake bottom sampling grid was designed to cover areas hosting known EM conductors. The average distance between samples over the conductors was 50 metres and additional infill samples to cover the lake were taken between 100 and 150 metres apart. Sample coordinates were uploaded into GPS units prior to the field collection. The GPS units were then used to guide the sampling teams to each preselected and pre-named sample site on the lake. An anchor was lowered, and the boat was allowed to steady its position, allowing for two samples to be collected from the same spot if the sample size from the initial sample was not sufficient.

An Ekman Bottom Grab sampler was utilized for collecting the sediment samples from the soft sediment at the bottom of the lakes. As the sampler is lowered, two hinged upper lids swing open to let water pass through and close upon retrieval, preventing sample washout. When the sampler reaches the bottom, a messenger is sent down the line, tripping the overlapping spring-loaded scoops. The samples were then placed with 12 inches × 18 inches sediment sample bags that allowed for water to drain.

9.3.5 Lake Sediment Survey Results

The concentrations of the two elements of interest, uranium and nickel, were plotted against LOI for all lake sediment samples (Figure 9-14). Nickel and uranium values were higher in samples with higher percentages of LOI. Based on a review of these two plots, the anomalous values for uranium and nickel were divided into three groups: i) anomalous, ii) weakly anomalous and iii) background. Results for nickel and uranium are illustrated in Table 9-4.



Figure 9-14: Uranium and Nickel vs. LOI in Lake Sediment Samples (Frostad, 2015)

Three lake sediment anomalies were identified (L1 to L3) and are shown in purple on the compilation map in Figure 9-13. Characteristics of these anomalies are summarized in Table 9-4.

	Table 9-4: Summary of Lake Sediment Anomalies							
			Geophysical	Other				
Area	Anomaly	Intensity	Correlation	Correlations	Geochemical Signature			
	L1	Strong U; moderate Ni	Near the terminus of an EM conductor; coincident with a magnetic low and a gravity low response	Between soil anomalies S7 and S9.	From 8.6 to 13.5 ppm U over a distance of approximately 100 metres; one of these samples also had the highest nickel concentration at 36.9 ppm Ni.			
С	L2	Strong U and Ni	No EM correlation but is located on the western edge of a coincident magnetic high and a gravity high response.	May relate to a lithological contact	> 25 ppm Ni and > 6.4 ppm U			
	L3	Weak U and Ni	Coincides with a moderate magnetic high and a moderate gravity high.	At northern extension of the S7 soil anomaly.	> 11 ppm Ni and > 4 ppm U			

Anomaly L1 is considered the most encouraging lake sediment anomaly, as its high concentrations of uranium and nickel are coincident with favourable geophysics and interpreted structures.



Figure 9-15: Area C Uranium in Lake Sediments (Frostad, 2015)



Figure 9-16: Area C Nickel in Lake Sediments (Frostad, 2015)

9.3.6 2014 Radon-in-Soil Survey

In 2014, a radon sampling survey over Area A (disposition S-112339) was conducted in conjunction with the previously described soil sampling survey. The radon sampling survey involved the collection of 282 readings using a Pylon AB6A Monitor with Lucas-style scintillation cells. The Pylon AB6A Monitor measures radon and thoron by detecting the alpha particles from the gases as they decay. Each reading location recorded the background radon, the soil radon reading, and a scintillometer measurement of total gamma recorded.

A sampling grid was designed to utilize the historical cut grid having a line-spacing of 200 metres and picketed stations every 50 metres. Sample coordinates were uploaded to GPS units which were then used to navigate to the predetermined sample site. After choosing a suitable sample location close to the GPS sample coordinate, a battery powered drill with a ³/₄-inch ship auger bit was used to drill a hole 18 inches deep. The radon probe was then placed in the hole and connected to the scintillation cell with a vacuum hose. A 15 inHg vacuum is created in the cell using a handheld vacuum pump with the valve on the vacuum hose closed. The AB6A is turned on and the date, location, and the hand scintillometer measurement is recorded before the measurements begin. The first three intervals are recorded with the cell under vacuum. When the third interval is complete, the flow valve is opened until the vacuum pressure in the cell reaches zero inHg. This draws the gases from the soil into the cell. Intervals four, five and six then measure the decay of the gas in the cell. The measurements are saved internally in the AB6A. When the measurements are complete, the cell is then flushed for 25 seconds using the vacuum pump.

9.3.7 Radon Results

The radon samples were collected sites that were also sampled for soils. To ensure that peaty terrain was not influencing the radon-in-soil readings, LOI from the soil sampling results were plotted against the measured radon concentrations (Figure 9-17). The plot suggests that the peat-rich content (i.e., with LOI > 90%) does not influence the radon measurements. The radon results are shown in Figure 9-18.



Figure 9-17: Radon in soil (cpm) vs. soil LOI (wt %) (Zhou et al., 2018)



Figure 9-18: Radon Survey Results Area A (Zhou et al., 2018)

Five radon-in-soil anomalies were identified, R1 to R5, and are plotted on the geochemical compilation map for areas A and B (Figure 9-12). High radon concentrations were measured proximal to strong soil anomalies within the Campbell target area. Although the radon-in-soil anomalies appear discordant to the underlying geology, the anomalies are interpreted to be migrating downhill from their source. The anomalies are summarized as follows:

- Anomalies R1 and R2 appear related as they occur at opposite ends of an arcuate EM conductor located in the northern corner of the sampling grid.
- Anomaly R2 is coincident with the northern portion of the S1 soil anomaly.
- The R3 and R4 radon-in-soil anomalies are associated with the S1 soil anomaly but trend east-west. The R3 and R4 anomalies are interpreted to share a similar uranium source, located where the S1 soil anomaly crosses a break the EM conductor. The anomalies are interpreted to disperse downhill from this topographic high towards the central lake.
- The R5 radon-in-soil appears to be associated with the S2 soil anomaly, the strongest soil anomaly in the program. Again, the elongate east-west trending anomaly may be suggesting migration away from a radon source near or beneath the S2 soil anomaly.

9.4 Geological Surveys

9.4.1 2014 Geological Mapping

Between July 9 and 15, 2014, a geological mapping program was conducted by four SaskCo geologists. The fieldwork was conducted from a camp constructed at kilometer 185 on Highway 914. Although the Graham Lake skidder trail provided ATV access into the central area of the property, most locations were only accessible by foot due to dense tree cover, musked, and steep topography. The mapping program was successful in locating most of the key outcrops as well as discovering additional outcrops. However, due to limited access to the property, not all historical outcrops were visited.

The purpose of the mapping program was to validate historical mapping, to improve the density of mapping and to create an updated lithological map by compiling the field results with recent airborne magnetic and gravity surveys. The resultant property geology map is presented in Figure 9-19.

The 2014 mapping program identified seven lithologies. The nomenclature used in historical maps was considered and integrated into the geological compilation map. The metasedimentary sequence was dominant in the mapped area. The electromagnetic (EM) conductors detected by ground and airborne surveys correspond with the pelites and psammo-pelites and foliation measurements closely related to magnetic fabrics. Large granitic bodies were mapped on the eastern and western margins of the project.

Samples of each rock type were collected and used for specific gravity measurements to aid in interpreting the results of the airborne gravity survey. Calc-silicates were the densest unit averaging 2.76 g/cm³ while granite was the least dense averaging 2.61 g/cm³. The specific gravity of the metasediments was in between these two rock units with an average density of 2.67 g/cm³.

No. Specific Gravity (g/cm3)					
Rock Type	Samples	Mean	Median	Min	Max
Granite	2	2.60	2.60	2.63	2.57
Archean Granite	4	2.61	2.60	2.65	2.58
Pelite	43	2.66	2.69	2.96	1.30
Pegmatite	7	2.67	2.59	3.08	2.49
Psammite	14	2.68	2.66	3.01	1.59
Calc-Silicate	11	2.76	2.77	2.93	1.56
Total	81				

Table 9-5 summarizes these results.



Figure 9-19: Geology Map for the Key Lake South Uranium Project (SRK, 2022)

9.4.2 2015 Exploration Targeting

Frostad (2015) defined 14 exploration targets and described them in detail with accompanying geophysical maps. Subsequent compilations that integrated results of later surveys further confirmed and refined these targets.

A structural interpretation and targeting exercise conducted by SRK (2015) generally agreed with Frostad's assessment and concluded with a priority ranking of the targets. The rankings as well as the characterization of the various parameters are relative to other targets within the dataset and are not to be interpreted as absolute values. The description and ranking of these targets are summarized in Table 9-6 and illustrated in Figure 9-20.

Target/Priority Ranking	Significant Historical Exploration	Anomalous Radiometric Signature	Geochemical Signature	Geology	EM Signature	Structure	Geophysical Indicators of Alteration	Conclusions
Loki LOW to HIGH	Extension of the Key Lake Mine conductor?	Strong	U, radon	Conductors are interpreted as graphitic	Conductor in hinge of F₃ fold; corresponds to broad mag low	Conductors are folded and faulted.	Gravity low	High potential due to possible correlation with Key Lake Mine conductor.
Campbell HIGH		Moderate	U, radon		5 kilometres long narrow low-mag conductor forms boundary with radiometric high	Conductor is folded, faulted (brittle D_{S}), and parallel to a D_{S} fold.	Gravity low coincident with conductor	
Hart HIGH	Considerable historical drilling for U: graphitic pelites, kaolinite	Strong	Strong U, moderate radon,		Very strong conductor coincident with the boundary of a gravity low	Conductor in F₄hinge intersected by NE D₅ brittle fault.		
Zimmer HIGH	Sparse drilling, best targets not tested.	Strong			Semi-continuous relatively linear low-mag sub-parallel conductors	Conductor parallel to NE D₅ fault.	Linear gravity low, contiguous with conductor	Graphitic pelites with complex geometries, ductile deformation with evidence of later brittle reactivation, and anomalous geochemical, radon, radiometric and/or gravity surveys
Twin Lake HIGH	Historical drilling w few minor U anomalies.	Strong	U, moderate radon	Northern conductor: graphitic. Southern conductor: massive sulphide.	Series of semi-continuous relatively linear conductors	Conductors and subparallel D1- D3 shear zones are folded by F_4 fold. D_5 and D_6 faults bisect the core of the fold.	Gravity low	
Mustang HIGH	Previous drilling but did not test best targets.	Moderate		Graphitic pelites overlying a granite	Semi-continuous linear conductors (graphitic)	Conductors = D₁-D₃ shear zones, crosscut by NE D₅ faults and NW D₀ faults.	Broad gravity low in south	
Reed MODERATE		Moderate	Moderate radon		3 kilometres continuous linear high mag conductor	Conductor is parallel to D_1 - D_3 shear zones and a D_6 brittle fault and is cut by a D_5 brittle fault.	Gravity and mag lows	
Graham Lake MODERATE	Historical lake sediment survey	Strong	Moderate radon		Multiple semi-continuous linear conductors, potentially truncated by E-W conductors in the south.		Gravity low	
Sky MODERATE		Moderate	Moderate U, moderate radon		Curvilinear conductor straddling the contact with Zimmer Lake granite	Conductor is parallel to D ₁ -D ₃ shear zones and is folded or faulted.	Gravity low	areas may be favourable but more detailed work is needed.
Seager MODERATE	Drilling intersected graphite, graphitic pelites, and	Strong	Moderate U, moderate radon	Faults and conductors mark the	Continuation of Mustons			
Seager North MODERATE	Granite/metased contact is between two conductors. Radioactive boulders.	Moderate	Moderate radon	marking the granite/metased contact.	conductors	faults.	Gravity low	
Costigan North LOW					Shorter and disjointed FM	Conductors are parallel to D ₁ -D ₃		EM conductors that may represent thin
Costigan South LOW			Moderate radon		conductors	folded (F ₄). Cut by D ₅ fault and multiple D ₆ faults	Gravity low	packages of metasedimentary rocks overlying granite bodies
Jaschinsky LOW		Strong						

Table 9-6: Exploration Targets





Exploration Target Areas Key Lake South Project

Figure 9-20: Exploration Targets (Modified from SRK, 2015)

9.5 **QP** Comment

2

In the Author's opinion, the sampling methods and sample quality meet or exceed industry standards, the samples are representative, and there are no known factors that may have resulted in sample biases.

10 DRILLING

10.1 Summary

In 2016, past operator SaskCo carried out a diamond drilling program to test geophysical anomalies associated with conductive features (typically graphite) that are prospective for uranium mineralization. The 26 drillhole program featured the discovery of the Loki Graphite Deposit in the northern part of the project area and intersection of weak uranium mineralization in the Mustang target area. The 2016 drilling completed by SaskCo is summarized in Table 10-1 and Figure 10-1.

A total of four drill programs have been conducted by Abasca Resources on the Property: winter 2023, summer 2023, summer 2024, and winter 2025. The first two programs were focused on uranium exploration at KLS, where as the summer 2024 program was focused on the initial delineation of the Loki Flake Graphite Deposit as well as a small amount of uranium exploration in other target areas in the project area (Figure 10-1;Table 10-2). The winter 2025 program is ongoing as of the effective date of this report and assays have not been received as of the filing date of the report.



Figure 10-1: Map of the Key Lake South Project Area and the Collar Locations of the 2023 and 2024 Drill Programs.

Т	Table 10-1: Drillhole Locations of the 2016 program at KLS completed by Saskco.							
Drillhole ID	Disposition	Easting	Northing	Elevation	Azimuth	Inclination	EOH	
KS-CC16-01	S-112088	446210	6329835	540	90	-60	181	
KS-CC16-02	S-112088	446060	6329835	539	90	-50	181	
KS-CC16-03	S-112088	446210	6329570	538	45	-50	262	
KS-CC16-04	S-112088	446430	6329570	536	50	-60	169	
KS-CC16-05	S-112088	446360	6329510	536	50	-60	265	
KS-CC16-06	S-112088	446510	6329545	535	50	-60	184	
KS-CC16-07	S-112088	446475	6329515	535	50	-60	187	
KS-CC16-08	S-112088	446506	6329635	535	230	-60	166	
KS-CC16-09	S-112088	446370	6329600	535	50	-60	172	
KS-CC16-10	S-112088	446280	6329640	538	45	-60	181	
KS-CC16-11	S-112088	445740	6330270	556	30	-60	157	
KS-CC16-12	S-112088	445480	6330425	558	45	-60	165.5	
KS-CC16-13	S-112088	445448	6330394	557	45	-60	169	
KS-CC16-14	S-112088	445180	6330560	546	45	-60	133	
KS-CC16-15	S-112088	444850	6330810	562	45	-60	172	
KS-MS16-01	S-112289	436515	6319950	569	300	-60	126.7	
KS-MS16-02	S-112289	436606	6320050	569	283	-60	177	
KS-MS16-03	S-112289	436600	6318970	566	286	-60	144	
KS-MS16-04	S-112289	436675	6318988	566	290	-60	207	
KS-MS16-05	S-112289	436720	6320525	569	300	-50	206	
KS-MS16-06	S-112289	436840	6321020	571	290	-60	159	
KS-MS16-07	S-112289	436903	6320983	570	290	-60	174	
KS-MS16-08	S-112289	436805	6320803	570	290	-60	153	
KS-MS16-09	S-112289	436800	6321180	570	290	-60	132	
KS-MS16-10	S-112289	436958	6321569	569	290	-60	153	
KS-MS16-11	S-112289	437150	6321973	559	290	-60	177	

Table 10-2: Drillhole Locations of the 2023 and 2024 programs at KLS Completed by Abasca

Drillhole ID	Disposition	Easting	Northing	Elevation	Azimuth	Inclination	EOH
KLS-23-001	S-112289	436971.16	6320780.35	572.09	279.8	-65.2	546
KLS-23-002	S-112289	437231.81	6320685.5	574.28	275.05	-66.09	477
KLS-23-003	S-112289	437193.99	6320934.39	577.14	280	-65	393
KLS-23-004	S-112289	437252.47	6320921.88	573.21	279.9	-65.1	417
KLS-23-005	S-112289	437291.02	6320915.26	574.97	280.1	-66.1	414
KLS-23-006	S-112289	437266.2	6321022.66	576.54	280.4	-65.2	420
KLS-23-007	S-112289	437641.82	6321270.36	574.26	277.97	-64.95	603
KLS-23-008	S-112289	437389.44	6321101.53	575.64	280.08	-65.79	459
KLS-23-009	S-112289	437280.71	6321127.05	577.67	282.67	-63.73	426
KLS-23-010	S-112289	437300.3	6321216.96	577.76	280.2	-65.1	408
KLS-23-011	S-112289	437213.26	6321028.38	576.58	280	-65.3	396
KLS-23-012	S-112290	448933.92	6328209.11	536.59	70.3	-59.9	366
KLS-23-013	S-112290	448873.45	6328346.76	536.21	19.08	-59.65	456
KLS-23-014	S-112290	448044.93	6328498.15	537.38	21.79	-60.36	402
KLS-23-015	S-112088	447500.41	6328701.97	546.35	46.07	-60.09	390
KLS-23-016	S-112088	446998.35	6329081.89	545.46	41.88	-59.16	399
KLS-23-017	S-112088	446777.34	6329250.04	543.09	44.02	-60.03	381
KLS-23-018	S-112290	448921.19	6328052.64	537.23	70	-60.19	396
KLS-23-019	S-112290	448924.67	6327889.99	535.67	89.9	-60	393
KLS-23-020	S-112290	447584.69	6325699.82	561.56	135	-60.3	318
KLS-23-021	S-112290	447193.98	6325325.22	554.5	125	-60.9	373
KLS-23-022	S-112290	444823.41	6324372.37	560.52	135.83	-60.59	516
KLS-23-023	S-112290	444866.13	6323854.6	558.88	69.9	-59.9	300
KLS-23-024	S-112290	447053.72	6325306.99	563.61	130	-60	69
KLS-23-025	S-112290	447054.85	6325307.9	560.55	133.1	-62.95	417
KLS-24-026	S-112088	445377.25	6330260.16	556.98	34.7	-59.9	372
KLS-24-027	S-112088	445316.8	6330176.13	556.46	35	-60	420
KLS-24-028	S-112088	445480.65	6330397.52	559.31	34.96	-60.24	207

Drillhole ID	Disposition	Easting	Northing	Elevation	Azimuth	Inclination	EOH
KLS-24-029	S-112088	445404.97	6330476.99	558.83	35.24	-60	159
KLS-24-030	S-112088	445348.5	6330394.35	559.66	35.19	-60.01	234
KLS-24-031	S-112088	445289.41	6330312.8	557.17	34.87	-59.93	304
KLS-24-032	S-112088	445266.4	6330455.12	553.42	34.88	-59.88	210
KLS-24-033	S-112088	445210.91	6330371.22	552.22	34.9	-60.1	300
KLS-24-034	S-112289	437782.67	6322299.87	565.75	280.04	-65.11	531
KLS-24-035	S-112088	445151.7	6330290.47	552.33	35.17	-60.17	381
KLS-24-036	S-112436	438166.91	6323488.1	573.82	279.95	-64.99	531
KLS-24-037	S-112088	445569.7	6330359.83	557.83	34	-60.69	204
KLS-24-038	S-112436	438585.91	6325856.96	566.37	281.79	-64.83	602
KLS-24-039	S-112088	445512.74	6330280.59	554.45	34.9	-60.1	270
KLS-24-040	S-112436	438873.09	6326446.59	564.63	280	-60	519
KLS-24-041	S-112088	445460.36	6330200.55	556.83	35	-60.2	312
KLS-24-042	S-112088	445331.65	6331285.13	567.52	35.06	-65.18	444
KLS-24-043	S-112088	445649.4	6330306.63	555.38	35.09	-60.02	171
KLS-24-044	S-112088	445592.56	6330223.69	557.05	35.42	-60.17	276
KLS-24-045	S-112088	445537.9	6330142.13	557.61	35.1	-60.23	339
KLS-24-046	S-112088	445979.46	6330800.54	544.09	35.01	-60.05	468
KLS-24-047	S-112088	445477.63	6330061.3	561.64	35.09	-59.92	398
KLS-24-048	S-112436	438219.56	6323735.79	583.87	280.03	-65.1	498
KLS-24-049	S-112088	445729.25	6330244.86	555.43	34.97	-60.19	168
KLS-24-050	S-112088	445673.38	6330164.05	556.73	34.91	-59.93	240
KLS-24-051	S-112088	445619.08	6330082.76	556.56	34.93	-59.77	312
KLS-24-052	S-112088	445434.25	6330338.25	554.11	35.17	-60.01	222

10.2 Uranium Exploration Drilling Results

Two target areas, Mustang and Campbell, were drilled in 2016 by Saskco for a total of 4,553 metres. The 26 drillhole program intersected anomalous uranium (> 100 ppm U) in both target areas. The best intersection of the Mustang drilling was 256 ppm U over 0.4 m from 48.8 to 49.2 m in hole KS-MS16-07, and the best intersection in the Campbell area was 1950 ppm U over 0.3 m from 73.5 to 73.8 m in KS-CC16-06. The relationship between the sample length and the true thickness of the uranium mineralization is unknown, and the orientation of the system is also unknown.

The Winter and summer drill programs conducted by Abasca in 2023 totalled 10,135 metres. The programs successfully tested prospective conductor corridors throughout the property and intersected localized alteration proximal to re-activated graphic fault zones. The best intersection was 1,260 ppm over 10 cm from 310.5 to 310.6 m (true thickness and orientation is unknown) in KLS-23-004 in the Mustang target area.

In the summer of 2024, regional exploration comprised a total of 5 drill holes totalling 2,681 m were completed along the Mustang-Seager Trend. Strong silicification along with local clay alteration, including illite, and oxide staining near fault zones were observed along the trend. The corridor remains largely untested with many prospective targets. No anomalous uranium (> 100 ppm U) was intersected.

See Table 10-3 for all samples with anomalous uranium (> 100 ppm U) from the 2016 and 2023 drill programs.

Table 10-3: Samples	from the 2016 an	d 2023 drill pro	ograms with great	er than 100 ppm U.
Drillhole ID	From (m)	To (m)	Sample ID	U ppm
KS-CC16-01	73.70	74.00	98407	110
KS-CC16-02	122.50	123.00	437063	230
KS-CC16-03	139.70	140.00	98468	450
KS-CC16-03	162.80	163.00	98473	320
KS-CC16-04	58.00	58 50	437225	116
KS-CC16-04	74.30	74 40	98494	829
KS-CC16-05	70.20	70.70	08511	578
KS-CC16-05	86.90	87.40	90515	100
KS CC16 06	51.00	51 20	08553	580
	71.00	71 70	90555	500
KS-CC10-00	71.30	71.70	98558	090
KS-CC10-00	71.90	72.40	98559	117
KS-CC16-06	73.50	73.80	98560	1950
KS-CC16-06	73.80	74.50	98561	102
KS-CC16-10	41.00	41.50	426452	103
KS-CC16-12	81.80	82.00	98713	325
KS-CC16-12	82.00	82.20	98714	288
KS-CC16-14	89.50	89.70	98786	623
KS-CC16-15	94.00	94.60	98800	167
KS-MS16-06	69.30	69.70	98939	160
KS-MS16-06	70.00	70.50	98940	113
KS-MS16-07	43 90	44 20	98972	216
KS-MS16-07	48.80	49.20	98973	256
KS-MS16-07	40.00	/0 70	08070	153
KS MS16 07	- 5. - 0	50.50	08075	179
	142.00	142.40	90975	107
KS-WS 10-11	142.90	143.40	99077	187
KLS-23-002	281.40	281.55	304097	189
KLS-23-003	214.00	214.20	304503	139
KLS-23-003	214.20	214.70	304504	141
KLS-23-003	219.90	220.00	304159	150
KLS-23-003	260.60	260.70	304508	540
KLS-23-004	309.50	310.00	304516	104
KLS-23-004	310.00	310.50	304517	156
KLS-23-004	310.50	310.60	304518	1260
KLS-23-004	310.60	310.70	304519	179
KLS-23-004	327.35	327.50	304533	565
KLS-23-004	340.65	340.80	304539	110
KLS-23-005	352.95	353.45	304547	176
KI S-23-005	353.45	353.60	304548	601
KLS-23-005	353 60	354 10	304549	220
KLS-23-006	317 10	317.60	304557	126
KLS-23-006	330.95	331 17	30/1572	/13
KLS-23-007	110 50	420.00	30/58/	230
KLS-23-007	419.00	420.00	304580	105
KLS-23-007	427.00	427.50	204502	176
KLS-23-007	420.00	420.00	304593	170
KLS-23-008	298.50	299.00	304598	126
KLS-23-008	299.00	299.50	304599	102
KLS-23-008	299.50	300.00	304601	129
KLS-23-009	191.50	191.60	304449	197
KLS-23-009	205.00	205.50	304642	264
KLS-23-009	209.00	209.50	304651	104
KLS-23-009	209.50	210.00	304652	165
KLS-23-009	345.40	345.60	304665	507
KLS-23-009	345.60	345.70	304666	206
KLS-23-011	192.33	192.83	304675	157
KLS-23-011	269.75	270.00	304679	252
KLS-23-011	329.90	330.00	304881	135
KLS-23-014	84.40	84.90	304687	204
KLS-23-016	96.13	96.44	356064	123
KI S-23-017	86 54	86 76	304692	518
KI S-23-017	139 50	140.00	356114	109
KI S-23-017	140.00	140 50	356115	294
KI S-23-017	146.00	146 50	356126	207
	170.00	140.00	000120	201

Drillhole ID	From (m)	To (m)	Sample ID	U ppm
KLS-23-022	103.38	103.54	356427	135
KLS-23-022	137.55	137.90	356435	131
KLS-23-022	138.54	138.80	356438	145
KLS-23-022	207.40	207.60	356448	104
KLS-23-022	277.23	277.63	304703	126
KLS-23-022	277.63	278.03	304704	198
KLS-23-022	337.44	337.94	304716	171
KLS-23-022	368.02	368.52	304722	113
KLS-23-022	372.80	373.30	304733	113
KLS-23-022	386.20	386.57	356966	106
KLS-23-022	472.27	472.87	304737	451
KLS-23-023	54.65	54.98	304747	248
KLS-23-023	54.98	55.10	304748	223

10.3 Graphite Exploration Drilling Results

Previous drilling in 2016 by SaskCo in the area that is now the Loki Deposit focused on uranium exploration given its proximity to the Key Lake deposits as well as EM anomalies. Although the uranium anomalies intersected here were limited, the drilling demonstrated that the graphitic shear zone was at least 2 km in strike-length, approximately 35 m in thickness, and extended up to the base of the overburden. At the time, only representative samples from the graphitic shear zone were collected for whole-rock analyses at SRC Geoanalytical Laboratories (SRC) in Saskatoon for the purpose of uranium exploration in the area.

At the end of 2023, Abasca evaluated the Loki Deposit area for its graphite potential. Representative samples from the 2016 drill program stored at SRC were tested for graphite content. The best assay returned 22.2 % Cg from KS-CC16-12 between 88.0 and 88.5 m. Additionally, 10 samples were selected for flake size evaluation by QEMSCAN of which, the best result returned a median diameter passing percentage of 214 μ m. These initial results were sufficient for Abasca to conduct further investigations that led to the 2024 summer drill program, which comprised delineation of the Loki Flake Graphite Deposit as well as the drilling of two holes along parallel conductors to the north. Additionally, the core from the 2016 drilling was re-sampled, comprising 656 samples, and analysed for graphite content. Results from the resampling within the Loki Deposit were comparable with results from the 2024 drilling, with the best result from drillhole KS-CC16-13 from 116.0 to 116.5 m at 17.6 % Cg.

Drilling at the Loki Flake Graphite Deposit in the summer of 2024 included 20 drillholes, totaling 5,499 m. The drilling, which was conducted on a 100 m x 100 m grid along a 600 m wide segment of the over 2 km Loki Flake Graphite Deposit trend, focused on testing the continuity along strike and at depth. All holes successfully intersected graphite mineralization. Representative plan view and cross sections of assay graphite grades of the Loki Deposit are available in section 14.

The two holes drilled along conductors to the north of the Loki Deposit both intersected graphite mineralization. Graphite mineralization here was visually similar to the Loki Deposit with the best intersection being 60 m in length in hole KLS-24-046; however, assays for these holes were not available at the time of this report.

Further delineation of the Loki Deposit was conducted at the beginning of 2025 during a winter program. Drilling consisted of 22 holes totaling 5,925 m. The drilling focused on extending the Loki Deposit toward the northwest and southeast, as well as two exploration holes to the north testing parallel conductors. Initial field observations confirmed graphite mineralization along strike of the Loki Deposit as well as in hole KLS-25-072 which targeted a parallel conductor to the north and intersected approximately 45 m of graphite mineralization. Assays from the 2025 winter program are pending.

10.4 Drill Hole Surveying

Base Diamond Drilling was contracted for the drill programs in 2023 and 2024 and used a Zinex A5 diamond drilling rig. Holes were cased using HQ rods and cored using NQ rods. Drillholes were spotted using a handheld GPS and confirmed using a Trimble TDC650 GPS with accuracy less than 1 m. The drill was oriented using a Stockholm Precision Tools Rig Aligner and downhole orientation was surveyed using a Stockholm Precision Tools GyroMaster, both tools being True-North non-magnetic gyrocompasses. Axis Mining core orientation tools were used to orient the drill core to obtain structural measurements. Drillholes were probed using either a Mount Sopris 32GR gamma probe or Stockholm Precision Gamma Probe.

The 2016 drilling by SaskCo was conducted by Team Drilling. Holes were cased using HQ rods and cored using NQ rods. Downhole surveys and core orientation were conducted using a Reflex equipment. Drillholes were probed using a Mount Sopris HLP-2375 gamma probe.

10.5 Drill Core Handling and Logging Procedures

Drill core is logged at the temporary work camp and the data was entered into a custom Access Database. Core is oriented and recovery and Rock Quality Designation (RQD) is measured between each 3 m block marker and written on each box. Radioactivity is measured using a handheld scintillometer. Geological observations (lithology, alteration, major and point structures) are recorded in the database.

Core samples are taken systematically, every 10 m, and around areas of elevated radioactivity and graphitic zones. PIMA samples are taken every 10 m in clay-rich zones, or where clay alteration is observed.

QAQC samples are taken/inserted throughout the sampling process and include:

- Pulp-duplicate sample: every 100 samples
- Crush-duplicate sample: every 100 samples
- Field-duplicate sample: every 40 samples
- Blank reference material: every 40 samples
- Certified reference material: every 40 samples within mineralized zones
 - Uranium-specific or graphite-specific materials are used, depending on the exploration type.

Core is photographed, both wet and dry, after logging and sample selection has been completed.

In reviewing previous documentation on the project, the QP is of the opinion that core handling and logging procedures in 2016 was completed in a similar manner to that of the Abasca procedure outlined above.

10.6 QP Comment

In the Author's opinion, the drilling, core handling, logging, and sampling procedures meet or exceed industry standards and are adequate for the purpose of this Technical Report. The Author is not aware of any drilling, sampling, or recovery factors that could materially impact the accuracy and reliability of the results.

11 SAMPLE PREPARATION, ANALYSES, AND SECURITY

11.1 Historical Sampling Procedures

The reviewed historical results from 1969 to 2010 have not been verified by the author and there is a risk that any future confirmation work and exploration may produce results that substantially differ from the historical results. These results, which are only discussed in section 6, are considered relevant to assess the mineralization and economic potential of the property, but not to the Mineral Resource disclosed in this document. Detailed information regarding sample preparation, quality control measures, analyses or security in the private and publicly available reports documenting grab, chip, channel, or drill core sampling, for those exploration programs were not available. The QP is not aware of the laboratory used, the laboratory's relationship to the issuer, or if the laboratory was certified by any standards association for these samples.

11.2 Sample Preparation

Core samples were split using a hydraulic splitter. Prior to each sample being split, the splitter and work area was cleaned. Core samples were split perpendicular to the main foliation to ensure representative samples were being collected. Each core sample comprised half the core with exception to field-duplicate samples which were quartered. Samples were stored in separate bags that were labelled and included a barcode label inside the bag. Each sample bag was sealed and packaged in sample pails and dispatched to SRC. Sample dispatches and analytical requests are documented and stored in the Company's database. Sample preparation by SaskCo during the 2016 drill programs was conducted in a similar manner, but a core saw was using instead of a hydraulic splitter.

11.3 Analyses

SRC operates in accordance with ISO/IEC 17025:2005 (CAN-P-4E), General Requirements for the Competence of Mineral Testing and Calibration laboratories. All processes performed at the laboratory are subject to a strict audit program, which is performed by approved trained professionals.

SRC is independent of Abasca.

11.3.1 Drill Core Geochemical Analyses and Assay

All samples were submitted for SRC's ICP-MS2 Basement Exploration Package. The package includes ICP-MS analysis on the partial digestion as well as trace elements on the total digestion. ICP-OES is used for major and minor elements on the total digestion. All samples are also analysed by ICP-OES for Boron by fusion. Samples within the graphite mineralized zones were analysed for total Graphitic Carbon and total Sulfur by induction furnace. Samples in areas of elevated radioactivity were also submitted for SRC's U_3O_8 Assay package by ICP-OES. Analysis of Rare Earth Elements (REEs) was requested for some samples and was done at SRC by fusion and ICP-MS.

11.3.2 Drill Core Bulk Density Analyses

In-house field density analysis was conducted by weight difference between the sample dry and wet. Analysis was done approximately every 100 samples. Half-core samples were also selected for density analysis at SRC using their SG3 package. Samples are weighed, coated in wax, and weight wet to determine their density.

11.4 Quality Assurance and Quality Control

11.4.1 Protocols

Quality assurance/quality control (QA/QC) programs validate the accuracy of analytical results and are essential for verifying the results of the resampling program. Abasca's QA/QC protocols for drilling programs includes:

- Certified reference materials (CRM) Determination of accuracy
- Blank samples Screen cross-contamination between samples during preparation and analyses.
- Duplicate samples Determination of precision/repeatability

CRMs are inserted into the sample stream at a frequency of approximately 1 CRM per 40 samples. CRMs are also inserted at the beginning of each mineralized zone as well as randomly where the mineralization intensity appears to change. Within graphite-mineralized zones, Abasca used OREAS 722, 723, 724, and 725 CRMs. The OREAS 722-725 CRMs are a Graphite ore standard purchased from Analytichem in Baie D'Urfé, Quebec, Canada. The CRMs are prepared by blending graphite ore from the Queens Graphite Mine in the Matale/Kurunegala Project area in central Sri Lanka with barren I-type granodiorite from the Lysterfield complex located in eastern Melbourne, Australia. Within elevated radioactive zones, Abasca uses BL2A, BL4, and BL5 uranium CRMs prepared by CANMET and sourced from the Beaverlodge Domain uranium deposits. The CRMs used at KLS is summarized in Table 11-1.

CRM Code	Unit	Certified Values	Certified Standard Deviation
OREAS 722	Cg wt %	2.03	0.093
OREAS 723	Cg wt %	5.87	0.169
OREAS 724	Cg wt %	12.06	0.311
OREAS 725	Cg wt %	24.52	0.728
BL2A	U ppm	4264	32.5
BL4A	U ppm	1260	20
BL5	U ppm	71200	350

Table 11-1: Certified Reference Material Details

11.4.2 QA/QC Results

Results of the QA/QC program have been well documented by Abasca and SaskCo. The QP reviewed the documentation provided by Abasca in addition to reviewing the QA/QC data.

Results from the QA/QC samples are continually tracked by Abasca as certificates for each sample batch are received, checking for batches that exceed the failure criteria. Standard reference materials fail when results are more than three standard deviations from the expected value. Blank samples fail when results are greater than 20 times the lower detection limit. If QA/QC samples of a sample batch pass within acceptable limits, the results of the sample batch are imported into the master database. If the QA/QC sample fails, the entire batch is to be reanalyzed.

The were three blank sample failures at 0.26%, 0.30%, and 0.41% Cg, which were ultimately accepted given the CRMs of the batch passed. Of the 222 graphite CRMs measured, twelve standards fall outside of the acceptable range of mean plus three standard deviations (Figure 11-1). The field and laboratory duplicates demonstrated an acceptable level of precision and repeatability. Abasca and the QP consider these results acceptable given the failures are just outside the failure limits.



CRM Results

11.4.3 SRC Internal QA/QC Program

Quality control was maintained for all analytical apparatus at SRC with certified reference material used to track analytical drift, and data accuracy and precision. Independently of Abasca's QA/QC samples, standards were inserted into sample batches at regular intervals by SRC. Any certificates that include a standard sample that fall outside of 3 standard deviations (SD) is returned for re-analysis. As well, any certificate that includes two successive samples that fall outside 2 SD are also returned for re-analysis. All laboratory control samples fall within control limits.

11.5 Security

As each hole was drilled, drilling contractor personnel placed the core in boxes at the drill site and secured core boxes with lids secured to the box. Core was then delivered to the core processing facility twice a day. All core was logged, sampled and stored at the camp's logging facilities. On site sample preparation consists of core splitting by geological technicians under the supervision of geologists. The bags containing the split samples are then placed in buckets with lids for transport.

All samples are driven by Abasca personnel to SRC. If appropriate, the samples were accompanied by Transport of Dangerous Goods (TDG) documentation completed by qualified personnel. A request for analysis form was prepared prior to shipment, detailing each batch of samples, sample types, preparation codes, and analysis codes.

Samples were received at SRC either as dangerous goods requiring appropriate TDG documentation or as exclusive-use samples (with no radioactivity documentation attached). Upon arrival, all information pertaining to a received shipment of samples is verified by SRC personnel, including sample numbers, number of pails, sample type/matrix, condition of samples, and request
for analysis. After the completion of analyses, data are sent securely via electronic transmission to Abasca. These results are provided as a series of PDFs and an Excel spreadsheet.

SRC places a large emphasis on confidentiality and data security. Appropriate steps are taken to protect the integrity of samples at all processing stages. Access to the SRC premises is restricted and monitored.

In reviewing previous documentation on the project, the Author is of the opinion that sample handling, shipment, and security for samples collected in 2016 was completed in a similar manner to that of the Abasca procedure outlined above.

11.6 QP Comment

There were no significant issues identified concerning sample preparation, shipments or sample security for the 2016 to 2024 drill programs, which constitute the basis for the Mineral Resource Estimate enclosed in this report.

The QP has reviewed the 2016 to 2024 data and is of the opinion that the procedures and systems employed to collect and manage this information meet or exceed industry standard practice, and that the QA/QC results demonstrate acceptable levels of accuracy and precision at the laboratories. In the Author's opinion the results indicate that the database is suitable for the purposes of this Technical Report.

12 DATA VERIFICATION

12.1 Site Visit and Core Review

A site visit to the KLS Property was carried out January 28 to 29, 2025, by UMR's QP, Matt Batty, MSc, P. Geo. The two-day site visit included:

- Review of drill core from an ongoing drillhole,
- Review of mineralized drill core from two drillholes completed in 2024,
- Confirmation of three drillhole collar locations,
- Review and verification of the geological setting / environment of the Project,
- Review of drilling, logging, sampling, analytical and QA/QC procedures, and
- Review of overall site facilities.

Mr. Batty reviewed the entirety of available core from KLS-25-056 (0 to 233.0 m), which was being drilled at the time of the visit, and mineralized intervals from drillholes KLS-24-037 (79.7 to 125.9 m) and KLS-24-039 (156.5 to 204.9 m) (Figure 12-1). The selected drillholes provided examples of low- and high-grade graphite mineralization, an overall sense of the Property's geology, and spatial representation. A comparison of the drill logs and assay results with the drill core showed that the information recorded in the drill database matched well with the drill core. As part of the review, the QP verified the occurrences of mineralization visually (Figure 12-2).



Figure 12-1: Loki Core Review



Figure 12-2: Visual Inspection of Mineralization from KLS-24-037

The locations of three drillhole collars were confirmed visually and with a handheld Garmin GPS, inclusive to KLS-25-053, KLS-25-056, and KLS-25-057. The database records were within 3 metres of the less accurate handheld measurements; and therefore, were deemed acceptable. The collar locations for the KLS-25-053 and KLS-25-056, were demarked with tree branches or inserted into the ground near the drill collar (Figure 12-3). KLS-25-057 was actively being drilled during the site visit and the collar location was recorded at the drill head.



Figure 12-3: Labelled Picket Demarcating KLS-25-053 Collar

12.2 Database Validation

Mr. Batty validated the diamond drilling database via the following digital queries:

- Header table: searched for incorrect or duplicate collar coordinates and duplicate hole IDs.
- Survey table: searched for duplicate entries, survey points past the specified maximum depth in the collar table, and abnormal dips and azimuths.
- Lithology, alteration, and structure tables: searched for duplicate entries, intervals past the specified maximum depth in the collar table, overlapping intervals, negative lengths, missing collar data, missing intervals, and incorrect logging codes.
- Geochemical, density, and assay tables: searched for duplicate entries, sample intervals past the specified maximum depth, negative lengths, overlapping intervals, sampling lengths exceeding tolerance levels, missing collar data, missing intervals, and duplicated sample IDs.

No significant issues were identified.

12.3 Independent Verification of Assay Table

The assay table contains 6,909 laboratory records from 84 drill holes, and 4,011 samples of those samples, from 35 drill holes, have graphitic carbon (Cg) results. The author verified 353 records from 8 drill holes representing approximately 9% of the data for Cg values against 8 different laboratory certificates. No major discrepancies were found.

12.4 Validation Limitations and Adequacy of the Data

The QP reviewed the adequacy of the exploration information and the visual, physical, and geological characteristics of the mineralization of the Property and found no significant issues or inconsistencies that would cause one to question the validity of the data provided by Abasca.

In the QP's opinion, the KLS Project exploration data are free of any material or systematic errors, well validated and of sufficient quality for use in this Technical Report.

Based upon the QP's evaluation of the drilling, sampling and QA/QC programs completed by Abasca, which meet or exceed industry standards, and based on the QP's own validation of the data, it is Mr. Batty's opinion that the Loki drill and assay data are appropriate for use as presented in this Technical Report.

13 MINERAL PROCESSING AND METALLURGICAL TESTING

In 2023, a total of 10 samples were selected from the 2016 drill cores (Table 13-1) as an initial evaluation of the graphite flake size by QEMSCAN analysis conducted at SRC. The QEMSCAN is built on an FEI Quanta 650 scanning electron Microsoft fitted with a field emission gun (10 nm resolution) and duel Bruker XFlash 5030 energy dispersive spectrometers with a maximum throughput of 1.5 Mcps. The best result was from sample 98635 from drillhole KS-CC16-09 from 40.0 to 40.5 m. The 12.3 % Cg sample returned a median diameter of 214.76 μ m. The grain size distribution for these samples were done in two batches and are shown in Figure 13-1 and Figure 13-2.

Drillhole ID	Sample #	From	То	Length	Graphite (% Cg)	Median Diameter (µm)
KS-CC16-06	98555	60.00	60.50	0.50	10.7	195.32
KS-CC16-09	98635	40.00	40.50	0.50	12.3	214.76
KS-CC16-11	98696	67.00	67.50	0.50	8.07	212.65
KS-CC16-11	98701	79.00	79.50	0.50	16.5	152.67
KS-CC16-12	98717	88.00	88.50	0.50	22.2	106.34
KS-CC16-12	98722	103.10	103.60	0.50	6.87	132.55
KS-CC16-13	98767	110.00	110.50	0.50	12.6	135.71
KS-CC16-14	98778	46.00	46.50	0.50	16.7	101.82
KS-CC16-14	98782	61.00	61.40	0.40	4.04	137.12
KS-CC16-15	98814	120.50	121.00	0.50	15.7	140.27

GSD

Table 13-1: QEMSCAN results of preliminary flake size evaluation.

Percent Passing (%) Grain Size (µm)

Figure 13-1: Grain Size Distribution by QEMSCAN for batch 1 samples.



Figure 13-2: Grain Size Distribution by QEMSCAN for batch 2 samples

A preliminary metallurgical study has been initiated to evaluate the beneficiation potential of the graphite from the Loki Deposit. Samples from one drillhole (KLS-24-052) were selected for the testing. A composite sample was created for the evaluation and comprises samples from the modelled zone as well as samples from the hanging wall where lower concentrations of graphite were observed. The final results from the report are pending. The aims of the preliminary beneficiation testing program on the graphite ore sample are:

- To determine the chemical composition of the composite sample by ICP whole rock and total digestion analysis, its graphite grade, sulfur content by LECO, mineralogy analysis (XRD) and the composite feed density-Pycnometer density analysis.
- To determine the flake size of the recoverable graphite
- To determine the grade and recovery achievable from the graphite ore beneficiation
- To determine the maximum purity of the graphite through physical and chemical refinement

14 MINERAL RESOURCE ESTIMATE

14.1 Introduction

The 2025 Mineral Resource estimate for the Loki Flake Graphite Deposit was completed by Matt Batty, MSc, P. Geo of UMR. The effective date of the enclosed mineral resource is April 10, 2025, coincident with the date the last assay received.

One wireframe was created to represent mineralization at the Deposit and an additional five wireframes were created to characterize the local lithology. Samples were composited to 8 m lengths within the mineralized domain. The composites were reviewed for outliers and declustered, resulting in a decided representative dataset for the domain.

A block model was constructed to encompass the mineralization and lithology domains using a parent block of 20 m (strike direction) by 20 m (thickness direction) by 16 m (vertical direction) with 10 m by 10 m by 8 m sub-blocks. The blocks were populated using Ordinary Kriging (OK) as informed by the directional variogram. The lithology domains were assigned a density based on specific gravity measurements observed within the domains or observations from analogous deposits. A linear regression was used to assign density to blocks with estimated graphite grades.

The block model was validated via volume comparison, mean grade comparison, visual inspection, swath plots, and change of support comparison. The Author found the block model to reflect the geological interpretation, grade continuity to be reasonable and confirmed that the block grades were reasonably consistent with local drill hole composite grades.

The estimate is based on 22 diamond drill holes defining the mineralized domain, totalling 5,801 m. The Mineral Resource is entirely composed of Inferred Mineral Resources, inclusive to 11.31 million tonnes at an average grade of 7.65 % Cg for a total of 0.86 million tonnes Cg. The Mineral Resources are reported at a cut-off grade of 2.78% Cg within a conceptual open pit design. No Mineral Reserves have been estimated at the Property.

The reported material is classified as Inferred due to the uncertainty in the quality of the graphite (e.g. graphite flake size, uranium contamination, etc.), the general widely spaced drill pattern (~100 m), and the overall uncertainty in the spatial distribution of grades. The reported Inferred Mineral Resources approximates a drill hole spacing of 100 m.

In Understood's opinion, the estimation methodology is consistent with standard industry practice and the Inferred Mineral Resource Estimates for Loki Deposit are reasonable and acceptable.

14.2 Source Database

The drill hole data was provided as individual spreadsheets, including collar surveys, downhole surveys, lithology logs, mineralization logs, alteration logs, structural logs, recovery logs, geochemistry data, and specific gravity data.

The collar spreadsheet composed of 151 entries that details the drill hole name, the collar locations in Universal Transverse Mercator (UTM) North America Datum 1983 (NAD 83) zone 13N coordinates, and the end depth of the drill hole. According to the collar spreadsheet, which contains historic, recent, and ongoing drilling, a total of 37,053 metres have been drilled on the property.

The survey spreadsheet contains 2,211 records from 147 drill holes, which averages to a survey data point every 16.8 m of borehole. There are four holes with no downhole survey measurements. Two of the drill holes, CS-78-12A, and CS-78-13A, are abandoned holes from 1978 that are distal to the deposit with depths less than 10 m. The remaining two holes with no survey measurements, KLS-25-067 and KLS-25-074, were being drilled at the time the data was exported and, thus, does not yet have any downhole deviation measurements.

The lithology spreadsheet contains 1,784 logged intervals from 147 drill holes. The entries in the lithology spreadsheet define the drill hole, the interval, and the lithology log. The drill holes with no lithology logs were drilled distal to the deposit or being drilled at the time the data was exported.

The geochemistry spreadsheet contains 6,909 entries for an array of analytes, including 4,011 assays for graphitic carbon (Cg) results, 561 uranium assay results, and 102 entries for specific gravity from the water immersion method. Cg values range from below detection to 26.4 %, and specific gravity values range from 2.07 to 3.07 with an average of 2.60. At the time the QP reviewed the database, the assay results from the 2025 drill program have not been received from the SRC Geoanalytical laboratory.

Additional to drill hole data, the QP was provided with a Digital Terrain Model (DTM) with 5 m resolution for a topography surface.

Historic boreholes KS-CC16-11 and KS-CC16-12 were destroyed in a fire and could not be resampled; thus, these two holes are excluded from the resource estimate due to incomplete assay records for graphite. The other two historic holes drilled on the deposit, KS-CC16-13 and KS-CC16-14, were resampled and assayed for graphite and are included in the model along with 20 holes from the 2024 drill campaign.

14.3 Drill hole Validation

The drill hole data spreadsheets were organized and imported into a Vulcan database and checked for the following:

- Unique collar locations;
- Overlapping assays;
- Empty table check for assays, collars, lithology, and surveys;
- Increasing depth field in surveys, assays, lithology, and specific gravity field;
- Consecutive variation tolerance (max of 30 degrees) for dip and azimuth;
- Unique sample ID for assay and specific gravity measurements;
- Ensure azimuth survey measurements are between 0 and 360;
- Ensure dip survey measurements are between -90 and 0;
- Ensure total carbon (%) grades are between 0 and 100;

There are no overlapping assays, duplicate assay sample IDs, depth errors, or gross numerical errors in recorded assay grades. There are 2 holes that share collar coordinate locations with at least one other hole, but this is not in error and represents an abandoned hole that was restarted. There are 35 holes with no assay, lithology, and/or survey data, all of which are distal to the deposit or were recently drilled and awaiting assay results. The data was also reviewed in cartesian space. No significant errors were identified in the digital queries or visual review.

14.4 Geologic Domaining

The Loki Deposit is a broad graphite bearing shear-zone along an orientation of 121° azimuth and -52° dip to the southwest. The QP created one vein wireframe in Leapfrog Geo (version 2024.1.3) to constrain the estimate in the predominate orientation of mineralization (Figure 14-1). The grade-shell wireframe is modelled using a grade intercept limit equal to or greater than 15 m with a minimum grade of 1 % Cg, although small intervals (~2 to 3 m) of internal waste (e.g. < 1% Cg) are included to maintain continuity. Extension distance for the mineralized wireframes was halfway to the next hole, or approximately half the local average drill hole spacing vertically and horizontally past the last intercept. The wireframe is approximately 740 m long in the strike direction with an upper contact 55 m below surface and extends to 335 m below surface. The thickness of the modelled graphite ranges between 10 to 55 m with an approximate average of 35 m. Concordant thinner graphite intersections are observed above the modelled domain but not modelled as the intersections did not meet the criteria for thickness and/or grade continuity.



Figure 14-1: Plan View of Graphite Wireframe Interpretation underlain by Drillhole Cg Assay Grades.

A geologic model describing the bedrock to overburden contact was used to clip upper extents of graphite wireframes. Other major units observed in the deposit area were also modelled, including pegmatite units, granitic gneiss, and biotite gneiss (Figure 14-2). The modelled graphite vein follows the lower pegmatite boundary to honour this observation made in the core. All generated wireframes were exported from Leapfrog and imported into Maptek's Vulcan (version 2024.2) for estimation.



Figure 14-2: Cross-section (Looking at an Azimuth of 125°) of Graphite and Lithology Wireframe Interpretations underlain by Drillhole Cg Assay Grades.

14.5 Compositing and Statistical Analysis

14.5.1 Compositing

Assays were composited at 8 m lengths in Vulcan starting at the graphite wireframe boundary nearest to the collar. Composites less than the composite length, which were located at the bottom of the mineralized intercept, triggered a recompositing of the drill hole where the extra length is equally distributed to the composites along the drill hole string. Drillhole locations with no or missing values were assigned a value of 0.0 % Cg.

14.5.2 Declustering

A global representative distribution of variables is essential for unbiased resources estimation, and one step in determining a representative distribution is the consideration of the spatial arrangement of the data. Declustering techniques assign each datum a weight based on its closeness to surrounding data.

The declustering weights were created through a block model approach. A block model was created at block dimensions (4 m x 4 m x 4 m) smaller than the composites (8 m) with the blocks coded to each domain. The composites were assigned a unique ID per composite and a nearest neighbour estimation was completed on the unique IDs. The number of blocks assigned the unique ID were divided by the total blocks of the domain, resulting in the declustering weight for that composite (Figure 14-3). The weights were rescaled to be manageable for databases.



Figure 14-3: Long Section (Looking along an Azimuth of 032° and plunge of + 21°) of Composites (Spheres) Displaying Declustered Weights in Graphite Domain.

14.5.3 Outlier Capping and Representative Distribution

Where the assay distribution is skewed positively or approaches log-normal, erratic high grade assay values can have a disproportionate effect on the average grade of a deposit. One method of treating these outliers in order to reduce their influence on the average grade is to cut or cap them at a specific grade level. The QP is of the opinion that the influence of high-grade gold assays must be reduced or controlled.

The uncapped composited data with the declustered weights for each domain was reviewed in probability plots, histograms, and cartesian space for stationarity and outliers. Upon review, the QP decided no grade capping was necessary, rather a High Yield Limit (HYL) function was used to restrict the influence of samples greater than 11% Cg (Figure 14-4). The HYL function was implemented during estimation, reducing the effective search range of the samples above the threshold to 50 m (strike) by 25 m (dip direction) by 10 m (thickness).



Figure 14-4: Probability Plot and Histogram of Composite Distribution of the Graphite Domain

The composites in conjunction with the declustered weights, produce a representative distribution for the Mineral Resource Estimate of the Loki Graphite Deposit.

The composites with no weightings applied are used for the estimate, and the estimate is compared to the composites with the declustered weightings. The summary statistics of the representative distributions, such as count, average, variance, and CV, for the domain is listed in Figure 14-4.

14.6 Variography

As Rossi and Deutsch (2014) summarize, "The single biggest problem in variogram interpretation is a lack of data to calculate a reliable variogram. Too few data for reliable variogram interpretation does not mean there is no variogram; it is just hidden or masked by data paucity. Geological analogues or expert judgment may be required."

Experimental semi-variograms for the major and semi-major directions were created on the 8 m Cg % composites in the graphite domain. In the opinion of the author, the 8 m composites did not provide an adequate measure of short-range variability in the minor direction and elected to use 1 m composites for the minor direction experimental variogram. A variogram model was fitted to the experimental variograms with the nugget contribution being applied to each model as observed in the downhole variogram. The model is summarized in Table 14-1 and a visualized in Figure 14-5 and Figure 14-6.

Variable	Structure	Contribution	Tuno		Direction			Range	
Variable	Structure	Contribution	туре	Azi	Plunge	Dip	Major	Minor	Vertical
	C ₀	0.20	Nugget	-	-	-	-	-	-
Cg %	C1	0.22	Spherical	121	0	-52	110	71	5
	C ₂	0.58	Spherical	121	0	-52	260	200	14

Table 14-1: Variogram Model Parameters of Cg in Graphite Domain



Figure 14-5: Variogram Model of Cg% in Major and Semi-Major Directions underlain with Experimental Variogram Model.



Figure 14-6: Variogram Model of Cg% in Minor Direction underlain with Experimental Variogram Model.

14.7 Density

In the estimation domain, the graphite grade variable is nearly exhaustively sampled at all drill hole locations, but the density variable is missing at most locations. The collocated grade and density variables are weakly and negatively correlated. A linear regression was fitted to the collocated data and the regression was applied to the block estimates with Cg % grades. The equation is listed below, and the regression is visualized in Figure 14-7.



 $SG = 2.654 - 0.0105 \times \%$ Cg

Figure 14-7: Specific Gravity Measurements Histogram and Bivariate Plot vs Cg wt% with Fitted Linear Regression

The lithology domains were assigned a density based on specific gravity measurements observed within the domains and, in the case of the overburden and granitic gneiss, an assumed density was used based on observations from analogous deposits (Table 14-2).

Iau	Table 14-2. Assigned Domain by Lithology Domain						
	Lithology Domain	Assigned Density					
	Overburden*	2.00					
	Biotite Gneiss	2.63					
	Granitic Gneiss*	2.70					
	Pegmatite 1	2.64					
	Pegmatite 2	2.65					

Tab<u>le 14-2: Assigned Domain by Lithology Domain</u>

*Assumed Density Based on Observations of Analogue Deposits

14.8 Block Model Estimation

14.8.1 Block Model Definition

A block model was constructed to encompass the graphite and lithology using a parent block of 20 m (strike direction) by 20 m (thickness direction) by 16 m (vertical direction) with 10 m by 10 m by 8 m sub-blocks. The parent block size was selected to approximate the size of an open pit mining unit, and the sub-blocks were used to adequately capture the geologic features of the modelled estimation and lithology domains. The origins, extents (offsets from origins), and rotation of the block model are summarized in Table 14-3.

Table 14-3: Block Model Definitions							
	Origins						
х	Y	Z					
445070	445070 6331060						
	Offset						
х	Y	Z					
900	1400	608					
	Rotation*						
Bearing	Bearing Plunge Dip						
206	0	0					
* Rotation expre	essed in Vulcan's rot	ation convention					

14.8.2 Estimation Strategy and Testing

A Mineral Resource Estimate is to honour the data, replicate the relationships therein, be globally unbiased, and be geologically reasonable. An estimation strategy was constructed, and multiple models were tested to meet the stated criteria.

Minor localizations of high-grade and low-grade concentrations of graphite is observed within the domains. Ordinary Kriging (OK) assumes an unknown mean (and consequently a local varying mean during estimation) and was therefore selected as the kriging method to manage the local trends within the domains.

The estimate is to closely replicate the declustered mean of Cg % within the domains to ensure the estimate is globally unbiased. Target Cg % variance was derived from the composite data using a Discrete Gaussian Model (DGM). The DGM accounts for change of support using a variogram model, a normal score transformation, and Hermite polynomials (Harding & Deutsch, 2019). Change of support means that as the support of the core sample increases to the size of a mining unit (or block size), the observed variability will decrease and the distribution will become more symmetric (Harding & Deutsch, 2019; Figure 14-8). The QP completed a series of OK models to test different composite restrictions per estimate, targeting the declustered mean and variance from the DGM. Through this testing it was determined that 3 to 8 samples are to be used per estimate with no restrictions on samples per drill hole.



14.8.3 Interpolation Methods

The blocks were independently estimated in Vulcan using OK as informed by the directional variogram model. Block estimation was limited to blocks and composites within the wireframe domain. Block discretization was completed at 4 by 4 by 4 set up. The estimated value of the parent blocks was assigned to the sub-blocks.

The interpolation of the Cg % was completed in two passes. The first pass used a small search ellipse of 40 m (major direction) by 37 m (semi-major direction) by 18 m (minor direction) and estimated blocks with 2 to 5 samples. The pass also implemented the restriction that a maximum of 2 samples per drill hole can be used for estimation. The design of this pass is to only estimate blocks near two closely spaced holes (KS-CC16-13 and KLS-24-028) and avoid oversmoothing the estimate in the area. The first pass estimated a volume of 105,600 m³, representing 1.6 % of the blocks within the graphite domain. The second pass used a search range approximately equal to the variogram model range and used samples per estimate obtained from sensitivity testing. The minor direction was expanded from the variogram model ranges to capture undulations in the wireframes. The second pass estimates all remaining blocks in the graphite domain and used a HYL function to restrict the influence of samples greater than 11% Cg to an ellipse of 65 m (strike) by 50 m (dip direction) by 15 m (thickness), which approximates 25% of the variogram range. The estimation passes are summarized in Table 14-4. Density values were assigned to the block model based on Cg grade or lithology, as described in section 14.7.

	Table 14-4: Estimation Parameter Summary														
					Pa	ass 1			P	ass 2		HYI	Rest	rictior	ı
Domain	Bearing	Plunge	Dip	Major (m)	Semi (m)	Minor (m)	Samples Per Est.	Major (m)	Semi (m)	Minor (m)	Samples Per Est.	HYL % Cg Threshold	Major (m)	Semi (m)	Minor (m)
Graphite 1	121	0	-52	40	37	18	3 to 5	260	200	30	2 to 6	11	65	50	15
				N	No 1ax 2 Sa	o HYL. mples/	DDH.	HYL u	sed. No	DDH R	estriction.				

Table 14-4: Estimation Parameter Summary

14.9 Model Validation

The block model was validated via volume comparison, mean grade comparison, visual inspection, swath plots, and change of support comparison. Overall, there is a good correlation between the block estimates and the supporting composite grades.

14.9.1 Volume Comparison

The volume of the graphite domain was compared to contained block volume within the domain, as summarized in Table 14-5. Results show that there is good agreement between the wireframe and block model volume with a difference of -0.35%.

Table 14-5: Domain	Wireframe	Volume versus	Contained	Block Volume

Domain	Wireframe	Block	Percent
	Volume (m³)	Volume (m³)	Difference
Graphite 1	6,734,298	6,710,400	-0.35%

14.9.2 Global Bias Assessment

The average block grade was compared to the mean of the representative distribution for an assessment of global bias. Percent error was calculated for each domain, where:

% Error = 100 * <u>Block Average – Declustered Composite Average</u> <u>Declustered Composite Average</u>

Table 14-6 shows the percent error of the estimated blocks relative to the target mean for the domain. The comparison shows a slight underestimation (percent error of -5.4%) relative to the composites, which is attributed to the use of the HYL function to control the influence of high-grade samples. In the Author's opinion, this is a reasonable outcome to avoid grade smearing given the wide spacing of the informing drill holes. Further drilling may facilitate the removal of the HYL.

Table 14-6: Block Cg Grades vs. Target Cg Mean					
Declustered Composite Avg. Cg %	Block Cg % Avg. Tonnes Weighted	Percent Error			
7.55	7.15	-5.4%			

14.9.3 Visual Inspection

Block grades were visually compared with drill hole composites on cross-sections, longitudinal sections, and plan views. The block grades and composite grades correlate well visually within the deposit. Figure 14-9 is an example of the review, comparing the composites of the graphite domain to the estimated blocks in cross-section.



Figure 14-9: Cross-section (Looking at an Azimuth of 125°) of Estimated Cg % Blocks underlain with the Cg Composites (Spheres), Drillhole Traces, and Lithology Domains.

14.9.4 Swath Plots

Swath plots were generated in the three orthogonal directions relative to the estimation domain, denoted in the figures as X (strike), Y (dip direction) and Z (thickness) directions (Figure 14-10, Figure 14-11, and Figure 14-12). The swath plots compare the volume weighted block model grades derived from OK against the declustered composite grades and Nearest Neighbour (NN) block grades. As expected, the composite database is more variable than the block model, but the block model captures general trends observed in the data. The effects of the HYL are observed in the swath plots as localization of underprediction relative to the composites. Minor oversmoothing is also observed, but overall, the estimated grades correlate well with the composite grades.



Figure 14-10: Swath plot of the Graphite Domain along X Direction.



Figure 14-11: Swath plot of the Graphite Domain along Y Direction.



Figure 14-12: Swath plot of the Graphite Domain along Z Direction.

14.9.5 Change of Support Comparison

A Discrete Gaussian Model (DGM) was created using the 8 m graphite composites to account for change of support using a variogram model, a normal score transformation, and Hermite polynomials. According to the quantile-quantile (Q-Q) plot of the estimate versus the DGM, the distribution of block estimated grades closely match the variance of the composite grades corrected by the change of support model, but globally there is a slight underprediction (Figure 14-13). In the QP's opinion, the minor underestimation is attributed to the HYL used and that the result is appropriate given the wide spacing and grade uncertainties at the deposit.



Figure 14-13: Quantile-Quantile plot of Graphite DGM comparison to Estimated Blocks.

14.10 Mineral Resource Classification

The classification of Mineral Resources for the Loki Deposit is based on geological confidence, drillhole spacing, the certainty of graphite quality (e.g. graphite flake size, uranium contamination, etc.) and spatial distribution of grades. The Author does not believe the Mineral Resources meets the criteria for Measured or Indicated Mineral Resources due to lack of information regarding the graphite quality and the general widely spaced drill pattern. Therefore, only Inferred Mineral Resource was considered for the Deposit and only material was classified as such where the drillhole spacing was less than or approximately equal to 100 m.

An Inferred Mineral Resource is a Mineral Resource for which quantity and grade, or quality are estimated based on limited geological evidence and sampling. Geological evidence is sufficient to imply but not verify geological and grade or quality continuity. An Inferred Mineral Resource has a lower level of confidence than that applying to an Indicated Mineral Resource and must not be converted to a Mineral Reserve. It is reasonably expected that most of the Inferred Mineral Resource Resources could be upgraded to Indicated Mineral Resources with continued exploration.



The classification at the Loki Deposit is visualized in Figure 14-14.

Figure 14-14: Long Section (Looking along an Azimuth of 034°) of Composites (Spheres) Displaying Cg% in Graphite Domain denoted with Classification.

14.11 Cut-off Grade and Reasonable Prospects of Eventual Economic Extraction

The Deposit is located near the surface under a relatively thin overburden (~55 m thickness) and is currently defined to extend 335 m below surface; thus, it is envisioned to be mined via open pit mining methods if the project advances. A break-even cut-off grade was calculated to define the potentially economic portion of the deposit constrained within an open pit scenario. The work associated with the cut-off grade and generation of the conceptual open pit was completed by qualified engineers from Fuse Advisors Inc. (Fuse), and the resulting deliverables were reviewed and accepted by the QP of this report.

The break-even cut-off grade is estimated to be 2.78 % Cg based on the following parameters:

- A graphite price of \$1,400/t was used based on comparable projects and market research.
- Open pit production at a rate of approximately 5,000 tonnes per day.
- Process recovery of 90.0%
- \$4.24/t mining cost
- \$30/t processing cost

The cut-off grade calculation did not consider mining dilution or loss in the calculation.

Fuse performed pit optimization analysis to determine the Reasonable Prospects of Eventual Economic Extraction (RPEEE) for the project. The pit shell was generated using Whittle software with a 45° slope angle and material classified as Inferred Mineral Resource (Figure 14-15 and Figure 14-16).



Figure 14-15: Oblique View (Looking along an Azimuth of 016° and Plunge of +29°) of Cg Block Grades Classified as Inferred relative to Conceptual Open Pit Design



Figure 14-16: Cross-section (Looking at an Azimuth of 125°) of Cg Block Grades Classified as Inferred relative to the Conceptual Open Pit Design underlain with the Lithology Domains.

The parameters for the cut-off grade and open pit are considered to be approximate, as sufficient engineering and economic studies have not been conducted to generate authoritatively accurate values, and most or all of those parameters can be expected to change with time. This approach is not considered to represent an abnormal risk with respect to the validity of the Mineral Resource Estimate, as it meets the definition of "reasonable" in the context of reasonable prospects.

14.12 Mineral Resource Statement

The 2025 Mineral Resource Estimate for the Loki Deposit adheres to the CIM Definition Standards for Mineral Resources and Mineral Reserves (May 2014) and was reported at a cut-off grade of 2.78% Cg within a conceptual open pit design. The Mineral Resource is entirely composed of Inferred Mineral Resources, totalling 11.31 million tonnes at an average grade of 7.65 % Cg for a total of 0.86 million tonnes Cg (Table 14-7). The effective date of this Mineral Resource estimate is April 10, 2025 coincident with the date of the last assay result received from the analytical laboratory. Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability. There is no certainty that all or any part of the Mineral Resource will be converted into a Mineral Reserve. No Mineral Reserves have been estimated at the Property.

Table 14-7: Loki Flake Graphite Mineral Resources 2025							
Category	Cg Grade Cut-off (%)	Tonnage (Mt)	Cg Grade (%)	Contained Cg (Mt)			
Inferred	2.78	11.31	7.65	0.86			

Notes:

1. The reporting standard for the Mineral Resource Estimate uses the terminology, definitions and guidelines given in the Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Standards on Mineral Resources and Mineral Reserves (May 2014) as required by NI 43-101.

2. Reported Mineral Resources are constrained to a pit-shell generated in Whittle software above a cut-off grade of 2.78% Cg.

3. Numbers may not add up due to rounding.

4. The effective date of this Mineral Resource estimate is April 10, 2025.

5. The qualified person knows of no environmental, permitting, legal, title, taxation, socio-economic, marketing, political or other relevant factors that may materially affect the Mineral Resource Estimate in this report.

6. Mineral Resources are not Mineral Reserves and have not demonstrated economic viability.

14.13 Mineral Resource Uncertainty

Mineral deposits, including the Loki Deposit, are inherently uncertain because of variability at all scales and sparse sampling. In addition to uncertainty associated with estimation, there are specific risks and sources of uncertainty associated with the Loki Deposit. These risks should be evaluated by potential and current investors.

NI 43-101 and other similarly purposed International Codes (JORC, 2012; S-K 1300, 2019) are to disclose risks to the public as identified and evaluated by the QP. The QP addresses the technical risks in various sections, including this section, for the disclosure of such risks.

The risks listed below are not considered exhaustive and there may be additional risks and uncertainties not presently known, such as market or technology changes, that are currently deemed immaterial but may also affect the business.

14.13.1 Specific Identified Risks

The drill sampling methods used at the Loki Deposit meet or exceed industry standards and the assay results have been comprehensively reviewed and validated. The geostatistical estimates of in situ tonnages and grades are reasonable and validated thoroughly. The QP considers that these methods are appropriate to produce the declared Mineral Resources. However, the QP has identified a specific potential risk that require further investigation: uranium contamination of graphite mineralization.

Uranium Contamination Potential

All core was scanned with a scintillometer for elevated radioactivity that may indicate the presence of uranium. Core that measured elevated radioactivity or had elevated uranium from the traditional analysis underwent uranium assaying.

In total, 360 core samples in the deposit area have uranium assay results. Interval lengths for these samples ranges between 0.1 and 0.8 m. Of the 360 uranium assays, 20% are at or below the 0.001% U_3O_8 detection limit, and 66% is above the detection limit and less than or equal to 0.01 % U_3O_8 . The remaining 14% of the population is represented by 48 samples, 45 of which are between 0.011% and 0.07 % U_3O_8 . Beyond these described samples, the three highest uranium grade samples in the deposit area are:

- 0.36 % U₃O₈ in KLS-24-026 from 199.7 m to 199.8 m (0.1 m)
- 1.18 % U₃O₈ in KLS-24-033 from 59.1 m to 59.2 m (0.1 m)
- 1.08 % U₃O₈ in KLS-24-033 from 59.2 m to 59.6 m (0.4 m)

The two samples grading above 1 % U_3O_8 are located approximately 130 m perpendicular to the graphite domain (Figure 14-17). The 0.36% U_3O_8 sample is hosted in the pegmatite 35 m from the main graphite shear (Figure 14-18). Notably, there are only 13 uranium assays within the graphite estimation domain, 7 of which are at or below the detection limit and the other 6 samples are between the detection limit and 0.05 % U_3O_8 . In the Author's opinion, there is not enough meaningful uranium assay data to create an estimation of uranium impurity for the model.

Although the graphitic shear does not appear to host significant uranium grade, additional drilling could prove otherwise. Furthermore, purity of the graphite is a typical customer specification. Some of the impurities can be removed during processing, but some cannot be removed without excessive grinding that leads to reduced graphite flake sizes. The Author recommends that future sample testing include impurity removal testing.



Figure 14-17: Cross-section (Looking at an Azimuth of 125°) of Cg Block Grades, Drill Hole Cg Assay Grades, and the two uranium samples above 1% U₃O₈ (spheres) underlain with the Lithology Domains.



Figure 14-18: Cross-section (Looking at an Azimuth of 125°) of Cg Block Grades, Drill Hole Cg Assay Grades, and the uranium sample grading 0.36% U₃O₀ (spheres) underlain with the Lithology Domains.

14.13.2 Generic Mineral Resource Uncertainty

Mineral resources are uncertain because of variability at all scales and sparse sampling. The variables constituting the mineral resource, the volume of the geological interpretation and the grade estimates within that volume, are the sources of uncertainty. These uncertainties are typically a function of drill spacing, with denser spacing equating to less uncertainty and sparser spaced areas having more uncertainty.

Changes to the geologic interpretation would greatly alter the estimation. If new interpretations of geological complexities are presented, the Mineral Resource would need to be updated to reflect the new interpretations.

Abasca cannot be certain that any part or parts of a deposit or Mineral Resource estimate will ever be confirmed or converted into Mineral Reserves or that mineralization can in the future be economically or legally extracted.

14.14 Mineral Resource Sensitivity

The resources within the conceptual open pit were calculated at various cut-off grade thresholds as a review of the deposit's sensitivity to change in mining costs. The Author notes that there is no appreciable change in grade or tonnage between 0 and 5 % Cg, but appreciable changes are noted for cut-off grades above 5 % Cg. Table 14-8 summarizes the sensitivity of the tonnes and grade to the various cut-off grades and Figure 14-19 visualizes the table.

Cutoff	Tonnes	Grade	Contained Metal
(Cg %)	(000s)	(Cg %)	(Mt Cg)
-	11,310	7.65	0.86
2.78	11,310	7.65	0.86
4.00	11,310	7.65	0.86
5.00	11,200	7.67	0.86
6.00	9,030	8.20	0.74
7.00	6,440	8.89	0.57
8.00	4,730	9.39	0.44
9.00	2,910	9.96	0.29
10.00	1,290	10.58	0.14

Table 14-8: Grade and Tonnage Sensitivity to Various Cut-off Grades

*Numbers may not add up due to rounding



Figure 14-19: Graph of Grade and Tonnage Sensitivity to Various Cut-off Grades

14.15 Comparison with Previous Estimate

There have been no previous Mineral Resource estimates for the Loki Deposit.

14.16 Relevant Factors

The QP is not aware of any environmental, permitting, legal, title, taxation, socio-economic, marketing, political, or other relevant factors that could materially affect the Mineral Resource Estimate that is not discussed in this Technical Report.

A variety of factors may affect the 2025 Loki Mineral Resource Estimate, including but not limited to: changes to product pricing assumptions, re-interpretation of geology, geometry and continuity of mineralization zones, mining and metallurgical recovery assumptions, and additional infill or step out drilling.

In UMR's opinion, the estimation methods used are consistent with standard industry practice and the Inferred Mineral Resource Estimates for Loki Deposit are considered to be reasonable and acceptable.

14.17 Recommendations

The Author's Mineral Resource related recommendations are summarized below.

- Mineral resources are uncertain because of variability at all scales and sparse sampling. Geostatistical techniques can be used to quantify the uncertainty and the expected reduction of uncertainty in resources as a function of data spacing. The QP recommends that a drill hole spacing study be completed on the deposit to inform drill hole spacing for Indicated Mineral Resource classification. After completion of the drill hole study, definition drilling should be planned and executed accordingly. The drill hole spacing study is estimated to cost \$45,000.
- The QP recommends future sample testing include impurity removal testing.
- Complete Market survey for product requirements and customer specifications. Based on these results, additional sampling and analysis may be required for input into future block models. The comprehensive testing and survey are estimated to cost \$120,000.
- Customer specifications for flake graphite are typically based on physical properties, particularly flake size, in addition to chemical characteristics. It is recommended that Abasca completes more comprehensive testing for graphite quality. The physical property testing is estimated to cost \$150,000.

15 MINERAL RESERVE ESTIMATE

There is no current Mineral Reserve estimate on the Loki Flake Graphite Deposit.

16 MINING METHODS

This section is not applicable.
17 RECOVERY METHODS

18 PROJECT INFRASTRUCTURE

19 MARKET STUDIES AND CONTRACTS

20 ENVIRONMENTAL STUDIES, PERMITTING AND SOCIAL OR COMMUNITY IMPACT

21 CAPITAL AND OPERATING COSTS

22 ECONOMIC ANALYSIS

23 ADJACENT PROPERTIES

The qualified person has not verified the information of the adjacent properties, and that the information of the adjacent properties is not necessarily indicative of the mineralization on the property that is the subject of the technical report.

There are several adjacent properties to KLS (Figure 23-1) that conduct greenfields exploration programs, although there is only one notable property with extensive work and operations being conducted, which is Cameco Corporation's Key Lake Operation (Key Lake), located toward the northeast of KLS. Information reported here is referenced from Cameco Corporation's website https://www.cameco.com/businesses/uranium-operations/canada/mcarthur-river-key-lake and https://www.cameconorth.com). Key Lake is a past producing open pit mine that produced 535 million pounds of uranium concentrate since 1983. Although the mine is not producing anymore, the mill is used to process the ore from McArthur River, the world's largest, high-grade uranium mine. Since the year 2000, more than 325 million pounds of uranium have been mined at McArthur River and milled at Key Lake. In October of 2023, the Canadian Nuclear Safety Commission (CNSC) granted a 20-year renewal licence for both McArthur River and the Key Lake facilities. They are now expected to continue to operate until October 2043.



Figure 23-1: Map of the adjacent properties to the Key Lake South Project.

24 OTHER RELEVANT DATA AND INFORMATION

No additional information or explanation is necessary to make this Technical Report understandable and not misleading.

25 INTERPRETATION AND CONCLUSIONS

The Author's interpretation and conclusions are summarized below.

- The Loki Deposit is a broad graphite bearing shear-zone ranging in thickness along an orientation of 121° azimuth and -52° dip to the southwest. The QP created one vein wireframe to constrain the estimate in the predominate orientation of mineralization. The wireframe is approximately 740 m long in the strike direction with an upper contact 55 m below surface and extends to 335 m below surface. The thickness of the modelled graphite ranges between 10 to 55 m with an approximate average of 35 m.
- The 2025 Mineral Resource Estimate has an effective date of April 10, 2025, coincident with the date of the last assay result received from the analytical laboratory. The Mineral Resource is entirely composed of Inferred Mineral Resources, totalling 11.31 million tonnes at an average grade of 7.65 % Cg for a total of 0.86 million tonnes Cg. The resource was reported at a cut-off grade of 2.78% Cg within a conceptual open pit design.
- The reported material is classified as Inferred due to the uncertainty in the quality of the graphite (e.g. graphite flake size, uranium contamination, etc.), the general widely spaced drill pattern (~100 m), and the overall uncertainty in the spatial distribution of grades. The reported Inferred Mineral Resources approximates a drill hole spacing of 100 m.
- In conjunction with infill drilling, the testing of uranium contamination and graphite flake quality will be important for upgrading portions of the deposit from Inferred to Indicated or Measured Mineral Resources.
- The lithology domains were assigned a density based on specific gravity measurements observed within the domains or observations from analogous deposits. A linear regression was used to assign density to blocks with estimated graphite grades. The average density of graphite in the block model is 2.57 t/m³.
- Current and ongoing expansion drilling indicates the presence of significant graphite mineralization outside the current resource domain, and geophysical anomalies have been identified as potential targets for graphite mineralization.
- In the QP's opinion, the KLS Project exploration data are free of any material or systematic errors, well validated and of sufficient quality for use in this Technical Report.
- The QP identified uranium contamination of graphite mineralization as a potential risk. The QP believes that the likelihood of realizing this risk in a material sense is minimal given that the graphitic shear does not appear to host significant uranium grade (maximum uranium grade of 0.05% U₃O₈), but recognizes the risk remains until confirmed otherwise. Beyond this risk, the QP has not identified any other significant risks or uncertainties that could reasonably be expected to affect the reliability or confidence in the Mineral Resource.
- The QP is not aware of any environmental, permitting, legal, title, taxation, socio-economic, marketing, political, or other relevant factors that could materially affect the Mineral Resource Estimate that is not discussed in this Technical Report.

26 RECOMMENDATIONS

The Author's Mineral Resource related recommendations are summarized below.

- Mineral resources are uncertain because of variability at all scales and sparse sampling. Geostatistical techniques can be used to quantify the uncertainty and the expected reduction of uncertainty in resources as a function of data spacing. The QP recommends that a drill hole spacing study be completed on the deposit to inform drill hole spacing for Indicated Mineral Resource classification. After completion of the drill hole study, definition drilling should be planned and executed accordingly. The drill hole spacing study is estimated to cost \$45,000.
- The QP recommends future sample testing include impurity removal testing.
- Complete Market survey for product requirements and customer specifications. Based on these results, additional sampling and analysis may be required for input into future block models. The comprehensive testing and survey are estimated to cost \$120,000.
- Customer specifications for flake graphite are typically based on physical properties, particularly flake size, in addition to chemical characteristics. It is recommended that Abasca completes more comprehensive testing for graphite quality. The physical property testing is estimated to cost \$150,000.
- Additional delineation is recommended to demonstrate continuity with 2016 drilling. Drilling required is estimated to include approximately 6,000 m for \$2,000,000.00.

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28 DATE AND SIGNATURE PAGE

This report titled "Technical Report on the Key Lake South Project with Initial Mineral Resource Estimate for the Loki Flake Graphite Deposit, Saskatchewan, Canada" with an effective date of April 10, 2025 and report date of May 29, 2025, was prepared and signed by the following authors:

Dated in Saskatoon, SK May 29, 2025 Matthew Batty, MSc, P. Geo Geostatistican and Owner (Signed and Sealed) "M.D. Batty"

29 CERTIFICATE OF QUALIFIED PERSONS

I, Matt Batty, P. Geo, as an author of this report entitled "Technical Report on the Key Lake South Project with Initial Mineral Resource Estimate for the Loki Flake Graphite Deposit, Saskatchewan, Canada" with an effective date of April 10, 2025, prepared for Abasca Resources Inc. and dated May 29, 2025, do hereby certify that:

- 1. I am a Geologist with and owner of Understood Mineral Resources Ltd. of 22 Middleton Crescent, Saskatoon, Canada.
- 2. I am a graduate of the University of Saskatchewan in 2012 with a B.Sc. degree in Geology and a graduate of the University of Alberta in 2022 with a M.Sc. degree in Mining Engineering (Geostatistics).
- 3. I am a Registered Professional Geologist (Member No. 25595) with the Association of Professional Engineers and Geoscientists of Saskatchewan (APEGS). I have worked as a geologist for a total of 13 years since my graduation. My relevant experience for the purpose of the Technical Report is:
 - Mineral Resource estimation and preparation of NI 43-101 Technical Reports.
 - Over 10 years of experience in modeling and estimating structurally controlled Mineral Resources.
 - 13 years of experience working in the Athabasca Basin in Northern Saskatchewan where the Loki Deposit it located.
- 4. I have read the definition of "qualified person" set out in National Instrument 43-101 (NI 43-101) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I am a "qualified person" for the purposes of NI 43-101.
- 5. I visited the Key Lake South Property from January 28 to 29, 2025.
- 6. I am responsible for the entirety of the Key Lake South Technical Report (2025).
- 7. I am independent of Abasca Resources Inc.
- 8. I have had no prior involvement with the property that is the subject of the Technical Report.
- 9. I have read NI 43-101, and the Technical Report has been prepared in compliance with NI 43-101 and Form 43-101F1.
- 10. At the effective date of the Technical Report, to the best of my knowledge, information, and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated this 29th day of May 2025

(Signed & Sealed) "M.D. Batty"

Matt Batty