GYeo Research and Exploration

NI 43-101 TECHNICAL REPORT ON

THE CREE EAST PROJECT, ATHABASCA BASIN, SASKATCHEWAN, CANADA

Report CRE2013-01

Prepared for:

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1 SUMMARY

The purpose of this report is to provide a review of exploration results to date on the CanAlaska Uranium Ltd. Cree East Property in northern Saskatchewan as a Form 43-101 technical report.

1.1 The Cree East Property

The Cree East property lies on the eastern shore of Cree Lake in northern Saskatchewan, 585 km north of Saskatoon and 40 km west-northwest of Cameco's Key Lake uranium mill. The property comprises 17 claims (57,752 ha). Annual assessment is $866,280. All the claims are in good standing until at least 2028. The property is 100% owned by CanAlaska Korea Uranium Ltd, a joint venture company in which CanAlaska Uranium Ltd. and a consortium comprising Hanwha Corp., Korea Electric Power Corp., Korea Resources Corp. and SK Energy Co. Ltd. each have a 50% interest. Access to the property is by winter road from Kilometre 212 on the Key Lake Road (Highway 914) or by float- or ski-equipped aircraft from La Ronge (260 km).

The exploration target on the Cree East property is a sandstone- or basement-hosted unconformity-type uranium deposit. Nearby deposits include: McArthur River (sandstone-hosted), Key Lake (sandstone and basement-hosted), Millenium (basement-hosted) and Phoenix (sandstone-hosted).

Uranium deposits in eastern Athabasca Basin are commonly associated with structural lows on the unconformity surface and fault zones (particularly reverse faults). Graphitic pelites are common in associated basement rocks, although mineralization may be distal from these. In addition to anomalous clay assemblages, alteration associated with mineralization includes bleaching, 'hydrothermal hematization', 'grey pyritic alteration', sandstone friability due to desilicification and drusy quartz in vugs and fractures. Uranium and associated pathfinder elements, such as Co, Cu, Ni, As, etc., are commonly elevated at the unconformity and extend well up into the sandstone near faults or zones of fracturing and friability. All of these features have been recognized on the Cree East property. Target Area B, where three holes of a first-pass drill programme in 2012 found sandstone with anomalous clay alteration, grey pyritic alteration and drusy quartz, cut by a fault zone separating an upthrown block of basement quartzite from pelitic rocks, is an obvious priority for further work as similar features occur at both Cameco's McArthur River deposit and Denison Mines' Phoenix deposit.

1.2 Exploration Chronology

Exploration in the Cree Lake area began in 1969. Drilling southeast of Binkley Bay in 1978 – 1983 followed airborne and ground geophysical surveys, accompanied by prospecting and boulder sampling programs. Key Lake Exploration Ltd., SMDC, Uranium Power Corp., AGIP Canada Ltd.

and Denison Mines Ltd., drilled 44 holes on geophysical targets, of which 17 lie on CanAlaska's Cree East property. Most of the historical holes lie along two northeasterly conductive trends, one along the 'Chain of Lakes' and one from Perpete Lake towards MacIntyre Lake. These trends correspond respectively to the western and eastern branches of CanAlaska's Target Area J. In addition to encouraging alteration and structure, several mineralized intersections were reported. Uranium mineralization at the unconformity included 0.02% U3O8 in SM79-1 and 0.012% U3O8 in SM79-4, both at Perpete Lake, and 0.007% U3O8 in ZF1-81, drilled near Binkley Bay in the northern 'Chain of Lakes'. The best intersection was 0.025% U3O8 in basement in SM81-20 in the southern 'Chain of Lakes'.

Exploration of the Cree East property by CanAlaska began with lake sediment, boulder and soil sampling in 2006-2007, which led to recognition of three broad southwesterly trending zones of anomalous geochemistry.

Seven major conductive features were identified in a 2006 airborne VTEM survey. In 2007, grids were established over six of these for ground follow-up. An AMT survey over grids 1, 2 and 3, on the northwestern part of the property, revealed a broad northeasterly trending resistivity feature. IP-Resistivity surveys over grids 5, 6 and 7 on the central and eastern parts of the property, revealed a complex of resistivity structures. On Grid 7, resistivity features in the sandstone are broadly coincident with VTEM conductors in the basement. In 2008 and 2009, further ground IP-Resistivity surveys and a helicopter-borne VTEM survey were done on Grid 7, along with bathymetric and seismic surveys over parts of Cree Lake. A high-resolution airborne gradiometer survey was also done over the whole property. In 2010, 2011 and 2012, a series of ground moving loop TDEM surveys were done on all the grids to better define conductors.

Between 2008 and 2012, 91 (34,473 m) holes were drilled. Of these, 18 were abandoned before reaching their target depth, mainly due to difficult ground conditions. Most holes were targeted on near-coincident basement EM conductors and overlying sandstone resistivity features. Drilling has generally confirmed that these are respectively caused by graphitic rocks and/or basement fault zones, and zones of faulting/fracturing and/or alteration in the sandstone.

All the drilling to date has been on Grid 7. Grids 1, 2 and 3 on the northwestern part of the property and grids 5 and 6 on the eastern claims have closely associated basement conductors and sandstone resistivity features that have not been drill tested.

1.3 Property Geology

The Cree East property lies near the southeastern margin of Athabasca Basin, a virtually undeformed, Proterozoic (1.75 – 1.5 Ga) sedimentary basin that hosts the largest known concentration of high-grade uranium deposits in the world.

As in most of Athabasca Basin, exposure on the property is very poor. The oldest rocks are granitic gneisses of probable late Archean age (2.74 – 2.57 Ga), overlain by metasedimentary rocks of the

Paleoproterozoic (2.1 – 1.84 Ga) Wollaston Supergroup, all lying west of the transitional lithostructural domain boundary that separates Wollaston Domain to the east from Mudjatik Domain to the west. On aeromagnetic maps, a series of irregular, amoeboid, predominantly northeasterly trending magnetic highs, interpreted to correspond with granite gneiss domes, are surrounded by magnetic lows, interpreted to correspond with metasedimentary rocks. Drilling shows the metasedimentary rocks to include pelite, graphitic pelite, semipelite, meta-arkose, quartzite, calc-silicate rock, marble and silicate iron-formation. These basement rocks have undergone upper amphibolite – granulite facies metamorphism and polyphase folding. Basement structural grain is predominantly northeasterly.

Sandstones, pebbly sandstones and conglomerates of the Athabasca Group unconformably overlie the crystalline rocks. In upward/basinward succession, strata on the Cree East property include the Read Formation and Warnes (MFw), Collins (MFc) and Dunlop (MFd) members of the Manitou Falls Formation. The Warnes member can be subdivided into four sub-members. Because the lower three sub-members resemble the predominant Manitou Falls members in Athabasca Basin and occur in the same stratigraphic order, the lower pebbly unit (MFw-lp) was called MFb in CanAlaska logs, the middle sandy unit (MFw-s) was called MFc, and the upper clay-clast rich unit (MFw-cr) was called MFd. The upper pebbly unit (MFw-up) and overlying MFc and MFd strata were not encountered in drilling, because no holes were drilled on the northern part of the property.

Wisconsinan tills, 10 to 60 m thick and moulded into southwesterly trending drumlinoid ridges, overlie the sandstones. The tills are overlain by a series of eskers and by glaciofluvial deposits in the southwesterly-trending main valleys.

1.4 Geology and Mineralization of Grid 7

As noted above, all drilling to date has been on Grid 7. From north to south, target areas A, I, C, D, E and H lie along a sandstone resistivity low overlying a basement conductor trending along the axis of northern Binkley Bay. Target Area B lies on a short coincident sandstone resistivity low and basement conductor between Binkley Bay and MacIntyre Lake. Target Area G lies east of Binkley Bay on a sandstone resistivity low, but lacks a coincident basement conductor. Target Area J is a horseshoe-shaped, sandstone resistivity low, open to the southwest, and overlying a coincident basement conductor.

Although unconformity elevation drops basinward, there is much local variation, resulting either from fault offset or paleotopographic relief. The Read Formation and overlying MFw-lp sub-member ("MFb" in logs) generally thicken basinward, but local thickness variation indicates tens of metres of local paleotopographic relief or syndepositional fault displacement.

Pelite, graphitic pelite, semipelite, arkose and quartzite are common throughout the Grid 7 area, whereas Fe-pelite, siliceous banded iron-formation and calc-silicate rocks are restricted to the northwest (target areas A, I, C, D and E) and southeast (Target Area J).

At Area A, foliation measurements suggest folding about easterly to northeasterly and southeasterly axes. Elsewhere in the western part of Grid 7, foliation measurements suggest a series of close, northwesterly verging folds. At Area G, in the southern part of Grid 7, foliation suggests an open southeasterly trending fold.

In addition to direct evidence in drill core, abrupt offsets on the unconformity and variation in thickness of sandstone units indicate widespread faulting in the Grid 7 area. A major northeast-trending fault is interpreted to follow the basement conductor through areas A, I and C. At Area A, this is cross-cut by one or more northwest-trending faults.

Except at target areas A and B, illite/dickite, the regional background clay alteration assemblage, predominates in the upper Grid 7 sandstones, with dickite commonly increasing in abundance downward, and sudoite, dravite or kaolinite predominant above the unconformity. At Area A, clay alteration patterns are relatively complex, although illite predominates. At Area B, clay alteration is anomalous. Here, kaolinite predominates, with associated 'grey alteration' due to fine-grained disseminated pyrite in the lower sandstone.

Locally variable clay alteration patterns in basement rocks probably reflect differences in basement lithology. Alteration in eastern Athabasca Basin commonly extends tens of metres below the unconformity, but appears to extend much more deeply at the Grid 7 target areas. Most drill holes were still in altered rock when they were terminated, commonly 90 to 160 m below the unconformity.

Mineralized intersections at the unconformity were found in both the northwestern part of Grid 7, at target areas A (0.01% U3O8 in CRE063), D (0.01% U3O8 in CRE017) and I (0.09% U3O8 in CRE040), and the southeastern part of Grid 7 at Area J (0.02% U3O8 in CRE080), and in a nearby historical hole (0.01% U3O8 in ZF1-81). Several mineralized basement intersections were reported at Area A (up to 0.08% U3O8 in CRE063 and CRE067), Area B (up to 0.09% U3O8 in CRE083), Area G (up to 0.03% U3O8 in CRE057). No mineralization was found at areas C, E and H.

1.4.1 Geology and Mineralization of the Grid 7 Target Areas

Area A, with 28 drill holes to date, is the most intensively explored target area on the property. Relief of 82 m on the unconformity surface and variable thickness of the lower sandstone units indicates paleotopographic relief and probable syndepositional fault movement. Both northwesterly and northeasterly trending faults have been recognized. The latter appears to have had reverse movement. Clay alteration is complex, with illite predominant. At 33%, the average ranking of Area A drill holes is high, with three holes ranking higher than 45%. The best-mineralized intersections are 0.01% U3O8 over 1.5 m in sandstone above the unconformity in CRE063, 0.05% U3O8 over 0.4 m of graphitic pelite in CRE063 and 0.08% U3O8 over 0.75 m of marble in CRE067. Encouraging structural geology, alteration and mineralization make this target area a priority for further work.

Area B, between Binkley Bay and MacIntyre Lake and about 1.5 km east of Area A, was not tested until the 2012 drill campaign, when 6 holes were drilled. Relief on the unconformity of 52 m and thickness variation of the sandstone units suggest paleotopographic relief and syndepositional fault subsidence. As at the McArthur River and Phoenix deposits, a basement 'quartzite ridge' has been identified, separated by a fault from pelitic rocks downthrown to the east. As at McArthur River, kaolinite alteration is extensive in the sandstone. Drusy quartz and 'grey alteration' are common in the lower sandstone. At 37%, the average rank of the three holes that reached basement is the best of any target area on the property. The best mineralized intersection is 0.09% U3O8 over 0.5 m in hematite-altered quartzite in CRE083, but elevated uranium occurs in the Read sandstone. With so many encouraging features and only three holes penetrating the unconformity, Area B is a high priority target area.

Area C, in Binkley Bay 750 m south of Area I and 1 km north of Area D, has 10 drill holes on it. Relief on the unconformity is slight, 14 m. Except for the interpreted absence of the Read Formation in CRE005, which suggests local pre- or syndepositional uplift, there is little variation in thickness of the sandstone units. A fault is interpreted to extend northeasterly from Area C through areas I and A. Away from the fault, background illite/dickite clay alteration overlies basal sudoite and dravite, whereas close to the fault, kaolinite predominates in the lower sandstone. Although no mineralization has been reported, kaolinite enrichment and slightly elevated sandstone uranium extending upward in the sandstone over the fault suggest hydrothermal fluid activity. The average rank of the 4 holes that reached basement at Area C is 24%, moderate compared to areas A, B, I, J and G. Area C remains a moderate priority target area.

Area D, in Binkley Bay midway between areas C and E, has 7 drill holes on it. Relief on the unconformity of 47 m, and thickness variation in the lower sandstones indicate paleotopographic relief and probable syndepositional fault subsidence. A northeast-trending fault, downthrown to the southeast, has been recognized. The sandstone clay alteration is normal, with illite/dickite above basal dravite and sudoite. The average rank of Area D drill holes is 24%, which is moderate compared to most other target areas. In spite of the lack of sandstone alteration, a mineralized intersection 0.01% U3O8 over 1.7 m in sandstone about 4 m above the unconformity in CRE017 suggests this target area has some potential and remains a moderate priority.

Area E, in Binkley Bay midway between areas D and H has a 3-hole drill fence. Unconformity relief of 5 m and slight thickness variation in the sandstone units suggest little local paleotopographic relief or fault movement. No faults were recognized in drilling. Clay alteration in the sandstone is normal, with illite/dickite above dickite and basal sudoite or kaolinite locally. The average rank of Area E drill holes is 13%, the lowest of any target areas tested. No mineralization was found. Without encouraging structure, alteration or mineralization, Area E is a low priority.

Area G, on the eastern shore of Binkley Bay between target areas H and J, is the second most intensively explored target area on the property with 17 holes drilled on it. Unconformity relief of 54 m and variation in thickness of the sandstone units suggests both paleotopographic relief and syndepositional faulting. An east-northeast-trending fault cuts the area, downthrown to the north. The sandstone clay alteration is normal, with dickite and illite, commonly over basal sudoite. The average ranking of Area G drill holes is 26%, which ranks it just below areas B, A, I and J. Four holes in the western part of Area G intersected uranium in the basement. The best intersection is 0.03% U3O8 in semipelite and pegmatite in CRE057. Most of the basement mineralization in Area G is interpreted to be of metamorphic origin, however. In spite of encouraging structural geology and moderately high drill hole ranking at Area G, alteration and mineralization indicative of a hydrothermal system have not been found. Hence, Area G is a low priority target.

Area H, on the east shore of Binkley Bay about 1 km south of Area E, has a 3-hole drill fence. Unconformity relief is 26 m and the overlying sandstone units vary in thickness, suggesting paleotopographic relief and/or syndepositional fault subsidence. A northerly trending fault, downthrown to the east has been recognized. Clay alteration is normal, with illite/dickite above basal sudoite and dravite. The average drill hole rank at Area H is 21%, which is moderate compared to other target areas. No mineralization has been found. Although structural geology is favourable, lack of mineralization or anomalous alteration suggests that no hydrothermal system was ever active here. Hence Area H is a low priority target.

Area I, midway between areas A and C, also has a 3-hole drill fence. Relief on the unconformity surface is 26 m, but there is relatively little variation in thickness of the overlying sandstone units, suggesting post-depositional fault subsidence. The fault trending northeasterly from Area C through areas I and C is downthrown to the southeast. Clay alteration in the sandstone is normal, illite/dickite above basal sudoite. The average ranking of Area I drill holes is 29%, which is below only the rankings of areas B and A. A mineralized intersection of 0.09% U3O8 over 1.4 m in sandstone was reported at the unconformity in CRE040. Although clay alteration does not suggest a hydrothermal system, sandstone mineralization and faulting are encouraging. Area I should be a moderate priority target.

Area J is an extensive geophysical target about 1 km east of Area G. In addition to a three-hole fence drilled to test the western conductor and resistivity low, a fourth hole was drilled about 2.5 km further east to test the eastern conductor and resistivity low. There are also two historical drill fences at Area J.

On the main CanAlaska drill fence, unconformity relief is 28 m and there is considerable variation in thickness of the overlying sandstone units, suggesting both paleotopographic relief and syndepostional fault movement. A northeast trending fault appears to be coincident with the conductor and resistivity low. Clay alteration in the sandstone follows the normal background pattern of illite/dickite over dickite, with basal sudoite and dravite. The average rank of Area J drill holes, including CRE081, is 27%%, behind only areas B, A and I. Mineralization occurs in the basement in CRE080, with the best intersection 0.02% U3O8 over 0.6 m in banded iron-formation just below the unconformity.

Clay alteration in CRE081, the CanAlaska hole drilled on the eastern conductor of Area J, is similar to that found on the fence. No mineralization was reported in that hole.

A six-hole fence was drilled by AGIP Canada Ltd. in 1981 across the western Area J conductor and resistivity low between Area G and CanAlaska's Area J fence. Unconformity relief is 32 m, with downthrow to the northeast by the same northeasterly trending fault recognized on the Area J fence. Faulting and core loss was reported in four of the holes. Clay alteration in the sandstone was reported to be "normal" illite/kaolinite, with chlorite above the unconformity. (Whereas historical clay mineralogy is based on geochemistry, rather than SWIR analysis, this is probably equivalent to illite/dickite with sudoite at the base.) A mineralized intersection of 0.01% U3O8 reported at the unconformity in ZF1-81 may be an extension of mineralization in CRE080

A two-hole fence was also drilled by AGIP in 1982 about 1.4 km northeast of CanAlaska's Area J fence. Unconformity relief was only 4 m, but lost core in ZF82-7 suggests a fault zone. Clay alteration in ZF82-7 was reported to be kaolinite/illite (i.e., probably illite/dicikte); ZF82-8 had illite/kaolinite (i.e., illite/dickite) in the upper 75 m and chlorite (i.e., sudoite) below. No mineralization was reported.

Although clay alteration at Area J does not indicate the presence of a hydrothermal system, the presence of an apparently extensive fault zone and associated uranium mineralization at the unconformity in two nearby require follow-up. Further work at Area J should be moderate to high priority.

1.5 Conclusions and Recommendations

Targeting drill holes on coincident basement conductors and sandstone resistivity lows has been an effective exploration strategy at the Cree East property. Drilling has confirmed that the basement conductors are typically graphitic pelites which have locally controlled fault development and that the sandstone resistivity lows are commonly zones of fracturing, friability and alteration with which hydrothermal fluid plumes might be associated.

Area B, with attractive structural geology, anomalous kaolinite alteration extending throughout the sandstone, grey alteration and drusy quartz in the lower sandstone and uranium mineralization of probable hydrothermal origin in basement, is clearly the highest priority target on the property. Areas A and J are moderately high priority target areas. Areas C, D and I are moderate priority targets. With few encouraging results, areas E and H are low priority targets. Although uranium mineralization, favourable structural geology and relatively high drill hole rankings were reported at Area G, alteration and mineralization of hydrothermal origin has not been found; hence Area G is also a low priority.

As noted above, further geophysics should be undertaken on grids 1 – 3, but grids 5 and 6 are low priority target areas.

Recommended work includes detailed FLEM, gravity and IP/Resistivity surveys to better define structure and potential alteration at Target Area B, to be followed by a 30-hole drill program, comprising 12 holes at Area B, 12 at Area J and 6 at Area A. Soil geochemical surveys (MMI) over areas A and B are also recommended. Estimated cost for this program is $7,952,000. This work is suggested as part of a three-year exploration programme at Cree East with an estimated cost of $23,888,000.

2 INTRODUCTION

This report provides a technical review of the geology and exploration results received from exploration of the Cree Lake East property of CanAlaska Uranium Ltd. The report was prepared for CanAlaska as a Form 43-101 F1 technical report in accordance with National Instrument 43-101 ("N.I. 43-101") requirements. This report documents results received up to December 1, 2012.

2.1 Sources of Information

Uranium exploration in the area of the Cree Lake East property has been carried out since the late 1970s. Exploration prior to 2005 is summarized in Parts 6.2 (Exploration History) and 10.1 (Historical Drilling) of this report.

Most of the information concerning recent exploration of the property is contained in a series of CanAlaska exploration reports listed below (Table 2-1).

Table 2-1 - CanAlaska Uranium Ltd. Cree East Project Reports

Year	Title	Authors	CanAlaska Report No.
2008	2007 Ground Geophysical Surveys on Cree East Project Saskatchewan	G. Marquis & K. Schimann	CRE2008-01
	Report on 2007 Geochemistry on the Cree East Project, Saskatchewan	F. Shirmohammad & K. Schimann	CRE2008-02
	Report on 2008 Drilling on the Cree East Project, Saskatchewan	K. Schimann	CRE2008-03
	Report on 2008 Summer Exploration Programme, Cree Lake Project, Saskatchewan, Canada	K. Schimann, G. Marquis & A. H. Alizadeh	CRE2008-04
2009	Report on 2009 Winter Exploration Programme, Cree Lake Project, Saskatchewan, Canada	E. Smart, A. Hassanalizadeh & K. Schimann	CRE2009-01
	2009 Airborne Geophysics Assessment Report, Cree East project, Saskatchewan	G. Marquis & K. Schimann	CRE2009-03
	2009 Ground Geophysics Assessment Report, Cree East Project, Saskatchewan	G. Marquis & K. Schimann	CRE2009-04
2010	Interim Report on Winter 2010 Exploration on the Cree East Project, Saskatchewan	G. Marquis & K. Schimann	CRE2010-01
	Report on 2010 Winter Geophysics Programme, Cree Lake Project, Saskatchewan	G. Marquis & K. Schimann	CRE2010-02
	Report on 2010 Winter Drilling	E. Smart, M.	CRE2010-03

	Programme, Cree Lake Project, Saskatchewan, Canada	Muirhead, J. Cloutier, H. Kim & K. Schimann	
	Report on 2010 Summer Drilling Programme, Cree Lake Project, Saskatchewan, Canada	P. Dasler, H. Kim, G. Nimeck, K. Schimann & E. Smart	CRE2010-04
2011	Report on 2011 Winter Drilling Programme, Cree Lake project, Saskatchewan, Canada	K. Schimann & R. Duff	CRE2011-01
	Cree East 2011 and 2010 SQUID TEM Modelling and Interpretation, Athabasca Basin, Saskatchewan, Canada	S. Napier	CRE2011-02
2012	Cree East Winter 2012 Geophysics, SQUID TEM Modelling and Interpretaiton, Athabasca Basin, Saskatchewan, Canada	S. Napier & K. Schimann	CRE2012-02
	Report on 2012 Winter Drilling Programme, Cree Lake Projectf, Saskatchewan, Canada	K. Schimann & P. Ogilvie-Evans	CRE2012-02

The regional geological setting of the Cree Lake East property is outlined in maps and reports by Bosman et al. (2008), Campbell (2007), Gilboy (1982, 1985a, 1985b), Ramaekers (1990), Ramaekers et al. (2007), Ray (1977), Yeo and Delaney (2007) and others. The metallogeny of Athabasca Basin uranium deposits has been recently reviewed by Jefferson et al. (2007) and Cuney and Kyser (2008).

2.1.1 Scope of Involvement of the Authors

One of the authors (Ogilvie-Evans) is a former employee of CanAlaska, who was involved in management of the 2012 winter drill program as well as compilation of the report resulting from that work. The senior author (Yeo) has only briefly visited the property, but has been involved in exploration on several properties in Athabasca Basin since 2006, including the nearby Phoenix and Moore Lakes prospects. Prior to 2006, as a Saskatchewan Geological Survey geologist, he was a contributor to the EXTECH IV Athabasca Uranium report and was involved in regional mapping of the Wollaston Domain, the crystalline basement of eastern Athabasca Basin.

The following sections of this report were written by Ogilvie-Evans:

10.2 CanAlaska Drilling

10.3 Core Handling, Drill Hole Surveys and Logistical Considerations

11. Sample Preparation, Analyses and Security

13.2 Community Impact

Most of the balance of the report was written by Yeo.

Table 2-2 - List of Abbreviations

Abbreviation	Meaning
AdTau	Adaptive Tau: Time-constant inversion of TDEM data to generate maps of 'bright spots' (Tau anomalies) related to local conductivity
Ag	Silver
AMT	Audiomagnetotelluric
As	Arsenic
asl	Above sea level (elevation)
Au	Gold
B	Boron
BHTDEM	Bore Hole TDEM
bi	Biotite
Bi	Bismuth
BP	Years Before Present
Bsmt	Basement
D1, D2, etc.	Sequential deformation events
DC/IP	Direct Current Induced Polarization
DEEPEM	Deep Penetrating Pulse EM (ground EM system)
DIGHEM	Helicopter-borne frequency domain EM
Co	Cobalt
co	Cordierite
Cu	Copper
EM	Electromagnetic
Fe	Iron
Fe2O3	Iron oxide
FLEM	Fixed Loop TDEM
Ga	Billion years ago
GEOTEM	Airborne EM system similar to MEGATEM
gr	Graphite
gt	Garnet
ha	Hectare
HLEM	Horizontal Loop EM
ICP-MS	Inductively Coupled Plasma Mass Spectrometry
ICP-OES	Inductively Coupled Plasma Optical Emission Spectrometry
INPUT	Airborne TDEM system
K	Potassium
km	Kilometre
m	Metre
M1, M2	Sequential metamorphic events
Ma	Million years ago
MEGATEM	Large loop airborne EM (Fugro Airborne Surveys)
MFb	Bird member of the Manitou Falls Formation
MFc	Collins member of the Manitou Falls Formation
MFd	Dunlop member of the Manitou Falls Formation
MFw	Warnes member of the Manitou Falls Formation

MFr	Raible member of the Manitou Falls Formation
Mg	Magnesium
Mlb	Million pounds
MLEM	Moving Loop TDEM
Mo	Molybdenum
Na	Sodium
Ni	Nickel
oz	Ounce
Pb	Lead
Pd	Palladium
PD	Partial digestion (geochemistry)
ppm	Parts per million
RTP	Reduced To Pole
RQD	Rock Quality Designation
SQUID	Superconducting QUantum Interference Device
Sst	Sandstone
SWIR	Short Wave Infrared Radiation
TD	Total digestion (geochemistry)
TDEM	Time Domain EM
TMI	Total Magnetic Field Intensity
U	Uranium (form in which uranium lab analyses reported)
U3O8	Triuranium ocotoxide (uranium oxide or 'yellowcake' – form in which grades and production reported (U3O8 = 1.179 x U))
Va	Vanadium
VLF	Very Low Frequency EM
VTEM	Versatile Time Domain EM
W	Tungsten
Zn	Zinc
ZTEM	Z-Axis Tipper EM
>	Greater than
<	Less than
%	Percent

3 RELIANCE ON OTHER EXPERTS

Technical information that is beyond the scope or expertise of the authors is largely the work of other qualified persons (Table 2-1), and is cited throughout this report. Information concerning claim status, ownership, and assessment requirements, presented in the next section (Property Description and Location) of this report, have been provided by CanAlaska Uranium Ltd., and have not been independently verified by the authors. The authors, however, have no reason to doubt that the title situation is other than that presented here. The report has benefited from numerous discussions with Dr. Karl Schimann, CanAlaska's Vice President – Exploration.

4 PROPERTY DESCRIPTION AND LOCATION

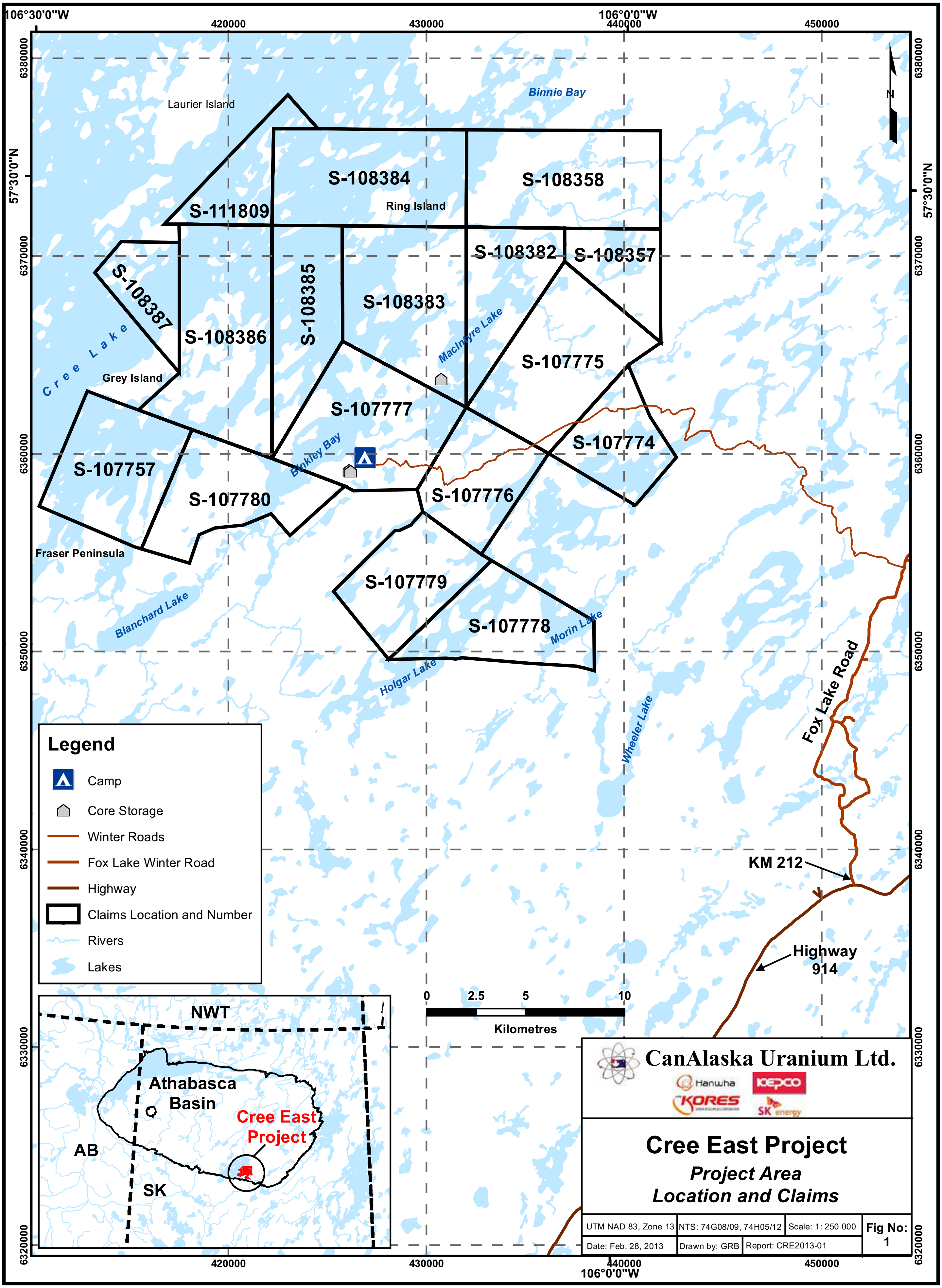
4.1 Property Location

The Cree East property is located in northern Saskatchewan on the eastern side of Cree Lake, approximately 585 km north of the city of Saskatoon (Figure 1) and 40 km west-northwest of the Key Lake mine site. The approximate corners of the property are 57^{o} 15'N by 105^{o} 54'W and 57^{o} 33'N by 106^{o} 30'W. Most of the property lies within Canadian National Topographic System 1:50,000 scale map sheet 74G/8, but the northern part extends into 74G/9 and the eastern part extends into 74H/5 and 74H/12.

4.1.1 Property Description and Title

The Cree East property comprises 57,752 hectares in 17 mineral dispositions (Table 4-1). All of the claims are 100% owned by CanAlaska Korea Uranium Ltd., a joint venture company formed in 2008 to explore the Cree East property (CanAlaska news release, 8 July 2008). Under the terms of the joint venture agreement, a consortium comprising Hanwha Corp., Korea Electric Power Corp., Korea Resources Corp. and SK Energy Co. Ltd. committed to earn an aggregate 50% interest in the property by funding \$19.0 million towards project exploration (CanAlaska Uranium Ltd. news release, 12 October 2007). This commitment was met in 2010 (CanAlaska news release, 20 December 2010), since when CanAlaska and the consortium of Korean companies each have a 50% interest in the property.

To the authors' knowledge, none of the dispositions are subject to any royalties, back in rights or encumbrances. No mining or waste disposal has occurred on the Cree East property, and consequently the property is not subject to any liabilities due to previous mining activities.



106°30'0"W
106°0'0"W
57°30'0"N
420000
430000
440000
450000
6380000
6370000
6360000
6350000
6340000
6330000
6320000
N
Laurier Island
Binnie Bay
S-108384
S-108358
S-111809
Ring Island
S-108382
S-108357
S-108387
S-108385
S-108383
S-108386
Cree Lake
MacIntyre Lake
S-107775
Grey Island
S-107777
S-107774
Binkley Bay
S-107757
S-107780
S-107776
Fraser Peninsula
S-107779
Blanchard Lake
S-107778
Morin Lake
Holgar Lake
Fox Lake Road
Wheeler Lake
Legend
Camp
Core Storage
Winter Roads
Fox Lake Winter Road
Highway
Claims Location and Number
Rivers
Lakes
KM 212
Highway 914
0
2.5
5
10
Kilometres
NWT
Athabasca Basin
Cree East Project
AB
SK
CanAlaska Uranium Ltd.
Hanwha
KEPCO
KORES
SK energy
Cree East Project
Project Area
Location and Claims
UTM NAD 83, Zone 13
NTS: 74G08/09, 74H05/12
Scale: 1: 250 000
Fig No: 1
Date: Feb. 28, 2013
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Report: CRE2013-01

Table 4-1 - List of the Cree East Project Claims (as of December 2012)

Claim	Recording Date	Area (ha)	Annual Assessment	Good Standing
S-107757	16 Nov 2004	3,625	$54,375	12 Feb 2041
S-107774	16 Nov 2004	2,221	$33,315	12 Feb 2045
S-107775	16 Nov 2004	4,517	$67,755	12 Feb 2043
S-107776	16 Nov 2004	2,678	$40,170	12 Feb 2027
S-107777	16 Nov 2004	4,427	$66,405	12 Feb 2053
S-107778	16 Nov 2004	3,206	$48,090	12 Feb 2028
S-107779	16 Nov 2004	2,895	$43,425	12 Feb 2028
S-107780	16 Nov 2004	3,337	$50,055	12 Feb 2032
S-108357	20 Sept 2005	1,789	$26,835	17 Dec 2045
S-108358	20 Sept 2005	4,858	$72,870	17 Dec 2036
S-108382	20 Sept 2005	2,685	$40,275	17 Dec 2041
S-108383	20 Sept 2005	4,686	$70,290	17 Dec 2049
S-108384	20 Sept 2005	4,805	$72,075	17 Dec 2049
S-108385	20 Sept 2005	3,143	$47,145	17 Dec 2049
S-108386	20 Sept 2005	5,416	$81,240	17 Dec 2041
S-108387	20 Sept 2005	1,647	$24,705	17 Dec 2042
S-111809	28 June 2010	1,817	$27,255	24 Dec 2035
Totals		57,752	$866,280	

4.2 Annual Expenditures

Under Saskatchewan's new Mineral Tenure Registry Regulations (2012), annual exploration expenditures of $15.00 per hectare are required for the first 10 years after staking of a claim to retain each disposition. After 10 years, this rate increases to $25.00 per hectare annually. Required annual assessment work for each mineral disposition is listed in Table 4-1. Total annual assessment expenditure requirements for the entire Cree East property are $866,280. All of the dispositions on the property have substantial exploration credits, however, and should remain in good standing until at least 2027.

4.3 Permits for Exploration

Authorization permits for timber removal, road construction, storage of fuel or camp material, etc. are required for most exploration programs from the Saskatchewan Ministry of Environment. A water use permit for drilling or camp well use is required from Saskatchewan Watershed Authority. The permits required depend on the exploration activities planned and their location. Required permits, application procedures, and best management practices for exploration activities are outlined in the Mineral Exploration Guidelines for Saskatchewan 2012 posted at the Saskatchewan Energy and Resources Ministry website. Apart from camp permits, annual fees for these are generally less than $200 in total.

Temporary camp permit fees are based on total person-day use per hectare, with a minimum camp area of one hectare assessed. Minimum fees range from $85/ha for less than 100 person-days to $330 for more than 500 person-days.

Permitting requirements are discussed in more detail in part 13 (Environmental Studies, Permitting and Social Impact) of this report.

5 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

5.1 Accessibility and Infrastructure

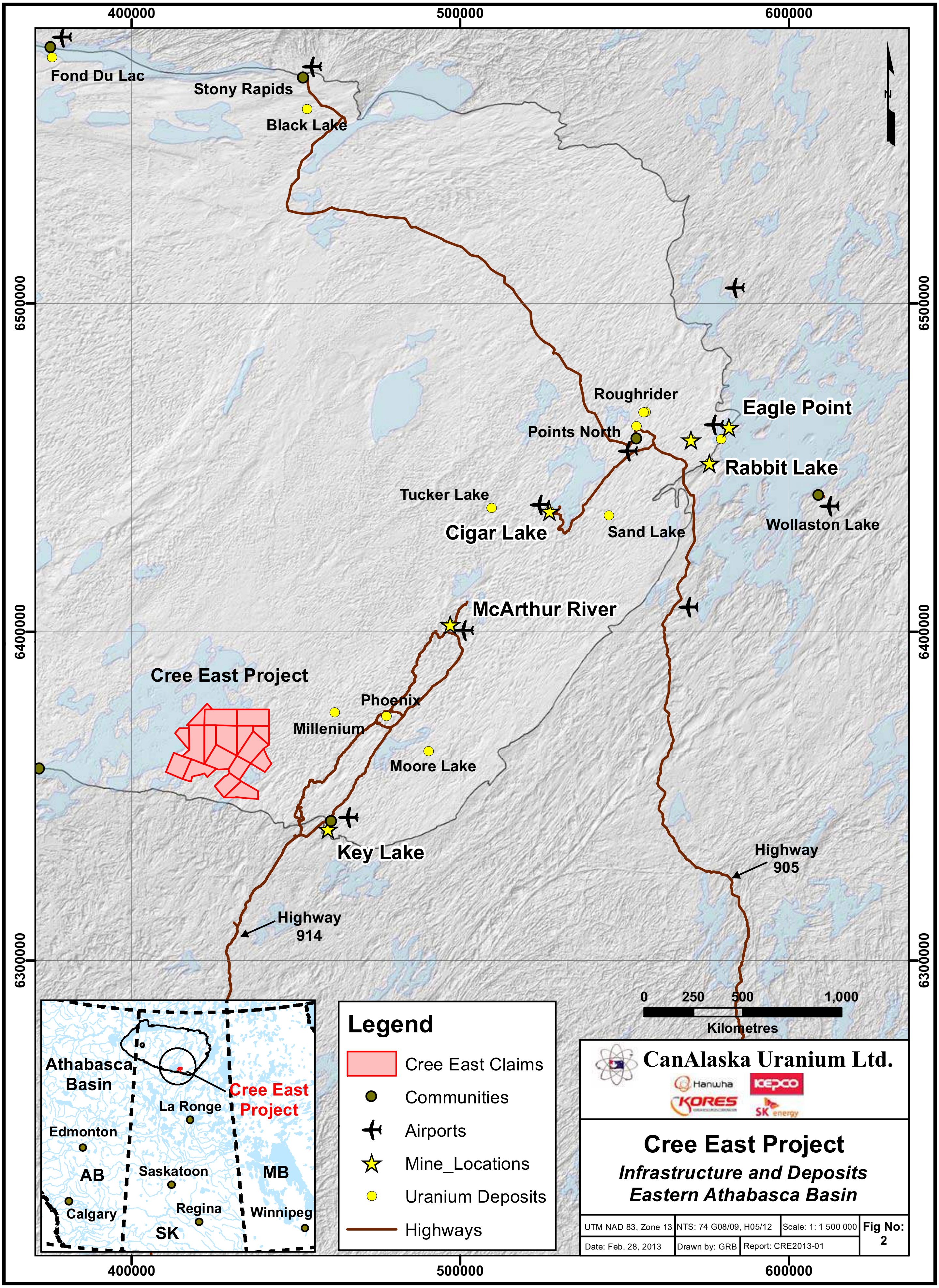
As noted above, the Cree East property lies 585 km north of Saskatoon (Figure 2). It lies 205 km north of Pinehouse, the nearest community. The nearest emergency medical facility and all-weather airstrip is at Cameco's Key Lake mine, 40 km to the east-southeast.

Float or ski-equipped aircraft and helicopters are available for charter at La Ronge, 260 km south of the property, Missinipe, 225 km to the south-southeast, and Points North, 175 km to the northeast. These air bases are all on an all-weather road and both La Ronge and Points North have scheduled air service. La Ronge is 385 km by paved road from Saskatoon.

Saskatchewan Highway No. 914 is an all-weather road connecting the Key Lake mine with major points to the south via the village of Pinehouse. Key Lake is 615 km by road from Saskatoon. A winter road links the Cree East property to the Fox Lake Road, which joins the Key Lake Road at Kilometre 212 (about 12 km south of Key Lake).

5.2 Climate, Vegetation and Physiography

Ecoregions are geographic areas characterized by their landforms, climate, soils and plant and animal communities. The Athabasca Plain ecoregion (Acton et al., 1998) broadly coincides with the Athabasca sedimentary basin. The southeastern part of the Athabasca Plain ecoregion, from the eastern side of Cree Lake north to Hatchet and Wollaston lakes, is called the Wheeler Upland.


400000
500000
600000
6500000
6400000
6300000
Fond Du Lac
Stony Rapids
Black Lake
Roughrider
Eagle Point
Points North
Rabbit Lake
Tucker Lake
Cigar Lake
Sand Lake
Wollaston Lake
McArthur River
Cree East Project
Phoenix
Millenium
Moore Lake
Key Lake
Highway 905
Highway 914
0 250 500 1,000
Kilometres
Athabasca Basin
La Ronge
Cree East Project
Edmonton
AB
Saskatoon
MB
Calgary
Regina
Winnipeg
SK
Legend
Cree East Claims
Communities
Airports
Mine_Locations
Uranium Deposits
Highways
CanAlaska Uranium Ltd.
Hanwha
KEPCO
KORES
SK energy
Cree East Project
Infrastructure and Deposits
Eastern Athabasca Basin
UTM NAD 83, Zone 13
NTS: 74 G08/09, H05/12
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5.2.1 Climate

The Athabasca Plain is characterized by a sub-humid high boreal ecoclimate, marked by short cool summers and very cold winters (Acton et al., 1998). The mean annual temperature is approximately -3.5°C. The mean summer temperature is 12°C and the mean winter temperature is -20.5°C. The mean annual precipitation ranges from 350–450 mm.

At Key Lake from 1977 to 2088, the annual mean temperature was -2°C, with monthly mean temperatures from December to February ranging between –20°C and –23°C, and monthly mean temperatures in July and August ranging between 14°C and 15°C (Figure 3). The total annual precipitation averaged 473.5 mm, with most falling between May and September (Cameco, 2009). Daytime highs are rarely above 27°C in July, the warmest month, and daytime lows are rarely below -42°C in January, the coldest month (weatherspark.com website). Break-up of ice on the lakes typically occurs in May and freeze-up is typically in October. Fieldwork is generally not practical during those periods.

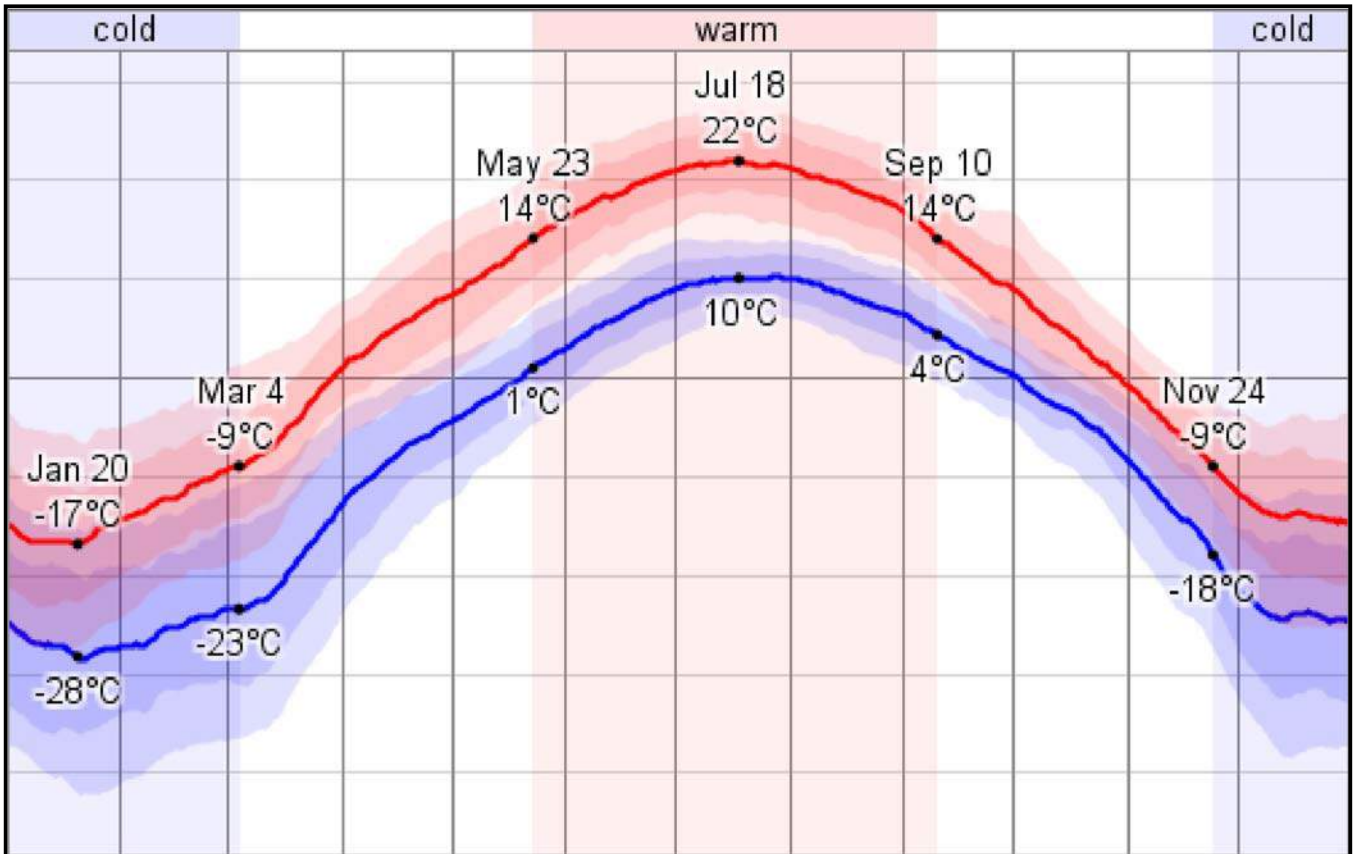
5.2.2 Vegetation

In the Wheeler Upland, jack pine and black spruce predominate on well-drained sites (Acton et al., 1998). Open stands of jack pine are common on older burns, areas of sandy outwash, southern sides of eskers and till ridges and on soils close to bedrock. Alders, lichens, blueberries and other ericaceous plants predominate in the understory. Black spruce is co-dominant or sub-dominant on north-facing slopes. White birch, white spruce, black spruce, balsam fir, and trembling aspen occur on warmer, south-facing sites. White birch stands also occur locally in well-drained hollows. Areas near streams have black spruce, white birch and willow. Fires are common and most forest is at some stage of regeneration. Mosses and sedges predominate in poorly drained bogs and fens. Depending on fire intensity and subsequent regeneration pattern, bogs may have up to 40% black spruce cover in unburnt sites.

5.2.3 Physiography

Most of the Wheeler Upland is drumlinoid moraine, extensively overlain by glaciofluvial outwash (Acton et al., 1998). Southwesterly trending eskers are prominent. The resulting topography is characterized by rolling, locally steep-sided, southwesterly trending ridges alternating with relatively flat-bottomed valleys with peat bogs and small lakes (Figure 4). Drainage is generally very weakly developed. Brunisolic soils dominate on well-drained slopes, with Gleysols, Organic soils and local Cryosols in the poorly drained lows.

Most of the western part of the property lies over Cree Lake, the fourth largest lake in Saskatchewan. Elevation ranges from about 485 metres above sea level at Cree Lake to 589 metres between Holgar and Perpete lakes, but local relief is typically 20 to 60 m.



From: weatherspark.com

CanAlaska Uranium Ltd.

Hanwha KEPCO KORES SK energy

Cree East Project

Average Temperature at Key Lake (1998 to 2012)

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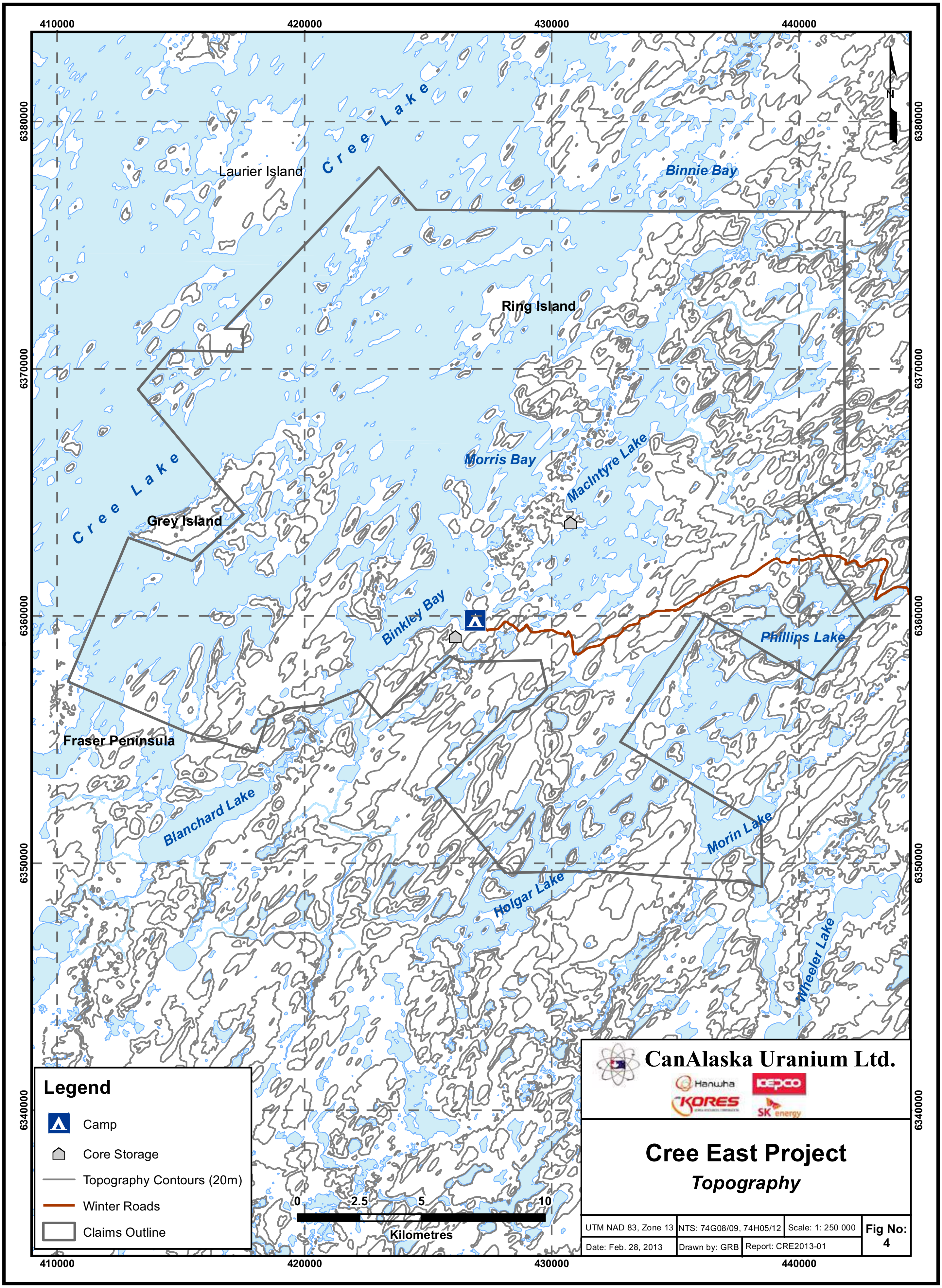

410000
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6380000
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6360000
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6340000
Cree Lake
Laurier Island
Binnie Bay
Ring Island
Morris Bay
MacIntyre Lake
Cree Lake
Grey Island
Binkley Bay
Phillips Lake
Fraser Peninsula
Blanchard Lake
Morin Lake
Holgar Lake
Wheeler Lake
N
Legend
Camp
Core Storage
Topography Contours (20m)
Winter Roads
Claims Outline
0
2.5
5
10
Kilometres
CanAlaska Uranium Ltd.
Hanwha
KEPCO
KORES
SK energy
Cree East Project
Topography
UTM NAD 83, Zone 13
NTS: 74G08/09, 74H05/12
Scale: 1: 250 000
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6 HISTORY

6.1 Ownership History

In November 2004, CanAlaska Uranium Ltd. staked the eight 'S-1077xx' series claims (26,906 ha) on the eastern side of Cree Lake (Figure 1). In September 2005, eight additional claims of the 'S-1083xx ' series (29,029 ha) were staked to the north and west of the first group. In 2010, an additional claim, S-111809 (1,817 ha), was staked on the northwest corner of the claim block.

In 2007, a consortium of Korean companies, Hanwha Corp., Korea Electric Power Corp., Korea Resources Corp. and SK Energy Co. Ltd., entered into a joint venture agreement with CanAlaska to acquire an initial 17.4% interest in the project, increasing to a 50% interest following expenditure of $19.0 million on the property (CanAlaska Uranium Ltd. news release, 12 October 2007). In 2008, formation of a joint venture company, CanAlaska Korea Uranium Ltd., was announced (CanAlaska Uranium Ltd. news release, 8 July 2008). In December 2010, the Korean consortium satisfied its exploration expenditure commitment and acquired a 50% interest in the property (CanAlaska news release, 20 December 2010).

6.2 Exploration History

Historically, uranium exploration in Saskatchewan has focused on three different areas and target models: epigenetic vein-hosted pitchblende in crystalline rocks in the Beaverlodge area north of Lake Athabasca during the 1940s and '50s (Saskatchewan Geological Survey, 2003; Rogers 2011), pegmatite-hosted uranium in Wollaston and Mudjatik domains during the 1950s (Yeo and Delaney, 2007; Rogers 2011), and unconformity-associated uranium in Athabasca Basin from the late 1960s to the present (Saskatchewan Geological Survey, 2003; Jefferson et al., 2007; Rogers, 2011). The Athabasca Basin and Beaverlodge uranium occurrences may have formed through similar processes, but they are of different ages. Uranium production from the Beaverlodge area between 1952 and 1981was 28,547 t U_3O_8, but production from Athabasca Basin has been an order of magnitude greater. From 1994 to 2011 production from mines in Athabasca Basin was 220,882 t U_3O_8 (n.b., Rabbit Lake production began in 1975, but precise production figures prior to 1994 are not available).

6.2.1 Exploration of Eastern Athabasca Basin

The first uranium discovery in Athabasca Basin was Rabbit Lake, found in 1968 by Gulf Oil following up an airborne radiometric survey flown the previous year. This discovery precipitated one of the largest staking rushes in Canadian mineral exploration history, although the only other discovery during this initial rush was the Cluff Lake 'D" deposit, found by Mokta (Canada) Ltd., now AREVA, in 1969. The Rabbit Lake discovery, however, led to recognition of a new class of uranium deposit, the unconformity-associated type (Hoeve and Sibbald, 1978; Jefferson et al., 2007, and others), discussed in part 8 of this report. More than 25 such deposits have since been discovered, including operating mines at McArthur River and Eagle Point, past producers at Cluff Lake, Key Lake, McClean Lake, Rabbit Lake, and mines under development at Cigar Lake and Millenium. Deposits found in southeastern Athabasca Basin are described in more detail in part 8.0 (Deposit Types) of this report. The nearest deposit to the Cree East property is Millenium (Roy et al., 2005; Beshear, 2010), 22 km to the northeast.

6.2.2 Property Exploration History Prior to 2006

Previous work on mineral claims that overlapped the present Cree East claims included airborne and ground electromagnetic and magnetic surveys, deep penetrating ground electromagnetic surveys, lake sediment and boulder geochemical surveys, surficial geology mapping and diamond drilling (Table 6-1 and Figure 5). A group of northeasterly trending EM anomalies lying east and south of Binkley Bay were tested by a series of drill programs on or near the southern part of the property. That work included thirteen historical holes, described in part 10.1 (Historical Drilling) of this report, drilled on the present Cree East property.

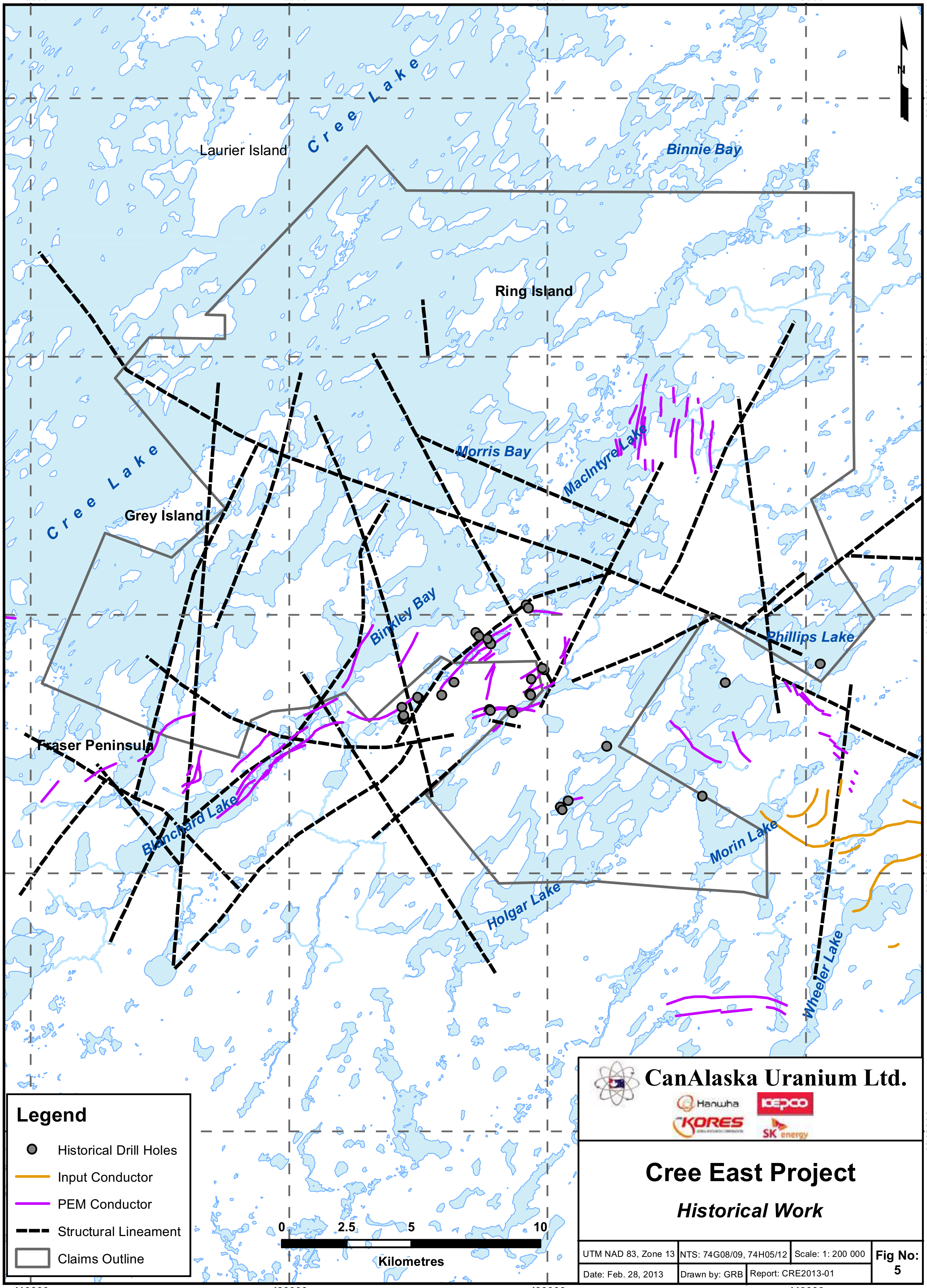
Table 6-1 - Historical Work in the Cree East Area (1969 - 1998)

Area	Year	Description	Work Done	Ass't Report No. & Author
Cree Lake	1969	Airborne EM		74G08-0002
Holgar Lake	1969	Recce Exploration		74G08-0001 G.J. McGinn
Cree Lake	1973	Inexco Mining Co. Summer 1973 Fieldwork – CBS 1878, 2866, 2018, 2045 & 2046	Airborne radiometrics, geological & geochemical surveys: no anomalous values in Cree L area	74H-0011 B.H. Tan
Cree Lake	1977	Uranerz Exploration Ltd. report on Inexco Mineral Permit #1	Linecutting, mapping, airborne INPUT EM & magnetics: NE-trending conductors at Darby Bay	74H-0012 K. Lehnert-Thiel & J. Rich
Cree Lake	1977	Uranerz Exploration Ltd. report on Inexco Mineral Permit #1	Prospecting, geochemical & radon surveys: no anomalous results	74H-0020 K. Lehnert-Thiel & J. Rich
Holgar Lake – Colquhoun Lake	1977	Denison Mines Ltd. report on the Colquhoun L. Project – CBS4894 & 4737	Airborne EM and magnetics; ground EM, radiometrics and geochemical sampling	74H05-0019 B. Chen
Southeast	1978	CBS 2045, 2046,	Includes VLEM and	74H04-NE-0041

Athabasca Basin		5457, 5458, 5459, 5460, 5461 & 4687	drilling 7 holes in Blanchard L. area: BD 1 to 6	K. Lehnert-Thiel & J. Rich
Cree Lake	1978	Report by Scintrex for AluSuisse Mining Ltd.	Airborne EM & radiometrics: found several short NE & E-trending conductors in Cree East project area; NNE-trending one at Perpete Lake	74G-0006 I. Johnson
Cree Lake	1978	Report by Kenting Exploration for SMDC on Permits 21, 22 & 23	Marine seismic survey over parts of Cree Lake	74G-0003 D.M. Danyluk
Brustad Lake	1978	Report by Geoprobe for SMDC	Airborne EM	74G-0007
Holgar Lake	1978	Report by Excalibur International	Ground VLF	74G08-0012
Cree Lake	1979	Scintrex report for AluSuisse Mining Ltd.	Airborne Turam EM	74G-0010
Cree Lake	1979	Cree Extension Project Report		74G-0011 B. Makie
Cree Lake	1979	Questor Survey Ltd. report for SMDC Project #20068	Airborne EM and magnetics	74G07-0020
Perpete Lake	1979	Questor Survey Ltd. report for SMDC Project #21029	Airborne EM	74G08-0020
Perpete Lake - Chain of Lakes area	1979	Excalibur Int'l Consulting report for Key Lake Exploration Ltd.	HLEM, VLF and magnetics on North Holgar, Perpete & Chain-of-Lakes grids: no strong conductor found	74G08-0021 J.G. Boniwell
Perpete Lake - Chain of Lakes area	1979	Key Lake Exploration Ltd	Drilling SM79-1 to 5	74G08-0021 F.J. Sharpley
Holgar Lake	1979	Denison Mines Ltd. report on Colquhoun L. Project - CBS 4894 & 4737	Drilling CQ79-1, -2A & -3	74H05-0050 S. Tsukagoshi
Colquhoun Lake – Holgar	1980	Denison Mines Ltd. report on Colquhoun L.	Drilling holes CQ79-4; CQ80-5, 6, 8, 9, 10 & 11	74H05-SW-0059 A. Farkas

Lake		Project - CBS 4894		
Perpete Lake	1980	Excalibur Int'l Consulting report for Key Lake Exploration Ltd.	Ground EM and magnetics	75G08-0022
Perpete Lake & Chain of Lakes	1980	Report for Key Lake Exploration Ltd. on CBS 4734, 4841 & 5045	Drilling holes SM80-6 to SM80-15	74G08-0023 F.J. Sharpley
MacIntyre Lake	1980	Assessment Report		74G08-0024 B. Violette
Cree Lake	1980	Brinex Annual Report		74G08-0016 P. Hum & R.W. Woolham
Holgar Lake – Blanchard Lake	1980	Report for Uranerz Exploration Ltd on CBS4687	VLF, HLEM, Turam, magnetics & geochemical surveys	74G8-0031 M.G. Chase
MacIntyre Lake	1981	Report on Agip Canada Ltd. MacIntyre Lake Project – CBS 5042 to 5047	Airborne geophysics, geology, prospecting, sampling, linecutting & drilling holes ZF-1 to ZF-3	74G08-0025 B. Violette & D. Eaton
Perpete Lake	1981	Final Report on Perpete Lake JV for Key Lake Exploration Ltd.	Review of 1979-81 geophysics & drilling at Chain of Lakes, Perpete, Blanchard & Morin lakes	74G08-0029 C. Von Hessert
Cree Lake	1981	Brinex Annual Report on Cree Lake Project		74G08-0017 P. Hum
MacIntyre Lake	1982	Report on AGIP Canada Ltd. MacIntyre Lake Project – CBS 5042 to 5047	Prospecting, ground magnetics, gravity, VLF & TEM, drilling holes ZF-4 to ZF-6	74G08-0042 J. Donkers & R. Tykaijlo
MacIntyre Lake	1983	Report on AGIP Canada Ltd. MacIntyre Lake Project – CBS 5042 to 5044	Drilling holes ZF-7 to ZF-11	74G08-0041 J. Donkers
Perpete Lake	1983	Report on SMDC Perpete Lake Project – CBS4841 & 8864	Ground geophysics & drilling holes SM83-25 to SM83-33	74G08-0048 G. Curry
Perpete Lake	1983	Report on SMDC Perpete Lake Project – CBS4841	Drilling holes SM83-25 to SM83-33	74G08-0046 G. Curry & R. Chapman

		& 8864		
Cree Lake – Key Lake	1985	Uranerz report on CBS 2938, 3510 & 4503 to 4509	Linecutting, EM & drilling KW1 to KW4	74H-0031 C. Cutts & K Kogler
Cree Lake – Key Lake	1986	Uranerz report on CBS 6132 to 6138, 6140 & 6148	Boulder & lake sediment sampling	74H-0030 C. Cutts & J. Murphy
Cree Lake – Key Lake	1987	Uranerz report on S-98143 to S-98148 & CBS6133, -135, -136, -139, -140 & 6232	UTEM & gravity surveys, boulder & lake sediment sampling	74H-0035 C. Cutts & J. Murphy
MacIntyre Lake & Benson Lake	1987	Interuranium Canada Ltd. report on MacIntyre L. Project – CBS7473, 7574, 7599	Airborne and ground EM: broad conductor, but no deep conductor on MacIntyre Grid	74-0008 F. Hopfengaertner
Cree Lake – Key Lake	1988	Uranerz report on S-98146, -147, -148 & CBS 6132, 6133, 6135, 6136	TEM, Drilling holes EL-01 to 04	74H-0036 L.C. Allen
Cree Lake – Key Lake	1990	Uranerz report on ML5279, 80, 81, 83, 86 & 87	Ground EM survey, boulder sampling & drilling	74H-0043 G. Chabot
Cree Lake – Key Lake	1990	Uranerz report on ML 5327 & ML5423	Ground EM survey & drilling 15 diamond drill holes & 41 percussion drill holes	74H-0045 C. Keller
Perpete Lake - Crawford Lake	1995	Report on S104755, 104756, 104749 & 104750	Boulder sampling & re-analysis of historical drill core	74H05-0136R K. Lehnert-Thiel
Perpete Lake	1997	Cameco Corp. report on S-103256	TDEM survey on Holgar L. grid and drilling hole PE-1	74G08-SE-0051L S. McHardy, G. Wood & K. Wasyliuk
Phillips Lake	1997	Cameco Corp. report on S-104244 & S-101954	Drilling holes PH-4 & PH-5	74G08-SE-0053L D. Macdonald & K. Wasyliuk
Phillip Lake – Holgar Lake	1998	Cameco Corp. report on Phillips Project S-101953, S-101954 & S-104244	Ground TDEM & drilling holes PH-1 & PH-2	74H05-0131 S. McHardy, D. Macdonald, B. Powell & K. Wasyliuk



CanAlaska Uranium Ltd.

Hanwha KEPCO KORES SK energy

Cree East Project

Historical Work

UTM NAD 83, Zone 13	NTS: 74G08/09, 74H05/12	Scale: 1: 200 000	Fig No: 5
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6.2.3 CanAlaska Exploration

Exploration carried out by CanAlaska Uranium Ltd. and CanAlaska Korea Uranium Ltd., the joint venture company formed to explore the property in 2008, is outlined chronologically below. Although most of the property was staked in 2004 and 2005, no work was reported prior to property-scale airborne EM and magnetic surveys and regional geochemical sampling in 2006. Exploration work is described in more detail by grid area in sections 7.4 (Grid 7 Geology), 9.0 (Exploration) and 10.0 (Drilling) of this report.

6.2.3.1 CanAlaska Exploration in 2006

Initial exploration on the Cree East project included property-scale geochemical sampling and airborne EM and magnetic surveys.

CanAlaska's initial evaluation of the property included systematic lake sediment and sandstone boulder sampling (Shirmohammad and Schimann, 2008). A total of 413 lake sediment samples and 2049 boulder samples were collected.

Also in 2006, an airborne Versatile Time Domain Electromagnetic (VTEM) and magnetometer survey was flown along north-south lines at 400 m line spacing. The results of this were modeled as AdTau parameter maps (Marquis and Schimann, 2008; Schimann et al, 2008) on which seven major conductive features (C1 to C7) were distinguished.

6.2.3.2 CanAlaska Exploration in 2007

Based on the results of the 2006 fieldwork, further geochemical sampling was carried out in 2007, along with audio-magnetotellurics (AMT) and resistivity surveys.

The 2007 geochemical sampling program included 1312 sandstone boulder samples, 65 lake sediment, and 602 soil samples (Shirmohammad and Schimann, 2008). On the basis of geochemistry, three zones of interest were outlined in the northern, south-central and south-eastern parts of the property.

In the spring and summer of 2007, five grids, corresponding to VTEM conductive features, were cut on the property (Marquis and Schimann, 2007). A reconnaissance-scale AMT survey was done by Geosystem Canada Ltd. over grids 1, 2 and 3 on the northwest part of the property, and DC/IP-Resistivity surveys were done on grids 5, 6 and 7 over the central and southeastern parts of the property by Peter Walcott and Associates and Discovery International Geophysics Ltd.. The AMT survey revealed a broad northeast-trending conductor, whereas the IP-Resistivity surveys showed a complex pattern of low-resistivity features, several of which were interpreted to be potential target "plumes" in the sandstone.

6.2.3.3 CanAlaska Exploration in 2008

Work in 2008 included more lake sediment sampling, DC/IP Resistivity, a seismic survey and 13 drill holes (Schimann, 2008; Schimann et al., 2008).

Thirty lake sediment samples were collected to verify anomalous results from the 2006-2007 sampling program.

Additional IP-Resistivity surveys by Discovery Geophysics International on Grid 7 over northern Binkley Bay provided data for a higher resolution model of potential targets (Marquis and Schimann, 2009a).

Bathymetric and Pulsar seismic surveys (164.8 km) were done on Grids 6 and 7 over northern Binkley Bay and Morris Bay in Cree Lake and southern MacIntyre Lake (Schimann et al., 2008; Marquis and Schimann, 2009a). In general, the top of the sandstone mimics the lake bottom pattern (i.e., sediment draped over sandstone). Reflector offsets, suggests numerous faults. In particular, a northeasterly trending fault zone through Binkley Bay is inferred to have sinistral offset.

In the winter of 2008, seven holes (CRE001 to CRE007; 1,470.2 m) were drilled on targets defined by 2006-2007 VTEM and IP-Resistivity surveys on Grid 7 (Schimann, 2008). Because of difficult ground conditions, only three holes (CRE002, CRE005 and CRE007) reached basement (pelite, graphitic or pyritic pelite and mylonite). The low resistivity targets were confirmed to be strongly fractured and altered sandstone, but no mineralization was found. However, geochemical enrichment in uranium and other elements and evidence of hydrothermal alteration was recognized in CRE002 and CRE005 (Alizadeh et al., 2008). Further drilling and more detailed geophysics was recommended.

In the summer of 2008, five holes (CRE008 to CRE012; 2,619.8 m) were drilled on geophysical targets on Grid 7 between Binkley and Morris bays (Schimann et al., 2008). All the drill holes but one (CRE012) confirmed their geophysical features and intersected basement. Except in CRE-11, fracturing and alteration was found in the sandstone. Basement lithologies included semipelite, pelite, graphitic pelite, calc-silicates and amphibolite. CRE008 and CRE009 encountered significant fracturing and alteration in the basement. Although no mineralization was intersected, geochemical enrichment in uranium and other elements and evidence of hydrothermal alteration was recognized in CRE008, CRE010 and CRE012 (Alizadeh et al., 2008). The unconformity elevation offsets between holes are likely due to faulting.

6.2.3.4 CanAlaska Exploration in 2009

Work in 2009 included airborne magnetics and EM, ground resistivity and another 15 drill holes.

In the summer of 2009, an airborne magnetic gradiometer survey (3,985 km at 200 m line spacing) was flown by Goldak Airborne Surveys to better define large-scale basement structures (Marquis and Schimann, 2009b). This improved resolution of magnetic basement features and allowed a property scale estimation of depth to the unconformity.

A helicopter VTEM survey (383 km on east-west lines with 200 m line spacing) was flown on Grid 7 by Geotech to improve the resolution of internal structure within the VTEM conductors first identified in the 2006 property-scale survey (Marquis and Schimann, 2009b). This survey showed that previously identified broad VTEM conductors (e.g., C7N and C7S in Schimann et al., 2008) actually comprised multiple long narrow conductors, likely graphitic pelite units. Northerly trending conductors, not detected in the 2006 survey, were also recognized.

A total of 29.3 kilometres of IP-Resistivity was done on lines intercalated with earlier IP survey lines on Grid 7 over northern Binkley Bay (Marquis and Schimann, 2009a). The 2009 IP-Resistivity data was merged with the 2007-2008 data and reinterpreted. A further 95.8 kilometres of IP-Resistivity was carried out to extend coverage to the north and west. Three new low resistivity target areas were identified.

In the winter of 2009, 15 holes (CRE013 to CRE028; 6747 m) were drilled on five fences roughly one kilometer apart along the axis of northern Binkley Bay on geophysical targets and to follow up previous drilling. All holes were completed, except CRE022, abandoned at 91.4 m in bad ground. Holes on fences A and B confirmed the presence of a major north-northwesterly structure with intense basement fracturing, brecciation and alteration. Fences C and D also gave encouraging results, but Fence E did not. In CRE017 (Fence D), a 2.2 m interval of 0.01% U3O8 was found.

6.2.3.5 CanAlaska Exploration in 2010

In 2010, ground and borehole EM surveys were carried out and 42 holes were drilled.

The 2010 winter geophysics program included Moving Loop Time Domain EM (MLTDEM) using SQUID (Superconducting Quantum Interference Devices) receivers, and Borehole Time Domain EM (BHTDEM) surveys (Marquis and Schimann, 2010; Napier, 2011). For better detection of deep targets, large transmitter loops (generally 400 m x 400 m) and long transmitter – receiver spacings (600 – 800 m) were used.

A 30.4 km MLTDEM survey was done by Discovery Geophysics on nine lines on Grids 1, 2 and 3 in the northwestern part of the property. Modelling of the data suggest a thin conductive unit (graphitic pelite?) trending north-northeasterly and dipping steeply southeast, plus several more complex conductors (Napier, 2011). These conductors match well with previous AMT and VTEM anomalies.

On Grid 7, where all the drilling to date had been done to date, an additional 6.6 km of MLTDEM was carried out on three short lines over the 7CN VTEM anomaly. Modelling of the MLTDEM data suggests the conductors have a steep easterly dip.

BHTDEM surveys were done by Abitibi Geophysics in 6 of the 2008-2009 holes plus all but 4 of the winter 2010 holes. Crosshole IP/DC Resistivity tomography was done on Zone A drill holes.

In the winter of 2010, fifteen holes (CRE029 to CRE043; 6139 m) were drilled, six in Area A between Binkley and Morris bays, three in Area D in northeastern Binkley Bay, four in Area G at the northern end of the Chain of Lakes and two in Area I in northeast Binkley Bay (Smart et al., 2010). The Area A holes helped clarify the structural complexity of that area. Weak mineralization (0.08% U3O8 over 0.5 m) was intersected in CRE035. Anomalous U, Ni, Zn, Pb and Cu enrichment was observed 10 – 20 m above the unconformity in CRE037 and CRE041. The Area D holes encountered strong hematite and chlorite alteration below the unconformity, but no mineralization. The Area G holes intersected weakly graphitic basement rocks, including 0.013% U3O8 over 3.1 m in in drill hole CRE043. One of the Area I holes, CRE040, intersected 0.091% U3O8 over 0.5 m and 0.18% over 0.5 m in sandstone just above the unconformity, with associated anomalous Ni, Co, As and V. Tectonically rotated blocks of sandstone suggest a major brittle fault structure.

An additional 27 holes (CRE044 to CRE70; 10,060.5 m) were drilled in the summer of 2010, including 8 holes in Area A between Binkley and Morris bays, 14 holes in Area G at the north end of the Chain of Lakes, three holes in Area H on the eastern shore of Binkley Bay; plus a short hole for a water well at the camp site.

Two northwesterly trending fences were drilled in Area A to test the extent of mineralization and alteration encountered in previous drilling. Mineralization was intersected in CRE063 (0.05% over 0.5 m) and CRE067 (0.14% over 0.3 m). Anomalous U, Ni, Zn, Pb, Cu and As enrichment plus a strong clay alteration halo was encountered in sandstone up to 150 m above the unconformity in CRE044, CRE046, CRE063 and CRE067.

Two northeasterly trending fences were drilled in Area G, one to test the extent of alteration and mineralization found in CRE043, and the second to test the extent of alteration encountered in the first fence plus a resistivity target. A third short fence was drilled to test a coincident basement conductor and sandstone resistivity anomaly. CRE047 intersected three mineralized intervals ranging from 0.01 to 0.10% U3O8. CRE049 intersected four zones ranging from 0.01 to 0.02% U3O8. CRE05 intersected five intervals ranging from 0.01 to 0.03% U3O8. All mineralized intersections were in basement.

An easterly trending fence was drilled at Area H to test a basement conductor associated with a resistivity low in the sandstones. Although no anomalous values were encountered in these holes, very friable sandstone was found in CRE055.

6.2.3.6 CanAlaska Exploration in 2011

In 2011, additional ground EM was carried out and 6 holes were drilled.

An additional 59.3 kilometres of MLTDEM – SQUID surveys were done by Discovery Geophysics in the winter of 2010-2011, including twenty lines on Grid 7 more closely spaced than the three MLTDEM lines surveyed in early 2010, two lines on Grid 5 and two lines on Grid 6 (Napier, 2011). The survey configuration used smaller loops (100 m x 100 m) and a closer transmitter – receiver spacing (200 to 400 m) because the target depths were shallower than in the early 2010 survey over the northwestern area. Line 11200E on Grid 7 was resurveyed to compare the results of the different configurations and the data showed very good correspondence, except for early time Z component data, which does not adversely affect the data modeling.

Modelling of the Grid 7 EM data suggests the MLTDEM response is due to a conductor trending northerly and curving east at its northern end. The conductor is about 220 m deep at its southern end, where it dips steeply to the east, and about 350 m deep at its northeastern end where its dip is less steep. An offset in the conductor corresponds with a Total Field Magnetic low, suggesting a northwesterly trending sinistral fault with about 200 m of offset. A second conductor about 2 km west of the main one appears to be more limited in extent.

Modelling of the Grid 5 EM data suggests a pair of northeasterly trending conductors, both dipping steeply to the northwest, with tops at a depth of 350 m.

No conductors were detected on Grid 6.

Six holes (CRE071 to CRE076; 1,414.6 m) were drilled on Grid 7 in the winter of 2011. Three reached basement. The program was terminated early following a fatal accident involving a drill contractor employee.

Three holes, CRE071, CRE072 and CRE073, were drilled in Area A northeast of Binkley Bay to extend alteration and mineralization encountered in previous drilling. CRE071, on the east side of Area A, was terminated at 90.8 m in sandstone when it was realized it had been spotted at the wrong location. The hole was re-started as CRE072 and successfully extended the alteration and anomalous geochemistry found in holes to the west. CRE073, on the north side of Area A, did not reach its planned depth, but ended in 8 metres of massive hematized clay, interpreted to be altered basement rock.

Two holes, CRE074 and CRE075, were drilled in Area I in northeastern Binkley Bay to extend mineralization from previous drilling and test structures and basement conductors defined by geophysics. CRE074 encountered alteration and anomalous geochemistry, but no mineralization. CRE075 had reached 75.6 m in sandstone when the program was terminated.

One hole, CRE076, was drilled in Area C in northeastern Binkley Bay to test the area between holes CRE025 and CRE026. The hole had reached 36.6 m in sandstone when the drill program was shut down.

6.2.3.7 CanAlaska Exploration in 2012

In 2012, more ground EM was done, followed by 15 drill holes.

In the winter of 2011-2012, 26.2 kilometres of MLTDEM were surveyed on Grid 7 by Patterson Geophysics using a SQUID receiver and 200 m x 200 m loops. Two lines were done over Zone B between Binkley and Morris bays and MacIntyre Lake and seven lines were done over Zone J between Binkley Bay and MacIntyre and Perpete lakes.

Modelling of EM data from the Grid 7 Zone B indicate a continuous, near-vertical conductor trending northeasterly and open to the north. This structure may represent a graphitic pelite unit folded into a northeast-plunging antiform.

Modelling of EM data from the Grid 7 Zone J indicate a semicircular conductive feature (the "Zone J Hook") dipping outward and flattening with depth, particularly to the north and east.

In the winter of 2012, following the MLTDEM survey, 15 holes (CRE077 to CRE091; 6,022.1 m) were drilled on target areas A, B, G and J in the Grid 7 area.

Three holes were drilled on the northern side of Area A to extend the zone of alteration and mineralization. CRE085 extended the hematized clay zone just below the unconformity in CRE076. CRE087 was lost in sandstone at 67 m. CRE089 did not intersect mineralization, but did encounter alteration, anomalous geochemistry and local silicification.

Six holes were drilled to test a basement conductor with associated resistivity anomalies in Area B, where no previous drilling had been done. The five western holes (CRE083, CRE086, CRE088, CRE090 and CRE091) all encountered strong fracturing, faulting, breccia, rotated blocks and intense kaolinite-illite-pyrite alteration. CRE083 intersected mineralization (0.09% U3O8 over 0.5 m) in fractured pelite. CRE084, drilled further east, had less intense sandstone alteration, but more intense basement alteration with associated mineralization, including 0.014% U3O8 over 0.5 m in pelite.

CRE082 was drilled to extend one of the Area G fences. It reached basement, but encountered no mineralization or alteration.

In Area J, four holes were drilled on a northwesterly trending fence in Zone J to test geophysical targets, particularly the recently defined MLTDEM conductors. A single hole (CRE081) was drilled east of Zone J. CRE077 intersected about 35 m of basal Read conglomerate, which suggests a nearby syndepositional fault. CRE078 was lost in overburden. CRE079, CRE080 and CRE081 all reached basement. None had significant alteration, but CRE080 was weakly mineralized in the basement.

7 GEOLOGICAL SETTING AND MINERALIZATION

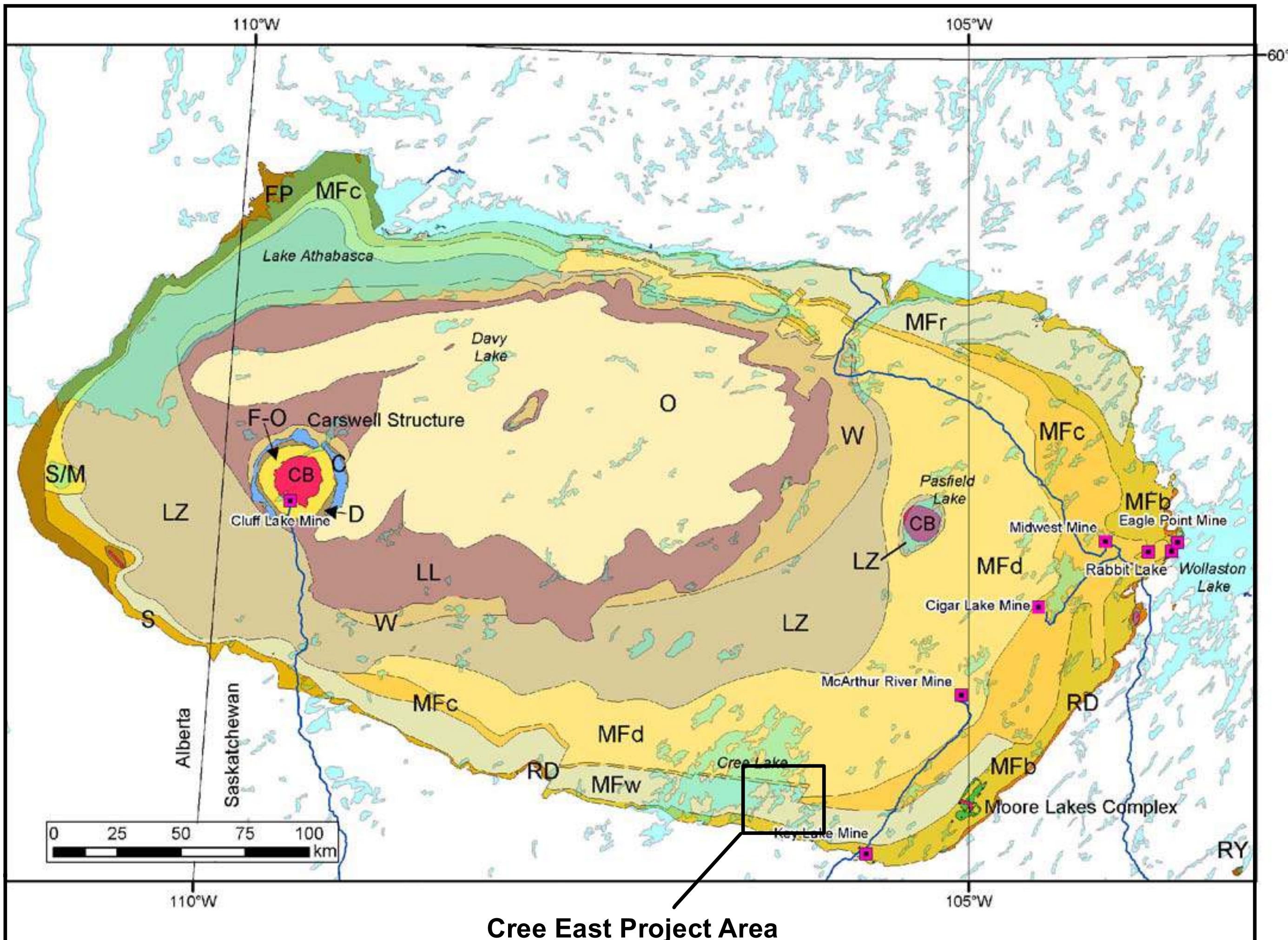
7.1 Regional Geology

The Athabasca Basin is a bathtub-shaped Paleo- to Mesoproterozoic sedimentary basin at least 1400 m deep (Figure 6). Except at its eastern end, it slopes steeply inward. Sandstone outliers, such as one at Reilly Lake, indicate that the basin was formerly more extensive, at least to the southeast. Among the Proterozoic sedimentary basins which host unconformity-associated uranium, the Athabasca Basin stands out for the number of deposits found and their relatively high grade (Jefferson et al., 2007).

Most of the uranium occurrences underlie the eastern Athabasca Basin; mainly along a northeasterly trend coincident with the transition between the two litho-structural crystalline basement domains which comprise this part of Hearne Province, Wollaston Domain to the east and Mudjatik Domain to the west (Figure 6). They are commonly in close association with northeasterly trending faults and spatially associated with Wollaston Supergroup graphitic pelite or calc-silicate rocks. They may occur in basement fault zones, at the unconformity, or perched in the lower Athabasca sandstone succession (Jefferson et al., 2007).

The Wollaston-Mudjatik boundary is defined by a transition from linear, northeasterly trending structures to broad, arcuate ones, and an increase in proportion of Archean gneisses, reflecting a change in regional strain and a higher structural level of crustal exposure in Wollaston Domain. The Wollaston-Mudjatik boundary beneath Athabasca Basin is not well-defined. Gilboy (1982; 1985a) interpreted it to lie along the southeastern margin of MacIntyre Lake, whereas Jefferson et al. (2007) and the Saskatchewan Geological Atlas interpreted it to lie more than 20 km to the east.

Crystalline basement rocks along the southeastern margin of the Athabasca Basin were mapped by Gilboy (1985b), Ray (1977) and others. Basement rocks beneath the Athabasca sandstone were interpreted on the basis of aeromagnetic data and limited drill core by Gilboy (1982). Much of this was compiled in 1:250,000 scale maps of the Cree Lake (NTS 74G) and Geikie River (NTS 74H) areas by Gilboy (1985a) and Ray (1983) respectively. The Athabasca sandstone was mapped by Ramaekers (1977; 1990), but substantially re-interpreted on the basis of drill core logs by Ramaekers et al. (2007), Bosman and Korness (2007) and Bosman et al. (2008).



From: Sean Bosman, Saskatchewan Geological Survey; personal communication

CanAlaska Uranium Ltd.

Hanwha KEPCO KORES SK energy

Cree East Project

Geological Sketch Map of the Athabasca Basin

Date: Feb. 28, 2013	Drawn by: GRB	Report: CRE2013-01	Fig No: 6

7.1.1 Wollaston – Mudjatik Basement Geology

The Wollaston Domain is underlain by metasedimentary rocks of the Wollaston Supergroup (Yeo and Delaney, 2007), which overlie late Archean (2.74 – 2.57 Ga, U-Pb zircon) granitoid orthogneiss, identical to that of Mudjatik Domain, with minor mafic, ultramafic and metasedimentary rocks. Bimodal volcanics (2075 +/- 2 Ma, U-Pb zircon), conglomerate and arkose, belonging to the Courtenay Lake Group preserved along the eastern margin of the domain, are interpreted to represent a craton rifting event. Overlying quartzite, wacke and siltstone of the Souter Lake Group are interpreted to be remnants of a passive margin succession. The Daly Lake Group, an upward-coarsening succession of graphitic pelite, quartzite, marble, and calc-silicate rocks, overlain by a succession of pelite, psammopelite and arkose. extends over most of the domain and is interpreted to be the fill of a foreland basin. Detrital zircons indicate that this succession is younger than 1.88 Ga. Widespread conglomerate, overlain by arkose, wacke and calc-silicate rocks, marks the base of the Geikie River Group, interpreted to be the final phase of basin infill before the Trans-Hudson Orogeny.

The Mudjatik Domain is characterized by elliptical domes of Archean (3.6 – 2.6 Ga) granitoid orthogneiss separated by keels of metavolcanic and metasedimentary rocks (Card et al., 2007; Saskatchewan Geological Survey, 2003). Some of the latter are remnants of the Wollaston Supergroup to the east, the Virgin Schist Group to the west, or the Ennadai and Hurwitz groups to the north. The Cree East property lies west of the Wollaston - Mudjatik Transition Zone.

7.1.2 Trans-Hudson Deformation and Metamorphism

The Wollaston Domain is intruded by 1.84 – 1.82 Ga granites and gabbros generated during the Trans-Hudson Orogeny. Metamorphic grade increases steeply westward from upper greenschist - lower amphibolite to upper amphibolite - granulite facies. Distinct suites of deformed and undeformed pegmatites and high temperature metamorphic mineral assemblages, best developed in the pelites, reflect two episodes of peak metamorphism. These correspond respectively to the regional D1/D2 and D3 deformation events between 1.82 and 1.80 Ga. The latter produced the tight to isoclinal, northeasterly trending, doubly plunging folds that give the domain its characteristic structural grain.

The Mudjatik orthogneisses, some of which may be as old as 3.6 Ga, underwent metamorphism at about 2.78 Ga, followed by widespread intrusion of 2.65 – 2.60 Ga granitoids. The 1.85-1.80 Ga Trans-Hudson Orogeny resulted in overprinting of northwesterly trending D2 folds by northeasterly trending D3 folds to produce the dome and basin structure characteristic of the domain.

The northeast-trending Cable Bay Shear Zone, along the western side of Cree Lake, is a ductile to brittle-ductile structure interpreted to be coeval with or younger than late Trans-Hudson D3 folds (Card and Bosman, 2007; Card, 2012). It has a strong aeromagnetic expression, but appears to die out about 20 km north of Cree Lake (Card, 2012) and around Wasekimio Lake to the southwest.

7.1.3 Athabasca Group

The depositional age of the Athabasca Group is bracketed by 1.82-1.80 Ga pegmatites and 1.77 Ga metamorphic cooling ages from Wollaston Domain (Annesley et al., in Saskatchewan Geological

Survey, 2003) and the 1.27 Ga northwesterly trending Mackenzie dykes which intrude the group. Apart from faulting and local folding associated with thrust faults or with the Carswell impact structure, the strata are undeformed.

Macdonald (1980) interpreted a zone of clay, hematite and chlorite alteration, extending up to 50 m below the unconformity, to have formed by intense chemical weathering following erosion of the Trans-Hudson mountains. Although commonly called a regolith (i.e. unconsolidated material overlying bedrock), this red-green zone is more precisely termed a saprolite (i.e. clay-rich, thoroughly altered rock formed in place by chemical weathering).

The Athabasca Group comprises four unconformity-bounded, broadly upward-fining, dominantly siliciclastic sequences deposited in a series of extensive lobate fluvial megafans or deposystems (Table 7-1; Ramaekers et al., 2007).

In the eastern Athabasca Basin, uranium mineralization occurs within or below the Read and Manitou Falls formations (Table 7-1). The Read quartz arenite, conglomerate and pebbly mudstone corresponds to that succession underlying the Bird (MFb) member formerly called MFa (Ramaekers, 1990; Ramaekers et al., 2007). Other members of the Manitou Falls Formation remain unchanged, including the Bird (MFb) conglomeratic sandstone, defined by the presence of at least 1.2% conglomerate, the Collins (MFc) sandstone, defined by scarcity of conglomerate and clay clasts, and the Dunlop (MFd)clay clast-rich sandstone, defined by the presence of at least 0.6% clay clasts. (Note: Bosman and Korness (2007) pointed out that the 2% conglomerate and 1% clay clast cut-off values used to define the MFb and MFd members (Ramaekers, 1990; Ramaekers et al., 2007) are based on logging core over 1 m intervals. The equivalent values when logging at 3 m intervals, as is common exploration practice, should be 1.2% and 0.6% respectively.) Ramaekers et al. (2007) introduced two new members to account for facies variations within strata correlative with the Bird Member (MFb) among the three major Manitou Falls depositional systems. The Raible Member (MFr) in the southwesterly prograding Moosonees deposystem of northern Athabasca Basin and the Warnes Member (MFw) in the northwesterly prograding Karras deposystem in the south are equivalent to the Bird member (MFb) of the easterly prograding Ahenakew deposystem in the east (Table 7-1).

Table 7-1 - Table of Formations and Geological Events in Athabasca Basin.

Unit		Material	Ice Flow & Distribution	Age
Quaternary Strata	Recent Deposits	Peat, lacustrine, eolian deposits	Widespread	< 8100 years
	Upper Stratified Sediments	Glaciofluvial & glaciolacustrine sand, gravel, minor silt, clay	Discontinuous eskers & outwash plains	8700-8200 years
	Till 3	Ablation till: thin, soft, sandy boulder till with locally derived clasts	SSW: Thin discontinuous drift, hummocky, small drumlins	
	Middle Stratified Sediments	Glaciofluvial & glaciolacustrine sand,, gravel, minor silt, clay	Uncommon; mixed with Till 3	
	Till 2	Ablation till: thin, soft,	SW: Very	Late

			brown, matrix-rich sandy till	widespread; drumlins & till plains	Wisconsinan
			Basal till: hard, grey till with abundant sandstone clasts		
		Lower Stratified Sediments	Glaciolacustrine clay and silt; glaciofluvial sand and gravel	Rare, no surface expression	
		Till 1	Till: hard, greenish grey cobble till with abundant crystalline basement clasts	WSW: Very rare, preserved in bedrock lows	Pre- Late Wisconsinan
Moore Lakes Complex			Diabase sills		1.11 Ga
Mackenzie Dykes			Diabase in NW-trending dykes		1.27 Ga
Athabasca Group	**Seq.**	**Formation**	**Lithology**	**Deposystem & Progradation**	
	4	Carswell	Dolostone	McLeod (W)	
		Douglas	Mudstone		1.54 Ga
		Otherside	Quartz arenite		
		Locker Lake	Pebbly quartz arenite		
	3	Wolverine Point	Mudstone	Bourassa (N)	1.64 Ga
		Lazenby Lake	Pebbly quartz arenite		
	2	Manitou Falls	MFd clay clast-rich quartz arenite	Karras (NW); Ahenakew (N & W); Moosonees (SW)	
			MFc quartz arenite		
			MFr & MFw pebbly quartz arenite, quartz arenite, clay clast-rich quartz arenite		
			MFb conglomerate		
		Read	Conglomerate, quartz arenite	Ahenakew (N & W)	
		Smart	Quartz arenite	Robert (N)	
	1	Fair Point	Conglomeratic quartz arenite	Fidler (W)	
Paleo-weathering			Clay, hematite, chlorite alteration of pre-Athabasca crystalline rocks		
Trans-Hudson Orogeny			Late metamorphic cooling		1.77 Ga
			Two generations of pegmatite associated with D2/M1 and D3/M2 events		1.82-1.80 Ga
			Granite & gabbro plutons		1.84-1.82 Ga
W oll	**Group**	**Formation**	**Lithology**	**Tectonic Setting**	

	Geikie River	Hidden Bay	Calc-silicates & marble	Foreland Basin	
		Fraser Lakes	Calc-silicate bearing meta-arkose		
		Rafuse Lake	Meta-arkose, wacke & calc-silicate breccia		
		Janice Lake	Meta-conglomerate and arkose		
	Daly Lake	Burbidge Lake	Meta-arkose & quartzite	Foreland Basin	< 1.88 Ga
		Roper Bay	Meta-arkose & semipelite		
		Thompson Bay	Semipelite & pelite		
		Bole Bay	Cordierite & sillimanite pelite & semipelite		
		Karin Lake	Garnet & graphite pelite, semipelite, pelite, quartzite, calc-silicates, marble		< 1.88 Ga
	Souter Lake Group		Quartzite & semipelite	Passive craton margin	
	Courtenay Lake Group		Conglomerate, arkose & volcanics	Intracratonic rift	2.07 Ga
Wollaston & Mudjatik Basement			Granite, granodiorite, tonalite, amphibolite, ultramafic rocks		2.74-2.57 Ga

Compositionally, the sandstones are all quartz- or hematite-cemented orthoquartzites with variable amounts of detrital clay (Jefferson et al., 2007). In spite of their simple composition, their diagenetic history is complex. The predominant regional background clay is dickite.

The stratigraphy of the Athabasca Group in southeastern Athabasca Basin, including the Cree Lake area, has been mostly recently been studied by Bosman et al. (2008).

7.1.4 Brittle Deformation

Local preservation of lower Manitou Falls strata in paleotopographic lows and sedimentary breccias along the margins of such lows, thickness variations within sandstone units, and stratigraphic offsets are respectively evidence for pre-, syn- and post-depositional faulting in southeastern Athabasca Basin (Bosman and Korness, 2007; Bosman et al., 2008; Long, 2007, and others)

Major Trans-Hudson ductile and ductile-brittle faults in southeastern Athabasca Basin interpreted to have been reactivated during infill of the basin (Ramaekers et al., 2007, Fig. 2) include the Cable Bay, P2 and Tabbernor faults.

The Cable Bay Fault is a reactivated, northeasterly trending late Trans-Hudson structure trending northeasterly along the western shore of Cree Lake. It is interpreted to have undergone dextral strike-slip in response to post Manitou Falls regional dextral transpression . It formed the eastern edge the Mirror Sub-basin, infilled by the Lazenby Lake and Wolverine Point formations.

The P2 Fault and its extensions form a northwesterly verging reverse fault complex, with which the McArthur River deposit is associated.

The Millenium and Phoenix deposits are also associated with northeasterly trending faults.

The Tabbernor Fault *sensu stricto*, is a northerly trending fault zone extending almost the length of Saskatchewan and cross-cutting easternmost Athabasca Basin . Post-depositional movement was predominantly sinistral. A series of subparallel faults lying west of the Tabbernor Fault likely resulted from the same regional stress system and are commonly considered to comprise a regional Tabbernor fault set.

Bosman et al. (2008) indicate a major north-northeast trending fault with apparent dextral offset roughly coincident with the interpreted trace of the Wollaston Mudjatik boundary (Gilboy, 1985) along the southeastern edge of MacIntyre Lake, and a sub-parallel fault (possibly a re-activated splay of the Cable Bay Shear Zone?) with apparent sinistral offset east of the Diabase Peninsula in western Cree Lake. Both faults are interpreted to die out within the Dunlop Member (MFd). Together, these faults suggest that Cree Lake is underlain by a syndepositional horst.

A swarm of diabase dykes trends northwesterly across southern Cree Lake through northern Lazy Edward and Mackenzie bays (Gilboy, 1985a; 1985b; Ramaekers, 1977).

On the Saskatchewan Geological Atlas, three dominant sets of aeromagnetic linears, trending northwesterly, northerly and northeasterly are indicated in southeastern Athabasca Basin. Three sets of topographic lineaments have the same orientations.

7.1.5 Quaternary Geology

Most of Athabasca Basin is covered by Quaternary till, glaciofluvial, glaciolacustrine, aeolian and organic deposits (Figure 10; Campbell, 2007). Parts of eastern Athabasca Basin are characterized by bedrock ridge and valley topography. The bedrock ridges commonly overlie granitic domes, whereas the valleys tend to be structurally controlled. The dominant ice-flow direction was southwesterly, but late ice-flow was southerly in eastern parts of the basin and westerly along its northern edge. Regionally, at least three tills, locally separated by stratified gravel, sand and silt, can be distinguished (Table 7-1). These glacial deposits are overlain by peat, eolian and lacustrine deposits.

The area east of Cree Lake is an extensive field of southwesterly trending drumlins (Schreiner, 1977). Terraces cut into some of the higher drumlins are relics of Glacial Cree Lake, which formed about 8700 years BP. The highest (oldest) terraces are at about 529m ASL.

7.2 Property Geology

Outcrop exposure is poor and only about 0.15 % of boulder sampling stations reported outcrop over the area. Most of the area is covered by glacial till, glacio-fluvial and glacio-lacustrine material.

7.2.1 Crystalline Basement Geology

Interpretations of the aeromagnetic pattern of the Cree East property (Gilboy, 1982) suggest that the sandstones are underlain by a series of generally north-northeasterly trending, amoeboid, granitic gneiss domes, associated with magnetic highs, alternating with predominantly pelitic paragneisses, associated with magnetic lows (Figure 7). By correlation with rocks exposed south of the Basin margin, the gneiss domes are likely late Archean, whereas the metasedimentary rocks likely belong to the lower Wollaston Supergroup (i.e., Yeo and Delaney's (2007) Daly Lake Group).

Gilboy (1982) interpreted the area underlying central Holgar and Morin lakes to be underlain by a felsic gneiss dome, which can be traced south of the Basin margin. The southern margin of this dome is likely flanked by metasedimentary rocks which can be traced in pelitic rocks south of the Basin margin. These metasedimentary rocks can be traced along the western flank of the gneiss dome through Perpete Lake into the Einarson and southern MacIntyre lake areas. Other interpreted granitic gneiss domes underlie Darby Bay and southern Stewart Channel, Binkley Bay, central MacIntyre Lake and northern Morris Bay, and northern MacIntyre Lake to eastern Binnie Bay. The northwestern part of the property is interpreted to be underlain by a northeasterly trending gneiss dome between Grey and Laurier islands.

An interpreted basement geology map of the south central part of the property, based on aeromagnetics and drilling on Grid 7 (Schimann and Duff, 2011), suggests that the granitic gneiss domes are mantled by arkose, calcsilicate rocks, semipelite and amphibolite, overlain by a succession of pelite and graphitic pelite.

A common concern for consistent correlation of basement metasedimentary rocks is how pelites, semipelites and arkoses are distinguished. Without a clear definition, a rock described as pelite in one core, might be described by the logger of an adjacent core drilled in a later year as a semipelite. There are published definitions for metasedimentary rocks, but they vary in composition from one classification scheme to another. Its important to specify what definitions were used.

CanAlaska has taken a petrochemical approach to the problem of metasedimentary rock terminology. For CanAlaska drill reports up to and including 2011, major element oxide data was re-calculated from the multi-element analyses of basement core and plotted on petrochemical diagrams. The petrochemical names were compared with the field lithological log names, and the latter were modified accordingly, particularly to reflect their iron content. Rock units containing more than 7.5% Fe_2O_3 (corrected) were termed Fe-rich. Rocks containing 1-5% graphite, by visual estimate, were termed 'weakly graphitic', whereas rocks with more than 5% graphite were termed 'graphitic'. In addition, 82 basement core samples were submitted for petrographic analysis (Table 7-2). Five sandstone core samples were also examined petrographically.

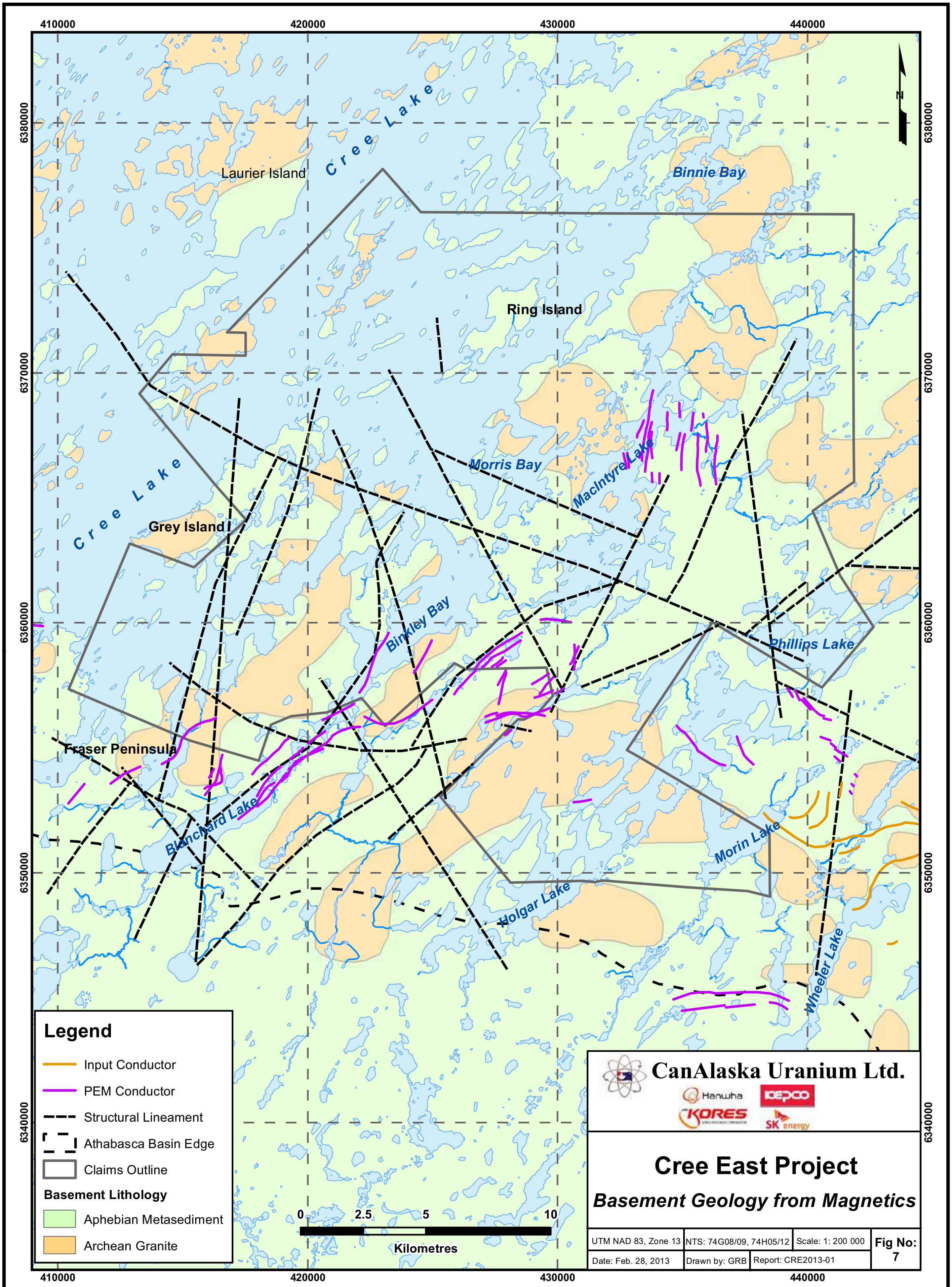
Table 7-2 - List of Petrographic Reports for Cree East Core Samples (2008 - 2012)

Report	Core	Sst	Bsmt	Drilled
Mysyk, W.K., 2008: Analysis of Nineteen Drill Core Samples, Cree Lake Project, Northern Saskatchewan	CRE002		11	2008W
	CRE007	3	5	
Mysyk, W.K., 2008: Identification of Dark Blue Mineral (Vivianite), Cree East Project, Northern Saskatchewan	Not reported	1		

Mysyk, W.K., 2009: Petrographic Analysis of Seventeen Thin Sections, Cree East Project, Northern Saskatchewan	CRE008		6	2008S
	CRE009		10	
	CRE010		1	
Mysyk, W.K., 2009: Petrographic Analysis of Nine Drill Core Samples, Cree East Project, Northern Saskatchewan	CRE015		1	2009W
	CRE016		1	
	CRE020		1	
	CRE025		4	
	CRE026		1	
	CRE028		2	
Mysyk, W.K., 2010: Petrographic Analysis of Twenty-Seven Drill Core Samples, Cree East Project, Northern Saskatchewan	CRE029	1	1	2010W
	CRE030		1	
	CRE032		4	
	CRE033		1	
	CRE034		1	
	CRE035		1	
	CRE036		2	
	CRE037		3	
	CRE038		2	
	CRE039		2	
	CRE040		1	
	CRE041	1	2	
	CRE042		1	
	CRE043		3	
Mysyk, W.K., 2011: Petrographic Analysis of Fourteen Drill Core Samples, Cree East Project, Northern Saskatchewan	CRE044		1	2010S
	CRE048		3	
	CRE051		3	
	CRE052		2	
	CRE053		2	
	CRE061		3	

7.2.2 Basement Structural Geology and Metamorphism

Mapping south of the Basin margin suggests that the basement rocks have been subjected to four phases of ductile deformation (Gilboy, 1985). D1 produced a gneissic foliation, but folds are rarely preserved. D2 produced large-amplitude, west-northwest-trending upright folds. Northeasterly trending upright folds developed in D3, cross-cut the earlier folds to produce the dome and basin structure typical of Mudjatik Domain. The broad amplitude of the D3 folds is one of the principal differences between Mudjatik and Wollaston domains. D4 deformation is represented mainly by shearing of D3 fold limbs (e.g., the Cable Bay Shear Zone on the western side of Cree Lake).



410000
420000
430000
440000
6380000
6370000
6360000
6350000
6340000
N
Cree Lake
Laurier Island
Binnie Bay
Ring Island
Morris Bay
MacIntyre Lake
Grey Island
Binkley Bay
Phillips Lake
Fraser Peninsula
Blanchard Lake
Morin Lake
Holgar Lake
Wheeler Lake
Legend
Input Conductor
PEM Conductor
Structural Lineament
Athabasca Basin Edge
Claims Outline
Basement Lithology
Aphebian Metasediment
Archean Granite
0
2.5
5
10
Kilometres
CanAlaska Uranium Ltd.
Hanwha
KEPCO
KORES
SK energy
Cree East Project
Basement Geology from Magnetics
UTM NAD 83, Zone 13
NTS: 74G08/09, 74H05/12
Scale: 1: 200 000
Fig No: 7
Date: Feb. 28, 2013
Drawn by: GRB
Report: CRE2013-01

The orientation of foliation from drill core (Map 1 in Smart et al., 2010; Fig. 5 and 10 in Dasler et al., 2010) suggests that fold axes trend mainly northeasterly or northwesterly. The pattern of arcuate magnetic highs and lows on vertical and horizontal gradient magnetic maps (Fig. 3 and 4 in Marquis and Schimann, 2009) indicates that the northwesterly-trending folds were re-folded about northeasterly trending axes, consistent with the regional structural interpretation. The northeast-trending fault interpreted by Smart et al. (2010) along the axis of northern Binkley Bay may have originated as such a shear, since it lies on and subparallel to the southeastern limb of an interpreted F3 synform.

Peak metamorphic conditions, at upper amphibolite to granulite facies, were developed during the first three phases of deformation. Retrograde metamorphism occurred during D4.

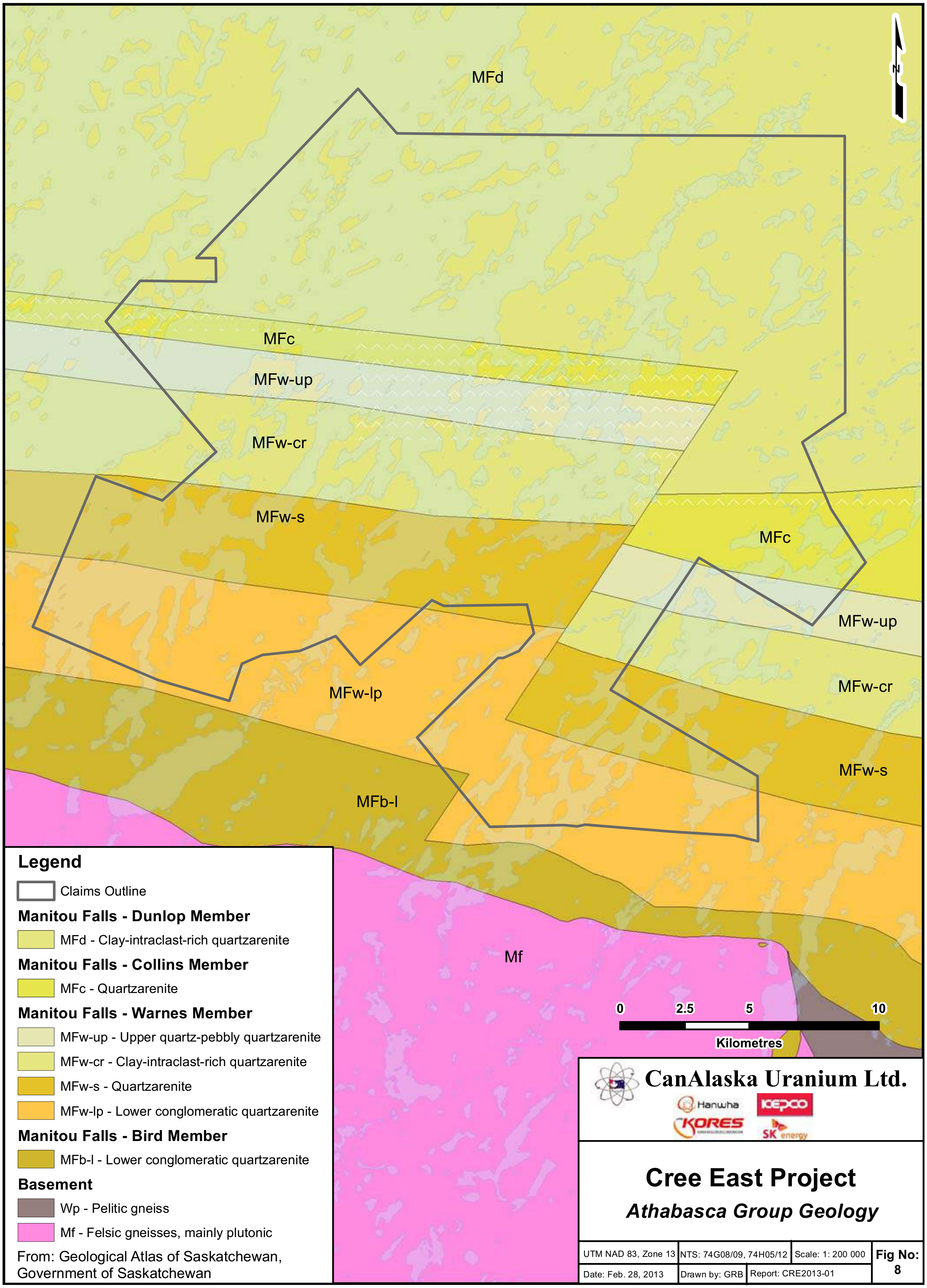
7.2.3 Athabasca Group Stratigraphy

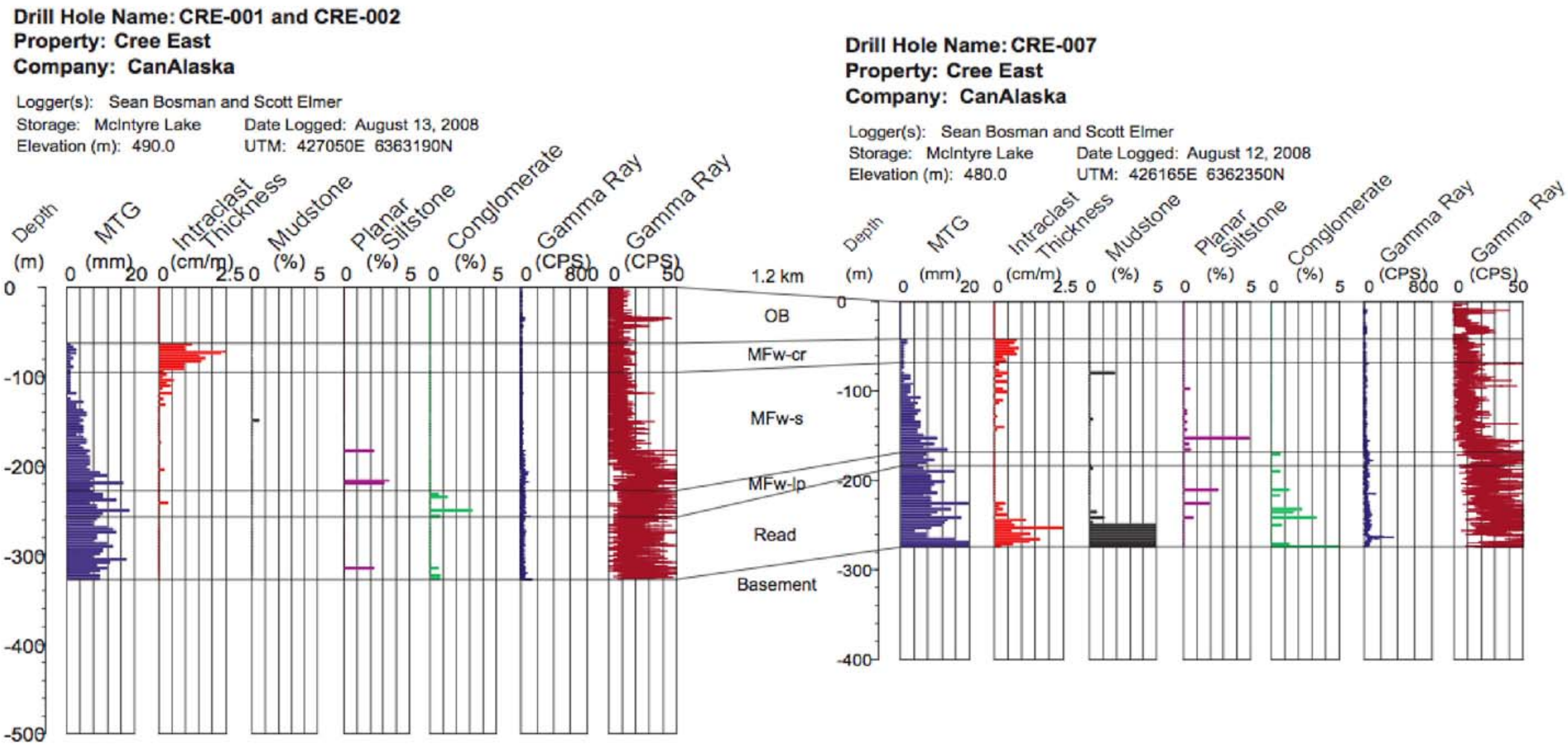
The interpreted Athabasca Group geology of the property area is shown in Figure 8. Bosman et al. (2008) logged three holes on the southern part of the Cree East property, CRE-001, CRE-002 and CRE-007 (Figure 9), as part of a regional study of Athabasca Group stratigraphy. CRE-002 was a re-drill of CRE-001, which was lost in the sandstone. An 80 m thick pebbly sandstone with abundant red clay intraclasts and red mudstone interbeds containing sand-filled desiccation cracks, and having a low gamma-ray signature at the base of the Athabasca Group in CRE-007 is typical of the Read Formation (formerly MFa). The Read Formation was also recognized in CRE-001/002, although the red mudstones are absent. The basal sandstone formation was interpreted to be Smart Formation in several CanAlaska logs, but it is now all considered to be Read Formation (Karl Schimann, personal communication, January 2013).

Overlying the Read sandstone is a thin (15-30 m) pebbly sandstone with minor thin conglomerate beds interpreted to be the lower pebbly unit of the Warnes Member (MFw-lp). As noted above, the Warnes Member is stratigraphically equivalent to the Bird Member (MFb) in southeastern Athabasca basin, but thick conglomerates, especially in its basal part, characterize the latter. The Warnes Member belongs to the Karras depositional system, which prograded into the basin from the south, whereas the Bird Member belongs to the Ahenakew depositional system which prograded from the east (Ramaekers et al., 2007; Yeo et al., 2007). Note that, in contrast to the Read/MFb contact, which typically corresponds to a coincident abrupt grain size and gamma ray increase in most of eastern Athabasca Basin, the Read/MFw-lp contact in the Cree East area is commonly challenging to pick.

Overlying the MFw-lp beds, is a 95-130 m thick sandstone with granules and small pebbles, corresponding to the middle sandy unit of the Warnes Member (MFw-s). Overlying the MFw-s beds is a 25-35 m thick, medium grained sandstone with abundant clay intraclasts interpreted to be the clay-clast rich unit of the Warnes Member (MFw-cr). This unit is lithologically identical to the Dunlop Member (MFd), but is observed stratigraphically below the Collins Member (MFc) in cores to the east at Moore Lakes (Bosman and Korness, 2007).

The upper pebbly unit (MFw-up) of the Warnes Member is stratigraphically higher than the collar elevations of the holes described by Bosman et al. (2008) at Cree East, but was recognized on Diabase Peninsula on the western side of Cree Lake (Bosman and Korness, 2007), as well as at Moore Lakes, to the east (Bosman et al., 2008), and probably extends across the central part of the property.


N
MFd
MFc
MFw-up
MFw-cr
MFw-s
MFc
MFw-up
MFw-cr
MFw-lp
MFw-s
MFb-l
Mf
0 2.5 5 10
Kilometres
Legend
Claims Outline
Manitou Falls - Dunlop Member
MFd - Clay-intraclast-rich quartzarenite
Manitou Falls - Collins Member
MFc - Quartzarenite
Manitou Falls - Warnes Member
MFw-up - Upper quartz-pebbly quartzarenite
MFw-cr - Clay-intraclast-rich quartzarenite
MFw-s - Quartzarenite
MFw-lp - Lower conglomeratic quartzarenite
Manitou Falls - Bird Member
MFb-l - Lower conglomeratic quartzarenite
Basement
Wp - Pelitic gneiss
Mf - Felsic gneisses, mainly plutonic
From: Geological Atlas of Saskatchewan, Government of Saskatchewan
CanAlaska Uranium Ltd.
Cree East Project
Athabasca Group Geology
UTM NAD 83, Zone 13
NTS: 74G08/09, 74H05/12
Scale: 1: 200 000
Fig No: 8
Date: Feb. 28, 2013
Drawn by: GRB
Report: CRE2013-01



CanAlaska Uranium Ltd.

Hanwha KEPCO KORES SK energy

Cree East Project

Graphic Logs for CRE001/002/007
(Bosman et al., 2008)

		Scale:	Fig No: 9
Date: Feb. 28, 2013	Drawn by: GRB	Report: CRE2013-01	

Strata that prograded westward into the basin underlies the northern part of the property. It belongs to the Ahenakew depositional system, comprising the Read Formation and Bird (MFb), Collins (MFc) and Dunlop (MFd) members of the Manitou Falls Formation.

A few small sandstone outcrops are exposed on or near the property (Ramaekers, 1977). East of MacIntyre Lake (434925E, 6363385N), crossbedding indicates north-northwesterly sediment transport, whereas crossbedding at outcrops south of Einarson Lake (434305E, 6355379N), west of Morin Lake (435430E, 6351985N) and east of Holgar Lake (431830E, 6349390N) indicates west-northwesterly transport.

Depth to basement, interpreted from total magnetic field strength, increases northeasterly across the property, from 136m west of Fraser Peninsula to 711 m at northern Gilchrist Bay. Local fluctuations in unconformity depth, confirmed by drilling, are likely due to fault displacement.

CanAlaska logs from the 2008 – 2012 drill programs consistently follow Ramaekers' (1990) pre-EXTECH IV stratigraphic subdivisions, except for recognition of the Read or Smart Formation in lieu of Ramaekers' MFa member. Locally the basal sandstone formation was interpreted to be Smart Formation in many CanAlaska logs, but it is now all considered to be Read Formation (Karl Schimann, personal communication, 21 January 2013).

Ramaekers' (1990) MFb, MFc, and MFd members respectively are lithologically difficult to distinguish from the MFw-lp, MFw-s and MFw-cr sub-members of the Warnes Member (Ramaekers et al., 2007) recognized by Bosman et al. (2008) in Cree East core (Table 7-3). Because all drilling has been on the southern half of the property, no issues have arisen with this. CanAlaska logs have followed the old stratigraphic terminology in a consistent manner. Whereas EXTECH IV core logs were done at one metre intervals, but industry practice is to log at 3 m intervals, Bosman and Korness (2007) recommended using a 0.6% cutoff rather than 1% for clay clasts.

Table 7-3 - Comparison of Ramaekers (1990) and Ramaekers et al. (2007) Sandstone Units in Southeastern Athabasca Basin

CanAlaska Logs	Ramaekers (1990) definitions	Revised map of SE Athabasca Basin (Bosman, 2008)	Ramaekers et al. (2007) definitions
No cores collared stratigraphically higher than MFw-cr		MFd	Quartz arenite with > 1% clay clasts*
		MFc	Quartz arenite with < 1% clay clasts* & < 2% conglomerate beds > 2 cm thick
		MFw-up	Pebbly quartz arenite & arenite with <2% pebble/granule conglomerate
MFd	MFd: Quartz	MFw-cr	Quartz arenite

	sandstone with > 1% clay clasts		with > 1% clay clasts*
MFc	MFc: Sandstone with < 1% clay clasts & no conglomerate > 2 cm thick	MFw-s	Quartz arenite with < 1% clay clasts* & sparse small pebbles
MFb	MFb: Sandstone with > 2% interbedded conglomerates > 2 cm thick	MFw-lp	Pebbly quartz arenite with minor granule conglomerate
Read Formation (formerly MFa)	MFa: Sandstone, pebbly sandstone & conglomerate; may contain > 1% clay clasts	Read Formation	Quartz arenite, conglomerate & local pebbly mudstone

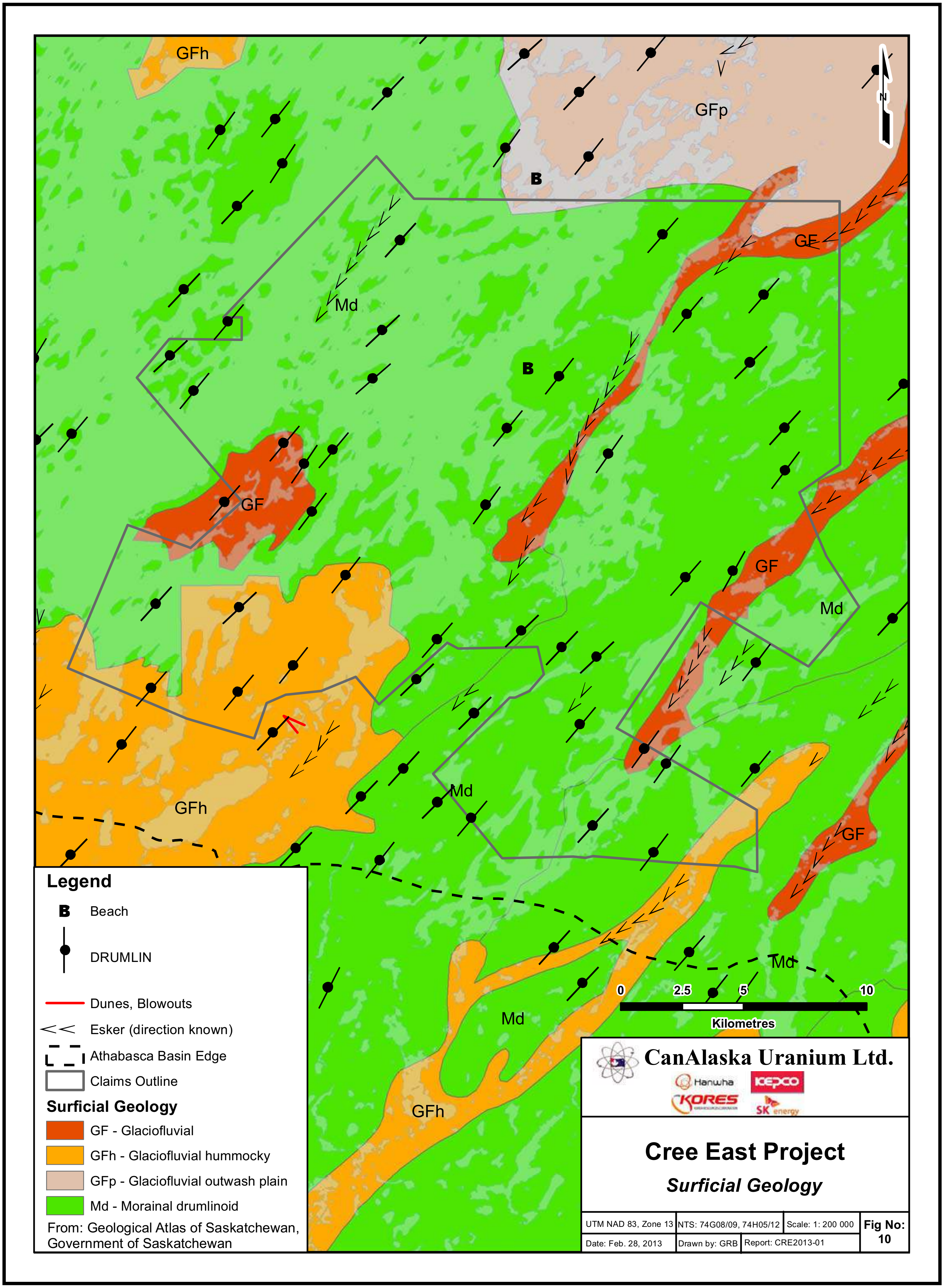
7.2.4 Brittle Deformation

A major north-northeast-trending fault is interpreted to trend along the axis of Binkley Bay (Smart et al., 2010). North of Binkley Bay this structure separates an interpreted F2 fold to the east from an interpreted F3 fold to the northwest.

Bosman et al. (2008) showed a north-northeast trending dextral fault along the southeastern shore of MacIntyre Lake (Figure 8), but there is no evidence for this structure as shown on the bason map. It was added to the map to emphasize the offset of lower Manitou Falls strata between eastern Cree Lake and Moore Lakes (Sean Bosman, personal communication, January 2013), but that could equally well be due to interfingering of deposits of the Karras (e.g., Warnes Member) and Ahenakew (e.g., Read Formation and MFb, Mfc and MFd members of the Manitou Falls Formation) depositional systems in southeastern Athabasca Basin.

7.2.5 Quaternary Geology

Ramaekers (1977) and Gilboy (1985b) show the Cree East area to be dominated by southwesterly trending drumlinoid ridges with several prominent southwesterly trending eskers (Figure 10). Low areas, such as the southwesterly trending MacIntyre Lake – Binkley Bay – Blanchard Lake and Holgar Lake valleys, are mainly underlain by glaciofluvial deposits (Schreiner, 1977).


GFh
GFp
B
GF
Md
GF
Md
GF
Md
GFh
GF
Md
Md
GFh
Legend
B Beach
DRUMLIN
Dunes, Blowouts
Esker (direction known)
Athabasca Basin Edge
Claims Outline
Surficial Geology
GF - Glaciofluvial
GFh - Glaciofluvial hummocky
GFp - Glaciofluvial outwash plain
Md - Morainal drumlinoid
From: Geological Atlas of Saskatchewan, Government of Saskatchewan
0 2.5 5 10
Kilometres
N
CanAlaska Uranium Ltd.
Hanwha
KEPCO
KORES
SK energy
Cree East Project
Surficial Geology
UTM NAD 83, Zone 13
NTS: 74G08/09, 74H05/12
Scale: 1: 200 000
Fig No: 10
Date: Feb. 28, 2013
Drawn by: GRB
Report: CRE2013-01

Of the three tills distinguished regionally in eastern Athabasca Basin (Campbell, 2007), the lowest is restricted to bedrock lows and has not been recognized in the Cree Lake area. The middle till, deposited extensively as drumlins or ground moraine during the main, southwesterly directed Late Wisconsinan ice advance, is typically grey, compact and relatively hard. The upper till, deposited mainly as hummocky moraine following a late southerly-directed ice advance that may only have extended partway across the basin, is weakly compacted, sandy and bouldery. Although composition is variable, the middle till typically has a higher component of crystalline basement clasts, derived from the northeast.

Overburden thickness in the Cree East area ranges from 10 m to over 60 m. Reports of thicker overburden are suspect, as they may reflect the presence of friable sandstone below the overburden. Tricone drilling to set drill casing commonly penetrated deeply into such friable sandstone.

7.3 Mineralization and Alteration

General characteristics of mineralization and alteration on the Cree East property are described below. Details of alteration and mineralization at each of the target areas drill tested by CanAlaska are given in section 7.4 (Grid 7 Geology, Alteration and Mineralization) of this report.

7.3.1 Uranium Mineralization

Of the 91 holes drilled by CanAlaska to date, 16 have weak uranium and/or gold mineralization (Table 7-4). These can be subdivided into sandstone-hosted and basement-hosted hydrothermal uranium occurrences and basement-hosted metamorphic uranium and gold occurrences.

Hydrothermal uranium mineralization can be distinguished from metamorphic mineralization by its stratigraphic setting (i.e., no metamorphic mineralization in sandstone), associated alteration (e.g., anomalous clays, bleaching, friability, silicification, brick red 'hydrothermal' hematite, etc.), drusy/vuggy quartz, faulting or fracturing and high U/Th ratio. Metamorphic uranium is common in Wollaston metasedimentary rocks, both in fractures and pegmatite generated by anatexis of pelitic rocks (Yeo and Delaney, 2007).

Three occurrences of sandstone-hosted mineralization, at or very close to the unconformity have been found (CRE017, CRE040 and CRE063). The best sandstone-hosted intersection was in CRE040, with 1.4 m grading 0.09% U3O8 and elevated Cu, Ni, Zn and Pb. This mineralization is associated with anomalous clay alteration (illite and Mg chlorite below sudoite) and intense fracturing. Anomalous uranium also occurs immediately below the unconformity in CRE080.

In the sandstone, uranium values typically increase towards the unconformity. Locally elevated values in the sandstone column, with associated clay alteration, suggest the former presence of hydrothermal plumes.

Basement-hosted uranium mineralization interpreted to be of hydrothermal origin (i.e., ingress-type) was found in six holes (CRE035, CRE063, CRE067, CRE083 CRE084 and CRE080). The best basement-hosted occurrence was in CRE083, with 0.5m grading 0.09% U3O8 in fractured, kaolinite/illite altered pelite.

Table 7-4 – Mineralized Drill Intersections on the Cree East Property

DDH	From (m)	To (m)	Int. (m)	Lithology	%U3O8	U/Th	Au g/t	Gamma spike	Clay Alteration	Other Alteration	Structure	Misc.
						Zone A						
CRE012	449.2	449.3	0.1	Pelite	0.020[H]	21.8		87cps	Illite	Just above hem/chl boundary	Below pelite breccia	
CRE018	426.5	428.5	2.0	Pelite	0.022[H]	15.1		350cps	Fe chlorite & illite	None	Sheared gr-py pelite	Anomalous Ni, Co, As, Cu & Fe (22%)
CRE035	430.55	431.05	0.5	Semipelite	0.083[H]	52.1		956cps	Sudoite/dravite	Hematite	Siliceous breccia	
CRE063	350.0	351.0	1.5	Sandstone at UC	0.014[H]	4.7		Ca. 350cps	Illite/chlorite	Regolith alteration	Strong fracture zone	
	359.0	360.5	1.5	Fe-pelite – graphitic pelite ctct	0.018[H]	8.7		1201cps	None	Hematite & chlorite above	None	Minor leucosome
	363.7	364.1	0.4	Graphitic pelite	0.011[H]	4.4		Ca. 400cps	Mg chlorite	None	None	
	370.0	370.4	0.4	Graphitic pelite	0.048[H]	11.0		1228 cps	None; above illite/chlorite	None	None	Minor leucosome
CRE067	448.1	448.85	0.75	Marble	0.079[H]	259.5	2.4	6496 cps	None	Hematite	Fracture w sooty pitchblende	
CRE068	434.5	435.0	0.5	Calc-silicate	0.010[H]	13.0		Ca. 370cps	Mg chlorite	None	Fractures	
						Zone B						
CRE083	500.1	00.6	0.5	Pelite	0.090[H]	49.1		1163 cps	Kaolinite/illite	Weak hematite	Fractures	
CRE084	464.5	465.0	0.5	Pelite	0.014[H]	7.1		Ca. 370cps	Illite/chlorite	Strongly altered hem-chl-qz pelite	None	Base of ‘regolith’

	523.0	532.0	9.0	Pelite	0.001 $^{M?}$	1.0	4	Ca. 450cps	Illite/chlorite	None	None	At transition from pelite to gr pelite
	598.8	599.8	1.0	Pegmatite	0.004 $^{M?}$	0.9	13.3	1342 cps	Illite/chlorite	Green sericite alteration of feldspar	Rubble zone	
Zone De												
CRE017e	255.2	256.9	1.7	Sandstone 4.2 m above UC	0.014 ^{H}	5.8		1600 cps	Kaolinite/illite below dickite/illite	Silicified & bleached above	None	Elevated V, As & Ni
Zone Ge												
CRE043e	408.6	409.1	0.5	Pegmatite	0.016 $^{H?}$	9.5		1020 cps	Kaolinite	Hematite above	Fracture zone	Fractured pegmatite – gr pelite contact
	410.1	411.7	1.6	Fe-pelite	0.017 $^{H?}$	30.8	11.4	2223cps	Kaolinite	None	Fracture zone	> 70% leucosome
CRE047e	411.5	412.0	0.5	Pegmatite	0.014 ^{M}	5.8		Ca. 600cps	Kaolinite/illite & chlorite	Weak hematite	None	Pegmatite in quartzite & pelite
	414.75	415.25	0.5	Pegmatite	0.012 ^{M}	7.6		Ca. 1100cps	Illite/sudoite & chlorite	None	None	Pegmatite in Fe-pelite
	467.0	470.0	3.0	Fe-pelite	0.012 ^{M}	7.6		4683cps	Illite/chlorite	None	None	>40% leucosome
CRE049e	349.5	349.75	0.25	Graphitic semipelite	0.010 ^{M}	5.1		Ca. 500cps	Illite/sudoite	None	None	>60% leucosome
	350.25	351.0	0.75	Graphitic semipelite	0.018 ^{M}	11.9		Ca. 1000cps	Illite/sudoite	None	Fractures below	>60% leucosome
	364.0	366.0	2.0	Semipelite	0.016 ^{M}	4.6		Ca. 950cps	Kaolinite/illite & chlorite	None	Rare fractures	>85% leucosome
	382.8	383.9	1.1	Fe-pelite	0.014 ^{M}	6.3		Ca. 1550cps	Illite/chlorite	Weak hematite	Few fractures	95% leucosome
	405.0	407.5	2.5	Graphitic semipelite	0.011 ^{M}	5.7		Ca. 1300cps	Kaolinite/illite & chlorite	None	Few fractures	>25% leucosome
CRE052e	364.5	373.5	9.0	Marble, amphibolite,	0.0 ^{M}	1.4	1.2	No	Illite/chlorite above	Hematite below	Irregular fractures	

				pegmatite								
CRE057e	357.65	358.15	0.5	Semipelite	0.012 ^{M}	5.5		Ca. 650cps	Illite/kaolinite & Mg chlorite	None	None	>50% leucosome
	362.75	363.25	0.5	Pegmatite	0.011 ^{M}	1.4		Ca. 650cps	Illite/kaolinite & Mg chlorite	None	None	100% leucosome
	365.0	365.4	0.4	Semipelite	0.031 ^{M}	10.9		2222cps	Illite/kaolinite & Mg chlorite	None	None	40% leucosome
	367.7	368.5	.8	Semipelite	0.011 ^{M}	19.2		Ca. 700cps	Illite/kaolinite & Mg chlorite	None	None	>50% leucosome
	430.1	430.6	0.5	Semipelite	0.014 ^{M}	8.7		Ca. 800cps	Illite/phengite	None	Scattered fractures	25% leucosome
Zonede												
CRE040e	254.1	255.5	1.4	Sandstone 1.5m above UC at 257m	0.091 ^{H}	52.1		5067cps	Illite/Mg-chlorite below sudoite	None	Intense fracturing	Associated Cu, Ni, Zn, Pb
Zonege												
CRE080e	302.1	302.5	0.4	Banded IF directly below UC	0.011 ^{H}	10.7		790 cps	Dickite/kaolinite in basal sandstone; minor dravite, phengite & sudoite	Hydro. hematite	Strongly fractured; core loss	Associated Ni, V, Au
	303.2	303.8	0.6	Banded IF	0.015 ^{H}	19.3		Ca. 650cps	Kaolinite/illite & chlorite	Strong hematite	Strongly fractured	Co, Ni, V
	303.8	304.2	0.4	Banded IF	0.009 ^{H}	11.8	1.2	Ca. 500cps	Kaolinite/illite & chlorite	Hematite	Strongly fractured	Co, Ni, V

The occurrences of hydrothermal uranium mineralization at Cree East are characterized by associated brittle faults and fractures and anomalous alteration comparable to the structural controls and alteration typical of known economic uranium deposits in eastern Athabasca Basin. These are discussed in the following section (Deposit Types).

Five of the remaining seven basement-hosted mineralized intersections are interpreted to be metamorphic enrichments of uranium (or gold), commonly associated with pegmatites. Metamorphic-type uranium is common in the Wollaston Supergroup pelites and pegmatite derived from such pelites, but unlikely to have economic potential. A outlined below, however, the gold potential of these rocks is encouraging.

Two basement-hosted uranium occurrences are of uncertain origin. CRE043 has a 1.6 m intersection grading 0.02% over 1.6 m in fractured Fe-rich pelite. High U/Th (30.8) supports a hydrothermal origin. Another mineralized intersection in CRE043 ran 0.02% over 0.5 m in pegmatite. The host rock and low U/Th (9.5) suggests that this is of metamorphic origin.

Two mineralized intercepts in CRE084 are very low grade. The best of these (0.004% U3O8 over 1.0 m) is in pegmatite, which suggests a metamorphic origin, whereas association with a probable fault (rubble zone reported), suggests a hydrothermal origin.

7.3.2 Gold Mineralization

Significant gold grades have been reported in some holes. The two best intersections are 13.3 g/t over 1.0 m in pegmatite in CRE084 and 11.4 g/t over 1.6 m of Fe-rich pelite and 4 g/t over 9 m of pelite in CRE043. Whereas the average reported gold grade of all deposits reported by 70 Canadian gold mining companies is 2.343 g/t (and ranges from 0.083 to 16.511 g/t), these are attractive intersections. As noted in the next section of this report (Deposit Models), by-product gold was produced at Cluff Lake. A number of gold showings are known in basement south of Cree Lake.

7.3.3 Paleoweathered Basement Alteration

The basement rocks immediately below the unconformity are commonly characterized by a colour-zoned alteration pattern interpreted by Macdonald (1980) to be due to pre-Athabasca paleo-weathering. Although commonly described as 'regolith', the altered zone is really a sapropelite, since it is altered in place. It typically comprises a strongly clay altered and hematized upper 'red zone', overlying a 'red-green zone' of alternating hematization and chloritization, followed by a chloritized 'green zone' transitional to fresh rock. In downward succession, the predominant clays associated with this alteration are kaolinite, illite and chlorite. Although this alteration typically dies out within a few tens of metres of the unconformity, it may extend up to 220 m below it (Jefferson et al., 2007), and it is common to find minor hematization and chloritization deeper in the basement where fractures along which diagenetic fluids could migrate are present.

There is controversy about the extent to which the regolith zone is a product of pre-Athabasca chemical weathering or post-depositional diagenesis, but lack of depletion in trace elements associated with uranium mineralization, pseudomorphic replacement of basement rock minerals by chlorite and hematite and gradational alteration boundaries support the paleoweathering hypothesis (Jefferson et al., 2007). The absence of any paleosol is probably due to pre-depositional erosion.

7.3.4 Clay Alteration

In most holes, the predominant clay alteration assemblage in the sandstone section, or at least the upper part of it (above the MFw-lp sub-member called lower MFb in CanAlaska logs), is illite/dickite. This is the background assemblage in eastern Athabasca Basin. Strata corresponding to upper MFw-s ('MFc' in CanAlaska logs) commonly contain sudoite as well, whereas MFw-lp ('MFb' in CanAlaska logs) is commonly dickite-rich. The upper Read Formation is commonly illite/dickite, but os locally variable. The basal part of the sandstone column typically contains sudoite or illite/sudoite +/- dravite locally.

Departures from this regional pattern are likely indicative of the former presence of hydrothermal plumes. For example, in an area north of Binkley Bay (Zone B) much of the sandstone column is characterized by kaolinite/illite alteration, with sudoite/illite or kaolinite/illite/sudoite in unit MFw-s ('MFc' in CanAlaska logs)

As would be expected because of its more heterogeneous composition compared to the sandstones, basement alteration patterns are more complex. As noted above, within the red and green paleoweathered zone, a downward succession of kaolinite, illite and chlorite is common (Jefferson et al., 2007). Below this, illite and chlorite generally predominate with kaolinite, phengite or other clay species locally.

Basement alteration at Cree East is unusually deep, compared to other areas in eastern Athabasca Basin with which the authors are familiar, and where the transition from altered to fresh basement rock lies within a few tens of metres of the unconformity. At Cree East, however, drill holes were commonly still in altered basement when terminated, at an average depth of 122 ± 38 m below the unconformity. Such deep alteration indicates relatively deep circulation of hydrothermal fluids, and hence, potential for basement-hosted mineralization.

As discussed in section 8.0 (Deposit Types) of this report, alteration haloes associated with sandstone mineralization can be quite extensive (100s of metres), whereas alteration associated with basement mineralization is generally restricted (metres).

7.3.5 Other Alteration

Other forms of alteration locally found in the sandstone include silicification and desilicification, 'grey alteration' due to finely disseminated pyrite, and drusy quartz. Bleaching and 'hydrothermal hematite' alteration occur in both sandstone and basement. All of these types of alteration may be associated with uranium mineralization.

Desilicification and silicification are probably related, since one involves dissolution and removal of quartz, whereas the other involves precipitation of quartz from diagenetic solution. Desilicification results in increased sandstone friability and local generation of solution collapse breccia. Fluids can move easily through rocks with such increased permeability. Silicification, by contrast, inhibits and channels diagenetic fluid movement.

‘Grey alteration’ results from fine-grained disseminated pyrite which gives bleached sandstone, normally pale tan, white or pinkish, a distinctive grey colour. In contrast with hydrothermal hematite, with which it is mutually exclusive, ‘grey alteration’ is indicative of reducing fluids (which may have precipitated uranium on mixing with oxidizing fluids).

Drusy quartz is crystalline quartz lining vugs and fractures. It results from the passage of silica-saturated fluids (generated by diagenetic dissolution of silicates, especially quartz). Quartz dissolution may be associated with brecciation. Formation of open space in the rock is a necessary prerequisite for precipitation of potential ore minerals. The presence of pyrite or hematite coatings on the quartz crystals indicates subsequent passage of oxidizing or reducing fluids.

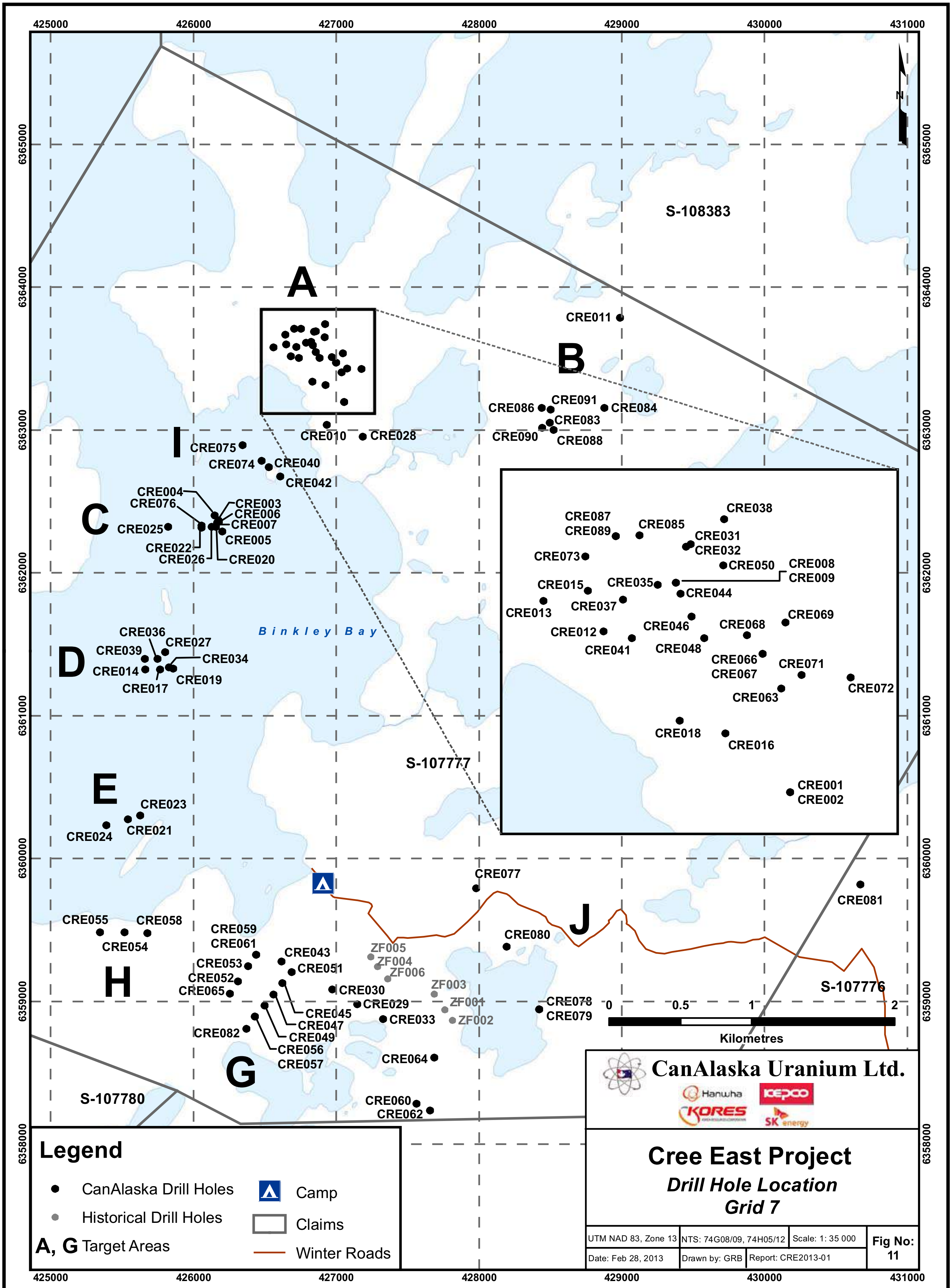
Diagenetic bleaching is common in the sandstones, although it typically decreases downward into the MFb member. The Read sandstone is commonly also bleached, especially towards the unconformity. Unless there is accompanying alteration, it is generally not possible to distinguish diagenetic and hydrothermal bleaching in the sandstone. In the vicinity of uranium mineralization, the upper hematized zone of the ‘regolith’ is commonly overprinted by bleaching and alteration of the rock to buff-cloured clay and quartz. The accompanying clay alteration indicates that bleaching is likely hydrothermal.

‘Hydrothermal hematite’ is brick red, in contrast to diagenetic hematite, which is typically purple. It most commonly occurs towards the unconformity or in association with faults and intense fractures. It is indicative of oxidizing fluids (which may have carried dissolved uranium).

7.4 Grid 7 Geology

As described in part 9.2 (Geophysical Exploration) of this report, a 2006 VTEM survey over the Cree East property identified a number of large-scale, airborne VTEM conductive features, over which a series of grids were laid out for ground geophysics, particularly DC-Resistivity. Follow-up work focussed on Grid 7, where a pattern of DC-Resistivity lows, broadly coincident with the VTEM conductive zones, was found. Ground moving loop EM surveys subsequently defined a series of linear basement conductors generally lying along the axes of the resistivity lows. Most of CanAlaska’s drilling has been on these coincident geophysical targets, and has confirmed that the conductive zones are mainly due to graphitic basement rocks, whereas the resistivity lows are mainly due to faulting and alteration in the overlying sandstone. The geology of the nine target areas drill tested to date on Grid 7 (Figure 11) is described in this section.

Note that many of the sandstone unit thicknesses reported here are approximations from cross-sections; not drill logs. Whereas contacts between members of the Manitou Falls Formation are commonly transitional, thickness variation or offsets on such contacts should not be taken as conclusive evidence for fault offset without supporting structural evidence. The unconformity and Read/MFb contacts, however, are generally sharp. Variation in thickness of the Read Formation is likely due to paleo-relief on the unconformity surface and/or syndepositional fault displacement. A summary of drill holes is available in Appendix 1.



S-108383
S-107777
S-107776
S-107780
Binkley Bay
A
B
C
D
E
G
H
I
J
CRE011
CRE086
CRE091
CRE084
CRE083
CRE090
CRE088
CRE010
CRE028
CRE075
CRE074
CRE040
CRE042
CRE004
CRE076
CRE003
CRE006
CRE007
CRE005
CRE025
CRE022
CRE026
CRE020
CRE036
CRE039
CRE027
CRE034
CRE014
CRE019
CRE017
CRE023
CRE024
CRE021
CRE087
CRE089
CRE085
CRE038
CRE031
CRE032
CRE073
CRE050
CRE008
CRE009
CRE015
CRE035
CRE044
CRE013
CRE037
CRE012
CRE046
CRE068
CRE069
CRE041
CRE048
CRE066
CRE067
CRE071
CRE072
CRE063
CRE018
CRE016
CRE001
CRE002
CRE077
CRE081
CRE055
CRE058
CRE054
CRE059
CRE061
CRE043
CRE080
CRE053
CRE051
CRE052
CRE065
CRE030
CRE045
CRE029
CRE047
CRE049
CRE033
CRE082
CRE056
CRE057
CRE064
CRE060
CRE062
CRE078
CRE079
ZF005
ZF004
ZF006
ZF003
ZF001
ZF002
0
0.5
1
2
Kilometres
425000
426000
427000
428000
429000
430000
431000
6365000
6364000
6363000
6362000
6361000
6360000
6359000
6358000
N
Legend
CanAlaska Drill Holes
Historical Drill Holes
A, G Target Areas
Camp
Claims
Winter Roads
CanAlaska Uranium Ltd.
Hanwha
KEPCO
KORES
SK energy
Cree East Project
Drill Hole Location
Grid 7
UTM NAD 83, Zone 13
NTS: 74G08/09, 74H05/12
Scale: 1: 35 000
Fig No: 11
Date: Feb 28, 2013
Drawn by: GRB
Report: CRE2013-01

From north to south, target areas A, I, C, D, E and H lie along a basement conductor coincident with an overlying sandstone resistivity low toward the western side of Grid 7. Target Area B lies on a short coincident conductor and resistivity low in the northern part of Grid 7. Target Area J is a horseshoe-shaped coincident conductor and resistivity low toward the eastern corner of Grid 7. Target areas G and K lie on resistivity lows, but lack coincident linear basement conductors. Area G lies near the southern edge of Grid 7. Area K, between areas B and J, has not been drilled and hence, is not described here. Note that there is no Target Area F on Grid 7.

Unconformity elevation generally drops basinward, as would be expected, but there is much local variation, reflecting either fault offset or paleotopographic relief on the basement surface. The Read Formation generally thickens basinward, but is thinnest (18-21 m) in Area I, and thickest in Area E (62 – 66 m), indicating tens of metres of paleotopographic relief and/or early syndepositional fault subsidence. Thickness of the MFb member is locally variable. Maximum thickness (117 – 165 m) in Area B and minimum thickness in Area C (57 – 68 m) likely reflect syndepositional fault subsidence.

The basement rocks of areas A, C, D and E in the western part of Grid 7 and Area J in the southeast, are characterized by the presence of iron-rich metasedimentary rocks, including Fe-pelite grading into siliceous banded iron formation, together with semi-pelite, graphitic pelite, arkose, quartzite and calc-silicate rocks, whereas Area G in the south and Area B in the northeast are characterised by a more typical Wollaston assemblage of pelite, graphitic pelite, semipelite, arkose and quartzite, with minor iron-rich pelite.

Except at Target Area A, foliation in basement rocks in the western part of Grid 7 (i.e., the I-C-D-E-H corridor) dips predominantly eastward. Variations in foliation suggest a series of close, northeasterly plunging folds. At Area A, foliation patterns are more complex, with evidence for folding about easterly to southeasterly trending axes as well as northeasterly ones. At Area G, the foliation pattern suggests an open southeasterly plunging fold. The structural geology of areas A and G are described in more detail below.

In addition to direct evidence for faulting, major offsets on the unconformity elevation and variation in thickness of sandstone units indicate widespread faulting in the Grid 7 area. A major fault, corresponding to a basement conductor, is interpreted to trend northeasterly through areas C, I and A. Except at target areas A and G, however, there are too few drill holes to show a clear picture of local fault patterns.

Except in areas A and B, the regional illite/dickite clay alteration assemblage predominates in the upper sandstones of the Grid 7 area. Locally, dickite increases in abundance downward, with sudoite, dravite or kaolinite common above the unconformity. Clay alteration patterns at Area A are complex, although illite is the predominant clay. In contrast to the other target areas, kaolinite predominates in sandstone at Area B. In the lower sandstones, this is associated with 'grey alteration' due to finely disseminated pyrite.

Mineralized intersections in sandstone at the unconformity were reported at target areas A (0.01% U3O8 in CRE063), D (0.01% U3O8 in CRE017) and I (0.09% U3O8 in CRE040). In Area J, mineralization was reported in basement at the unconformity (0.02% U3O8 in CRE080), as well as in a historical hole (0.01% U3O8 in ZF1-81). A number of basement intersections were reported at Area A (up to 0.08% in CRE063 and CRE067), Area B (up to 0.09% in CRE083), Area G (up to 0.03% in CRE057). Some of the basement intersections, however, are likely of metamorphic origin; not hydrothermal. No mineralization was found at areas C, E and H. Mineralized drill intersections are summarized in Table 7-4.

7.4.1 Target Area A

Target Area A lies on land at the northern end of Binkley Bay (Figure 11). With 28 drill holes to date, this zone has received the most attention of the Grid 7 target areas. The main cluster of 23 holes lies mainly along two east-trending (Figures 12 and 13) and three southeast-trending fences (Figures 14 and 15) over the core of the Area A resistivity anomaly. The other five holes lie to the southeast of this, with all but one (CRE010) on an extension of one of the main southeasterly trending fences.

Area A Stratigraphy: Unconformity elevation ranges from 114.3 m ASL in CRE035 to 196.4 m ASL in CRE010, reflecting much local fault offset. The Read Formation shows some variation in thickness, from 36 m in CRE002 to 52.7 m in CRE009, as does the MFb member, which ranges from 70 m in CRE016 to 155 m in CRE035 m. The MFb appears to be thicker over downthrown fault blocks. The MFc member, however, is fairly uniform in thickness across the area.

Area A Basement: The predominant basement lithologies are pelite and semipelite, intercalated with less common meta-arkose, banded iron formation, calcsilicate, marble, quartzite and rare amphibolite. A central domain characterized by the presence of calcsilicates and graphitic metapelite separates a northern domain with metapelites and arkose from a southern domain with metapelites and graphitic metapelites.

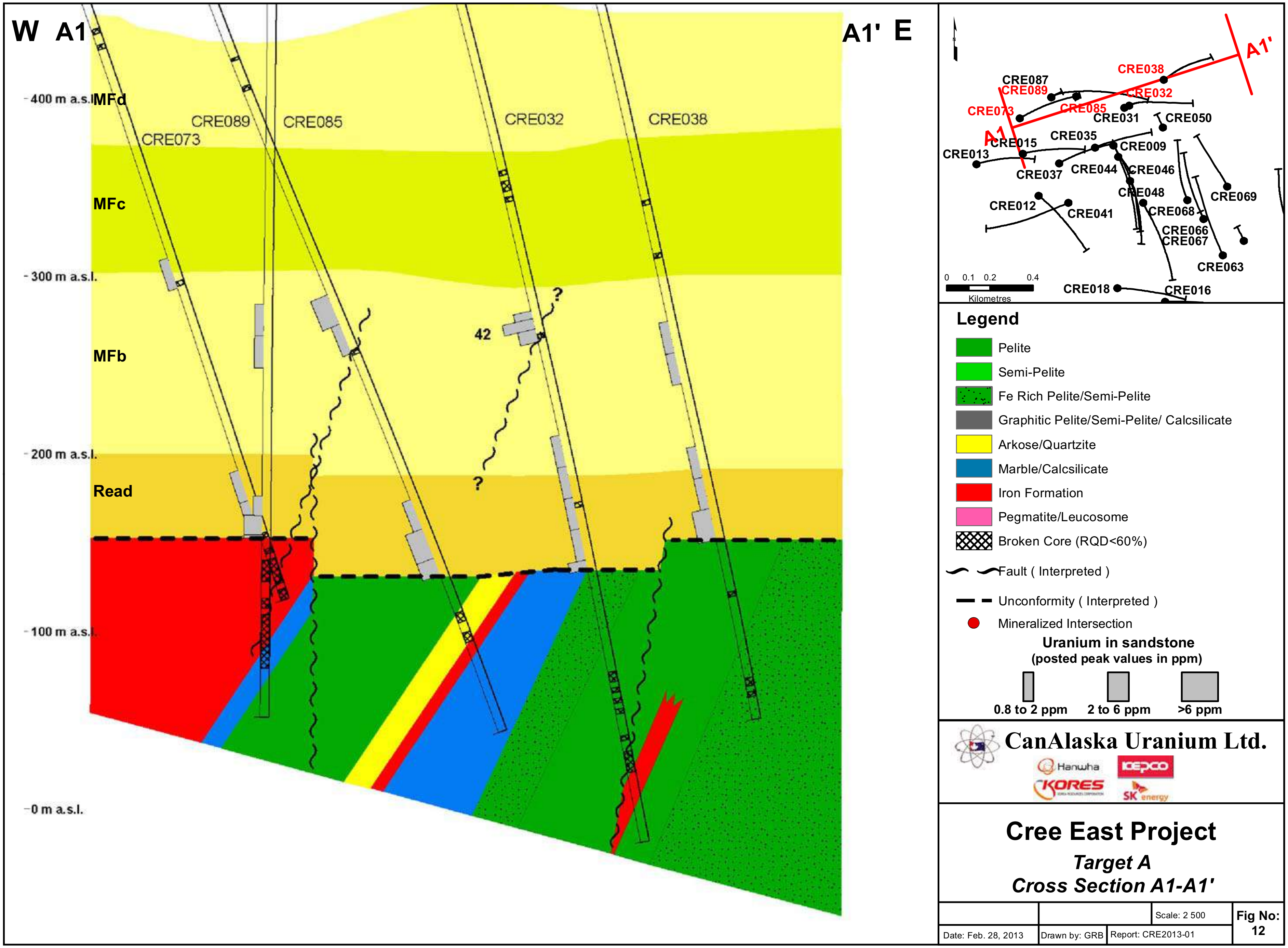
A high proportion of the pelitic and semipelitic rocks are iron-rich. Rocks from the southern part of the area are generally higher in iron than the rocks from the northern part. Graphitic units were intersected in all of the southern holes, whereas the only graphitic unit in the northern part is in CRE008. CRE010 has the most graphitic pelite and semipelite, followed by CRE002 and CRE008. Within the northern part of Area A, arkose predominates to the east, marble and calc-silicates are common in the centre, and pelites and semipelites predominate in the west.

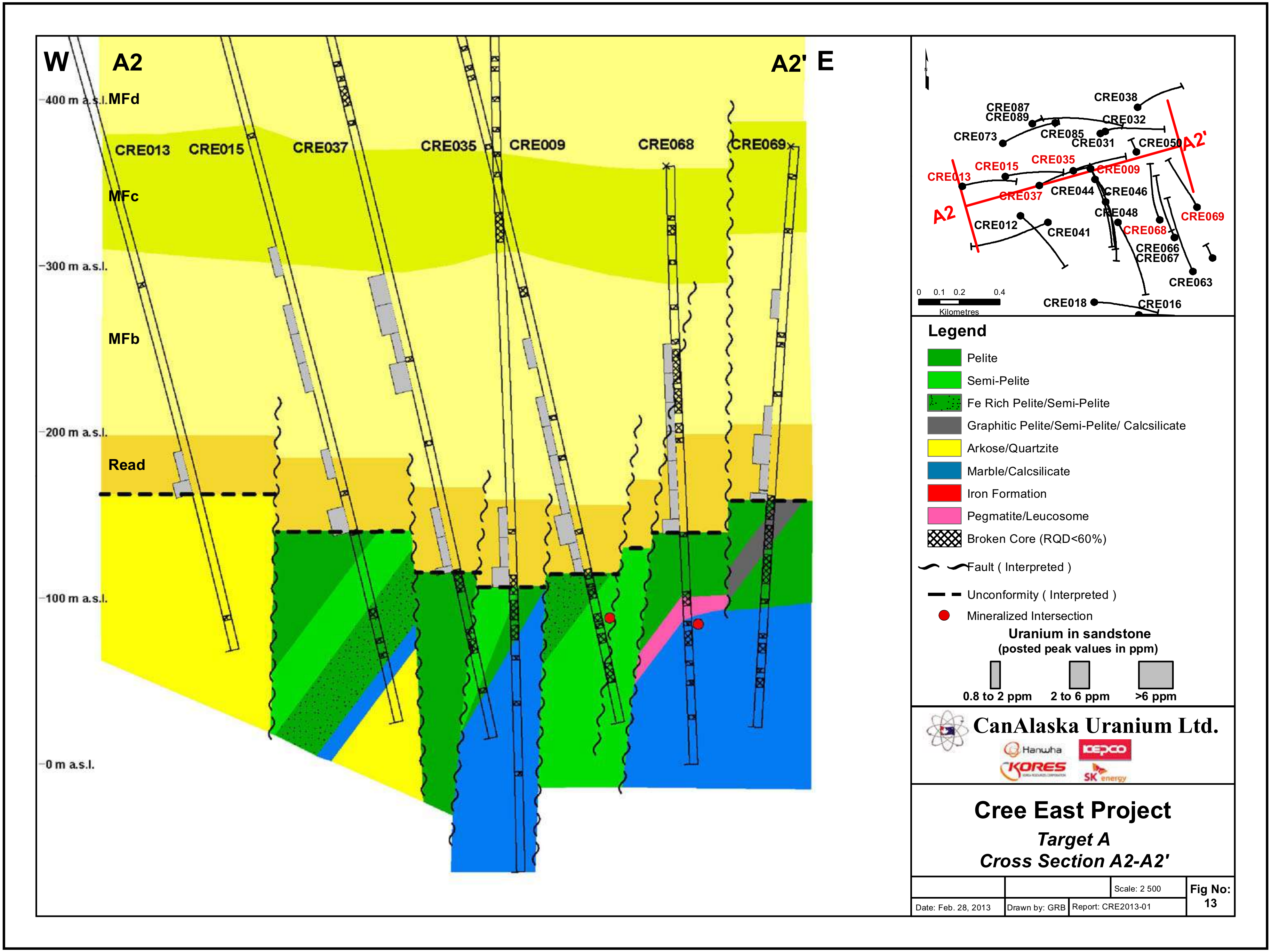
Area A Structural Geology: Foliation measurements from oriented core trend predominantly northeasterly. Dip reversals suggest a series of northeasterly to easterly trending open folds. Local variations in foliation suggest that a northerly trending fold is preserved in the northeast part of Area A.

CRE035 and CRE037 confirmed that the major conductive zone trending east-northeasterly through Area A is a fault zone. Unconformity offsets indicate that this likely has several subparallel splays, crosscut by a northwest or north-northwest trending fault intersected in several holes. Another northwest trending fault is suspected to lie between areas A and I. Fault repetition of basement in CRE044 indicates that the northeasterly or east-northeasterly fault it cuts is a steep reverse fault. A small sinistral offset is interpreted to occur on this fault where it is cut by the northwest-trending one.

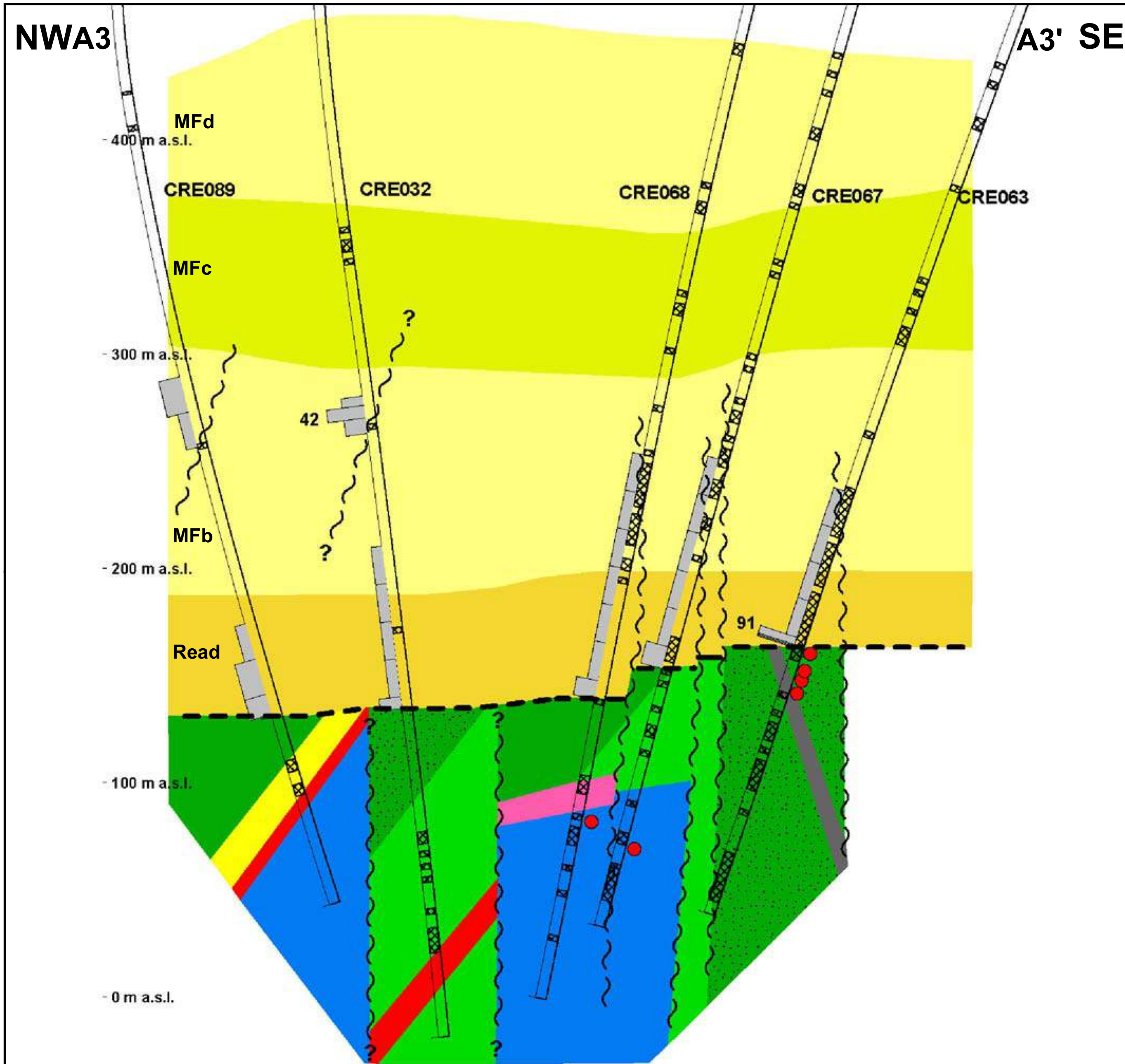
Local thickening of MFb over interpreted downthrown fault blocks, suggests syndepositional faulting, whereas apparent offsets of the MFc/MFd contact suggest continued postdepositional displacement as well.

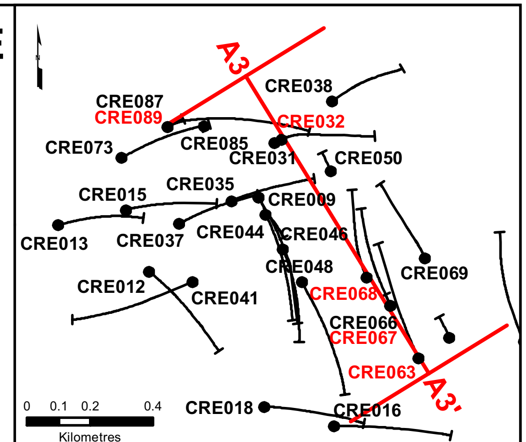
Figure 16 shows the unconformity elevation contours in Area A and the interpreted faults.


W A1
A1' E
400 m a.s.l.
300 m a.s.l.
200 m a.s.l.
100 m a.s.l.
0 m a.s.l.
MFd
MFc
MFb
Read
CRE073
CRE089
CRE085
CRE032
CRE038
42
?
CRE087
CRE089
CRE038
CRE032
CRE073
CRE085
CRE031
CRE050
A1
A1'
CRE015
CRE035
CRE009
CRE013
CRE037
CRE044
CRE046
CRE048
CRE012
CRE041
CRE068
CRE069
CRE066
CRE067
CRE063
CRE018
CRE016
0 0.1 0.2 0.4
Kilometres
Legend
Pelite
Semi-Pelite
Fe Rich Pelite/Semi-Pelite
Graphitic Pelite/Semi-Pelite/ Calcsilicate
Arkose/Quartzite
Marble/Calcsilicate
Iron Formation
Pegmatite/Leucosome
Broken Core (RQD<60%)
Fault (Interpreted)
Unconformity (Interpreted)
Mineralized Intersection
Uranium in sandstone
(posted peak values in ppm)
0.8 to 2 ppm
2 to 6 ppm
>6 ppm
CanAlaska Uranium Ltd.
Hanwha
KEPCO
KORES
SK energy
Cree East Project
Target A
Cross Section A1-A1'
Scale: 2 500
Fig No:
12
Date: Feb. 28, 2013
Drawn by: GRB
Report: CRE2013-01



W
A2
A2'
E
400 m a.s.l.
300 m a.s.l.
200 m a.s.l.
100 m a.s.l.
0 m a.s.l.
MFd
MFc
MFb
Read
CRE013
CRE015
CRE037
CRE035
CRE009
CRE068
CRE069
CRE038
CRE087
CRE089
CRE032
CRE073
CRE085
CRE031
CRE050
CRE044
CRE046
CRE048
CRE012
CRE041
CRE066
CRE067
CRE063
CRE018
CRE016
0 0.1 0.2 0.4
Kilometres
Legend
Pelite
Semi-Pelite
Fe Rich Pelite/Semi-Pelite
Graphitic Pelite/Semi-Pelite/ Calcsilicate
Arkose/Quartzite
Marble/Calcsilicate
Iron Formation
Pegmatite/Leucosome
Broken Core (RQD<60%)
Fault (Interpreted)
Unconformity (Interpreted)
Mineralized Intersection
Uranium in sandstone
(posted peak values in ppm)
0.8 to 2 ppm
2 to 6 ppm
>6 ppm
CanAlaska Uranium Ltd.
Hanwha
KEPCO
KORES
SK energy
Cree East Project
Target A
Cross Section A2-A2'
Scale: 2 500
Fig No: 13
Date: Feb. 28, 2013
Drawn by: GRB
Report: CRE2013-01





Legend

- Pelite
- Semi-Pelite
- Fe Rich Pelite/Semi-Pelite
- Graphitic Pelite/Semi-Pelite/ Calcsilicate
- Arkose/Quartzite
- Marble/Calcsilicate
- Iron Formation
- Pegmatite/Leucosome
- Broken Core (RQD<60%)
- Fault (Interpreted)
- Unconformity (Interpreted)
- Mineralized Intersection

Uranium in sandstone
(posted peak values in ppm)

0.8 to 2 ppm **2 to 6 ppm** **>6 ppm**

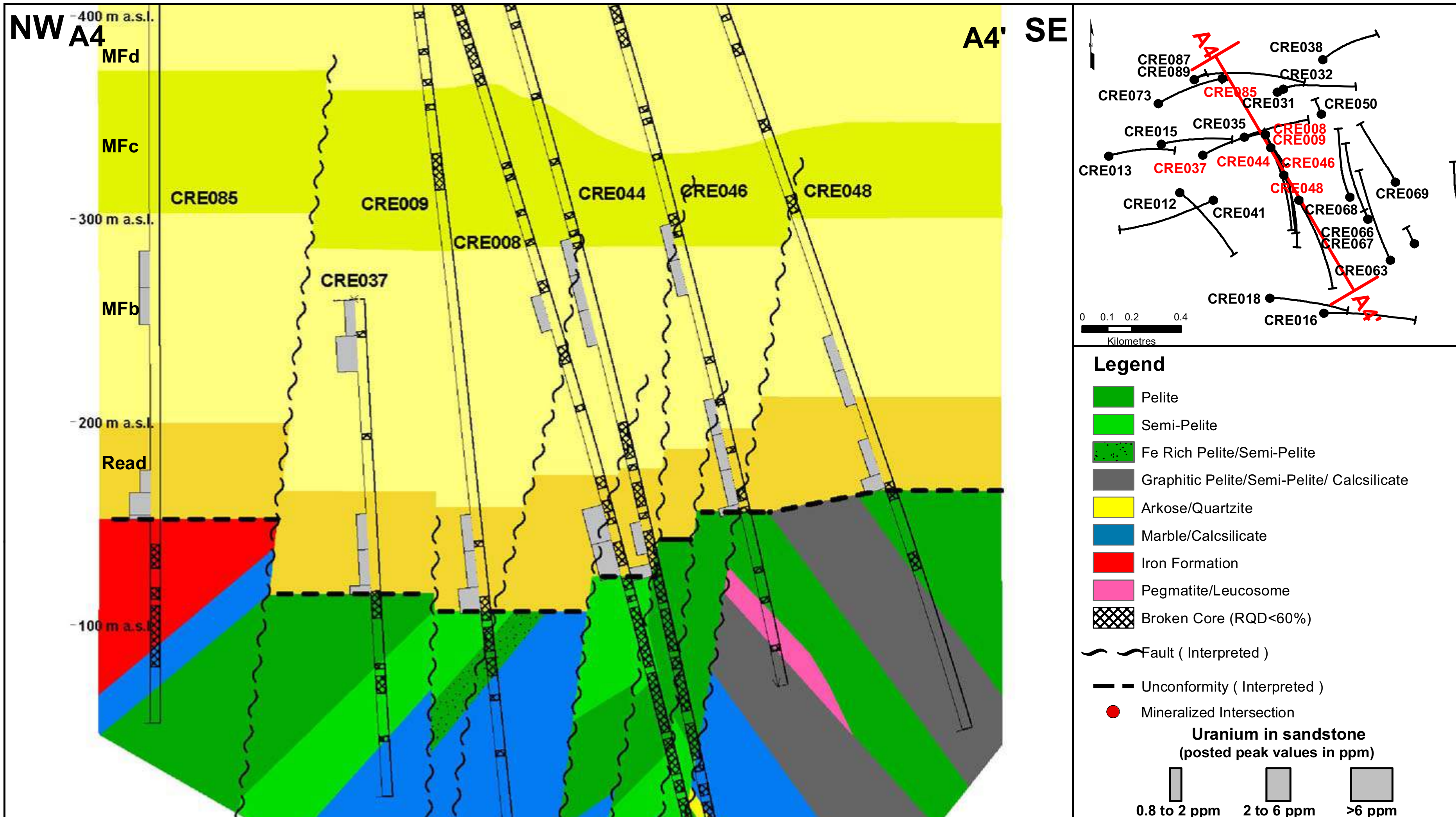
CanAlaska Uranium Ltd.

Hanwha KEPCO KORES SK energy

Cree East Project

Target A
Cross Section A3-A3'

		Scale: 2 500	Fig No: 14
Date: Feb. 28, 2013	Drawn by: GRB	Report: CRE2013-01	



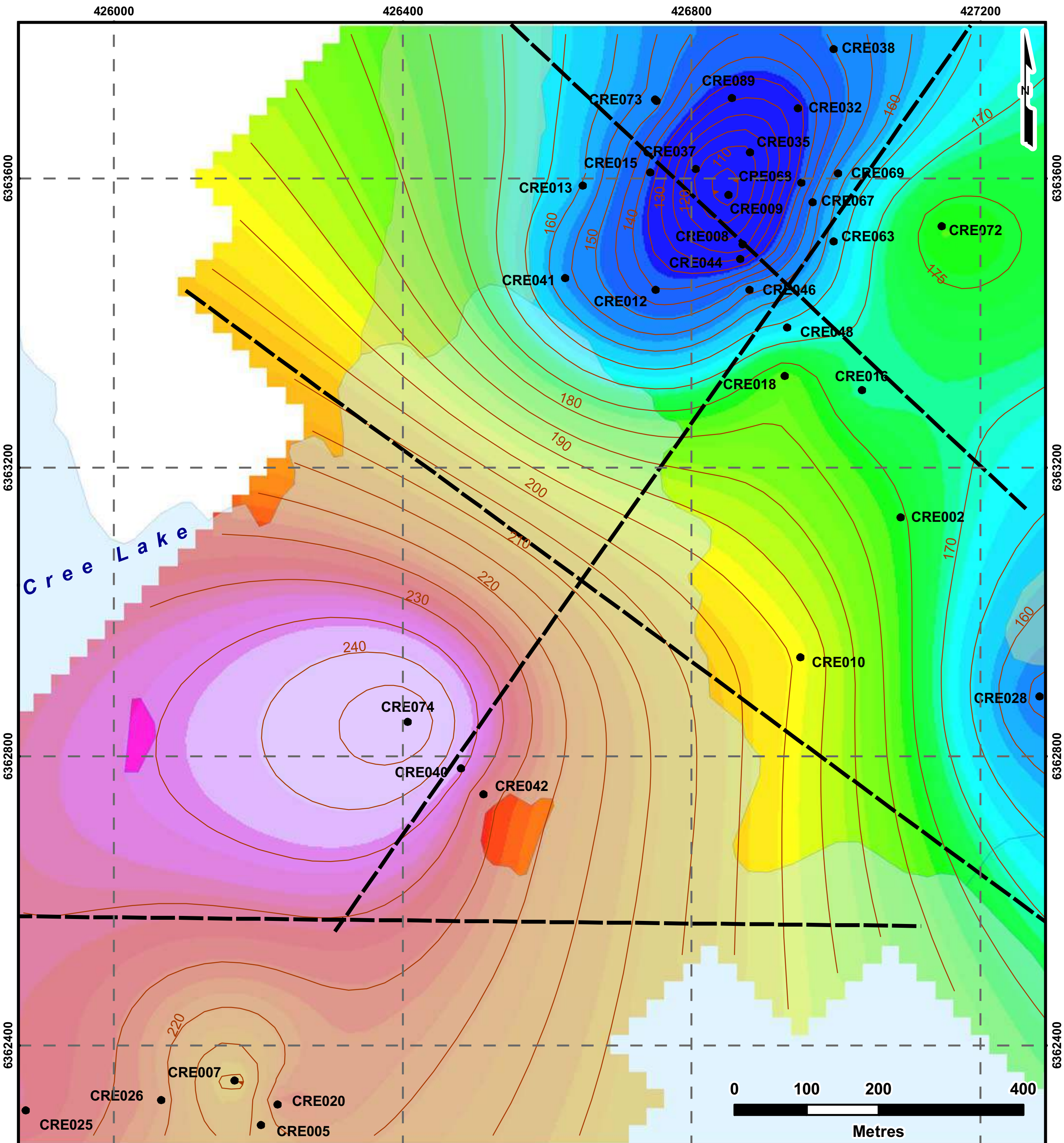
CanAlaska Uranium Ltd.

Hanwha KEPCO KORES SK energy

Cree East Project

Target A
Cross Section A4-A4'

		Scale: 2 500	Fig No: 15
Date: Feb. 28, 2013	Drawn by: GRB	Report: CRE2013-01	



Legend

- Unconformity Pierce Point
- Faults Interpreted from Unconformity Contours
- Unconformity Contours (ASL)
- Swamps
- Lakes
- Rivers

Background: Unconformity Elevation Grid

CanAlaska Uranium Ltd.

Hanwha KEPCO KORES SK energy

Cree East Project

Unconformity Elevation Contours and Interpreted Faults

UTM NAD 83, Zone 13	NTS: 74G08/09, 74H05/12	Scale: 1: 8 000	Fig No: 16
Date: Feb. 28, 2013	Drawn by: GRB	Report: CRE2013-01	

Area A Sandstone Alteration: The sandstone clay alteration pattern is complex. Illite predominates in all drill holes, except CRE038. A chlorite zone in the upper sandstone is present in drill holes CRE012, CRE015, CRE037, CRE035, CRE044, CRE046, and CRE068, but is replaced by sudoite in drill holes CRE063, CRE067, CRE069, and CRE48. In CRE068, both chlorite and sudoite are present high in the sandstone. Kaolinite replaces illite in the lower sandstone of drill holes CRE063, CRE067, CRE068, CRE044, CRE046, and CR048. A zone of sudoite is present above the unconformity in CREO067, CRE068, CRE069, CRE013, CRE015, CRE037, CRE035, CRE038, CRE044, CRE048 and CRE018. The strongest alteration appears to be associated with the intersection of east-northeast and south-southeast trending faults (e.g., CRE008, CRE009, CRE035 and CRE037). CRE032 was the only hole that intersected uranium enrichment above the Read Formation in the sandstone. CRE008 shows boron enrichment and is anomalous in Pb, Zn, and Cu throughout the sandstone. CRE086 shows anomalous Co and Ni content located within the sandstone, just above the unconformity.

Area A Basement Alteration: In the northern part of Area A, basement alteration shows rough zonation, with a core zone enriched in Mg- and intermediate chlorite (CRE008 and CRE009, CRE035, CRE037, CRE044, CRE046, CRE050,CRE068, CRE066, CRE067, CRE085, CRE086), and a peripheral zone in which illite predominates (CRE015, CRE032, CRE037, CRE041, CRE069, CRE071, CRE072 and CRE073). An exception to the pattern is CRE013, in which kaolinite predominates. In the southern part of Area A, kaolinite predominates, with weak to moderate Mg-, Fe- and intermediate chlorite. Generally, basement rocks from southern Area A have higher As, B, Cu, Ni, Pb, U, V and Zn values, with CRE010 being the most enriched in these elements.

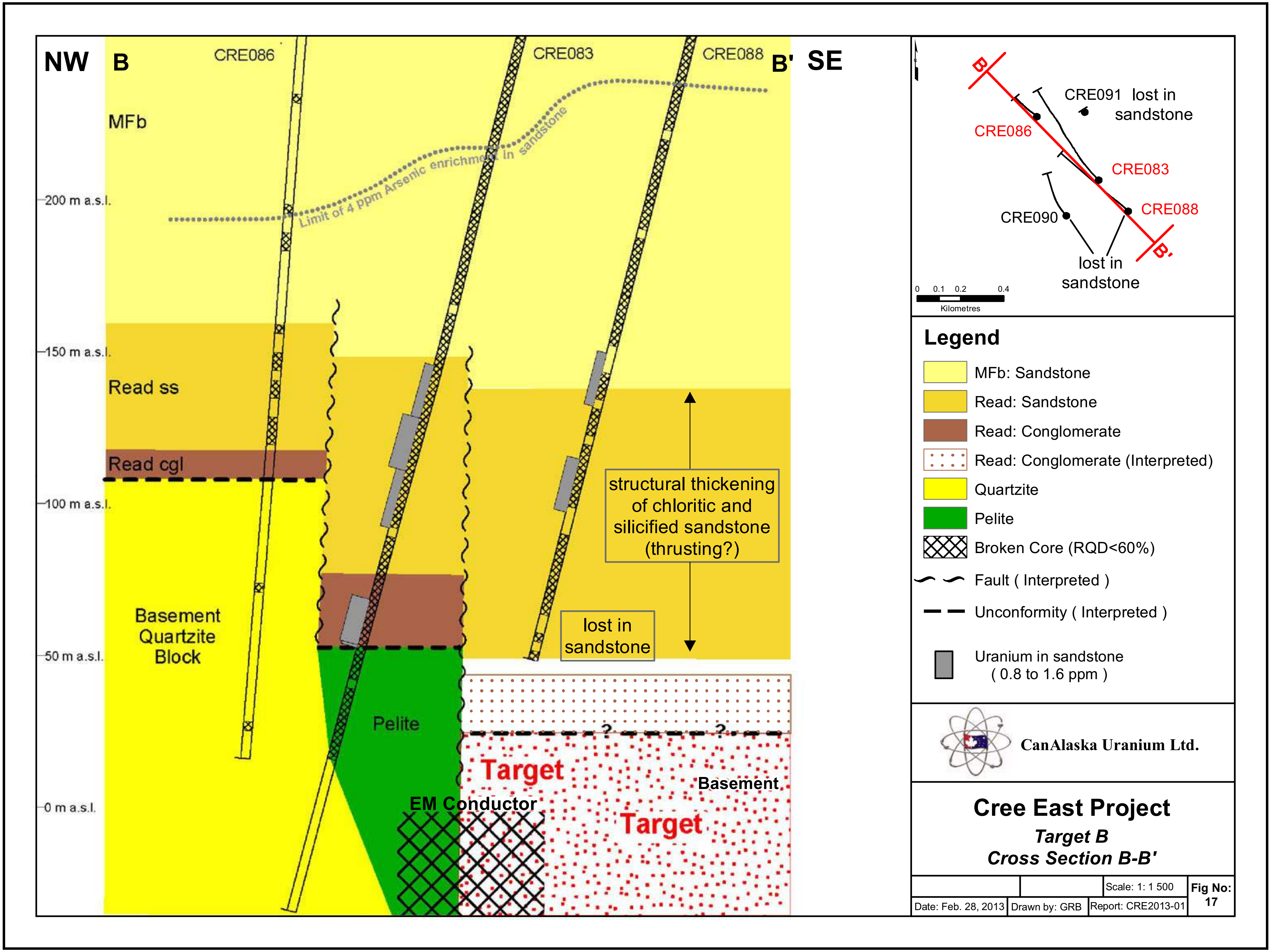
Area A Mineralization: Several zones of uranium enrichment were encountered in the sandstone of Area A. CRE032 intersected up to 42 ppm uranium 140 metres above the unconformity. In the eastern holes of Area A (CRE012, CRE035, CRE037, CRE044, CRE046, CRE048, CRE063, CRE067 and CRE068), a distinct uranium anomaly can be recognized above the unconformity. Bleaching and clay alteration is associated with this anomaly. The only significant mineralization intercepted in sandstone was 0.014% U3O8 over 1.5 m in Read sandstone in CRE063.

Several mineralized intercepts were encountered in basement. The best ones were 0.02% U3O8 over 0.1 m in a pelite breccia in CRE012, 0.02% U3O8 over 2 m in pelite in CRE018, 0.08% over 0.5 m in brecciated semipelite in CRE035, 0.05% U3O8 over 0.4 m in graphitic pelite in CRE063, 0.08% U3O8 over 0.75 m in marble in CRE067. Most have Cu, Zn, Ni, Co and As enrichment. These mineralized intercepts and associated alteration are interpreted to be hydrothermal.

7.4.2 Target Area B

Zone B lies on land at the northern end of Binkley Bay about 1.5 km east of Zone A, from which it is separated by a small lake. Six holes were drilled here in 2012 to test coincident MLEM and resistivity anomalies.

Area B Stratigraphy: Unconformity elevation ranges from 55 m ASL in CRE083 to 108 m ASL in CRE086 (Figure 17). The thickness of the Read Formation ranges from 46 in CRE084 to 55 m in CRE086. The MFb member thickens eastward from 117 in CRE090 to 165 m in CRE088. As in Area A, MFc thickness is fairly uniform (65 – 70 m), except in CRE083, where it is about 100 m thick, presumably due to syndepositional faulting (or structural repetition?). There is no significant offset on the MFc/MFd contact, and little evidence for brittle faulting within MFd, although underlying sandstone is commonly faulted and has low RQD values.


NW
B
CRE086
CRE083
CRE088
B'
SE
MFb
Limit of 4 ppm Arsenic enrichment in sandstone
200 m a.s.l.
150 m a.s.l.
100 m a.s.l.
50 m a.s.l.
0 m a.s.l.
Read ss
Read cgl
Basement Quartzite Block
Pelite
structural thickening of chloritic and silicified sandstone (thrusting?)
lost in sandstone
Target
EM Conductor
Basement
Target
B
CRE091 lost in sandstone
CRE086
CRE083
CRE088
CRE090
lost in sandstone
B'
0 0.1 0.2 0.4
Kilometres
Legend
MFb: Sandstone
Read: Sandstone
Read: Conglomerate
Read: Conglomerate (Interpreted)
Quartzite
Pelite
Broken Core (RQD<60%)
Fault (Interpreted)
Unconformity (Interpreted)
Uranium in sandstone (0.8 to 1.6 ppm)
CanAlaska Uranium Ltd.
Cree East Project
Target B
Cross Section B-B'
Scale: 1: 1 500
Fig No: 17
Date: Feb. 28, 2013
Drawn by: GRB
Report: CRE2013-01

Area B Basement: Of three holes at Area B that intersected basement, two have quartzite, pelite and graphitic pelite, whereas CRE086 to the west has only quartzite.

Area B Structural Geology: Fracture and breccia zones and faults are common, especially in the lower sandstone. Tectonically rotated sandstone blocks are reported in three holes. A 55 m offset on the unconformity indicates that a major fault separates CRE083 from CRE086, which was apparently drilled into a fault-bounded 'quartzite ridge', comparable to those associated with the Phoenix and MacArthur River deposits. Stratigraphic observations suggest minor pre-depositional relief, considerable fault movement during deposition of MFb and MFc, but little post-depositional displacement.

Area B Sandstone Alteration: Except for CRE084, in which regional background dickite/illite predominates, most holes in this area have elevated kaolinite in sandstone. The most encouraging hole in the zone, CRE083, has kaolinite almost to the top of MFd, as well as chlorite alteration above and below the unconformity. This alteration pattern is similar to that at Key Lake, and suggests that chemical conditions were favourable for mineralization. 'Grey alteration', due to finely disseminated pyrite, in four of the holes indicates that reducing fluids were present. An arsenic enrichment halo is associated with the grey alteration. Drusy quartz is also common in the sandstones. In CRE083, and adjacent hole CRE088, elevated uranium (>0.5 ppm) was reported in the Read and MFb sandstones. CRE086 has sporadic elevated boron and uranium extending up into MFc.

Area B Basement Alteration: Kaolinite and illite are the dominant clays in the basement. Elevated uranium and boron were found in basement rocks in two holes, CRE083 and CRE084.

Area B Mineralization: CRE083 had a mineralized intersection grading 0.09% U3O8 over 0.5 m hematized quartzite 30 m below the unconformity. CRE084 had four mineralized intersections, all in basement. The best one was 0.014% U3O8 over 0.5 m in fractured pelite.

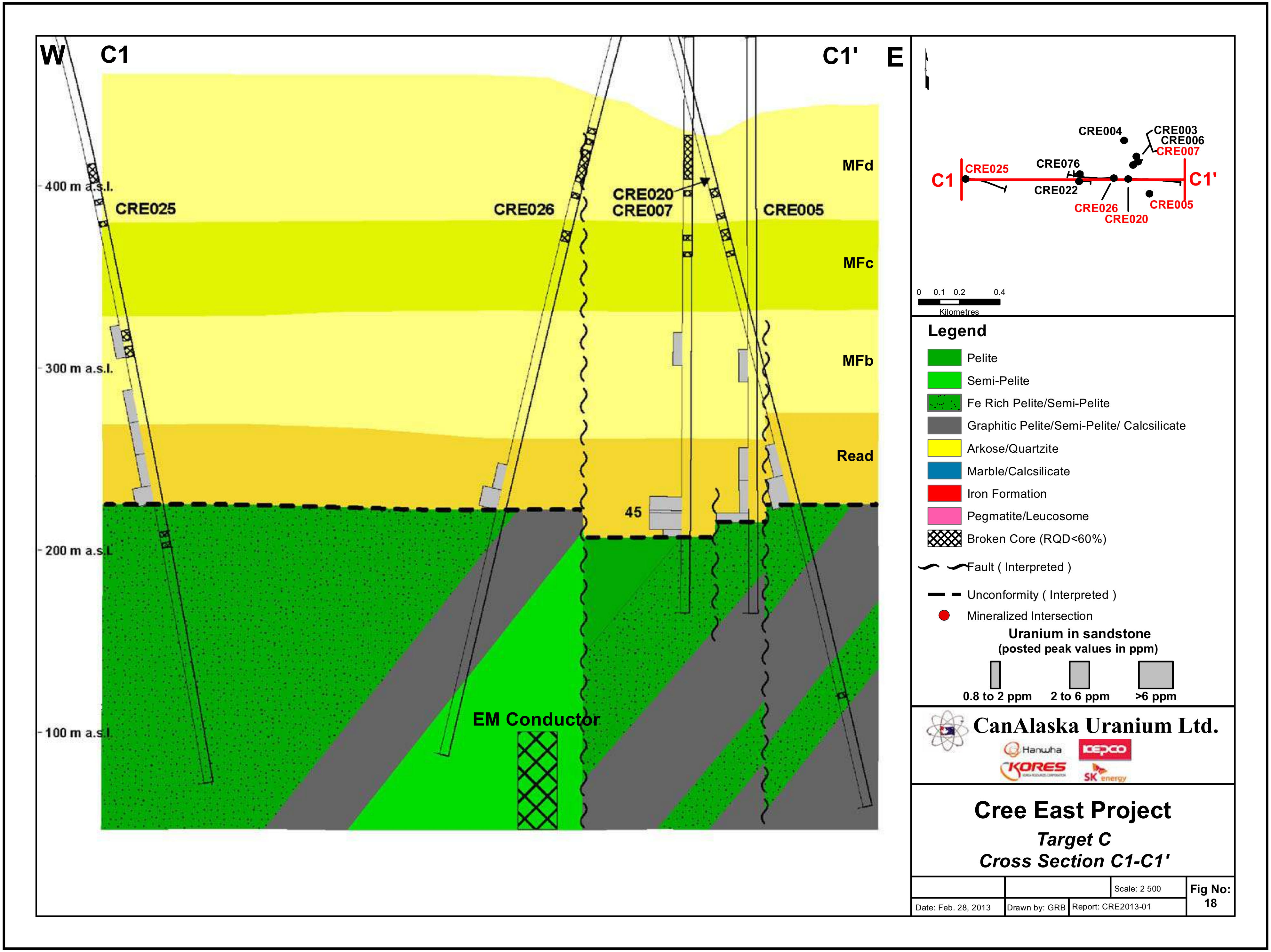
7.4.3 Target Area C

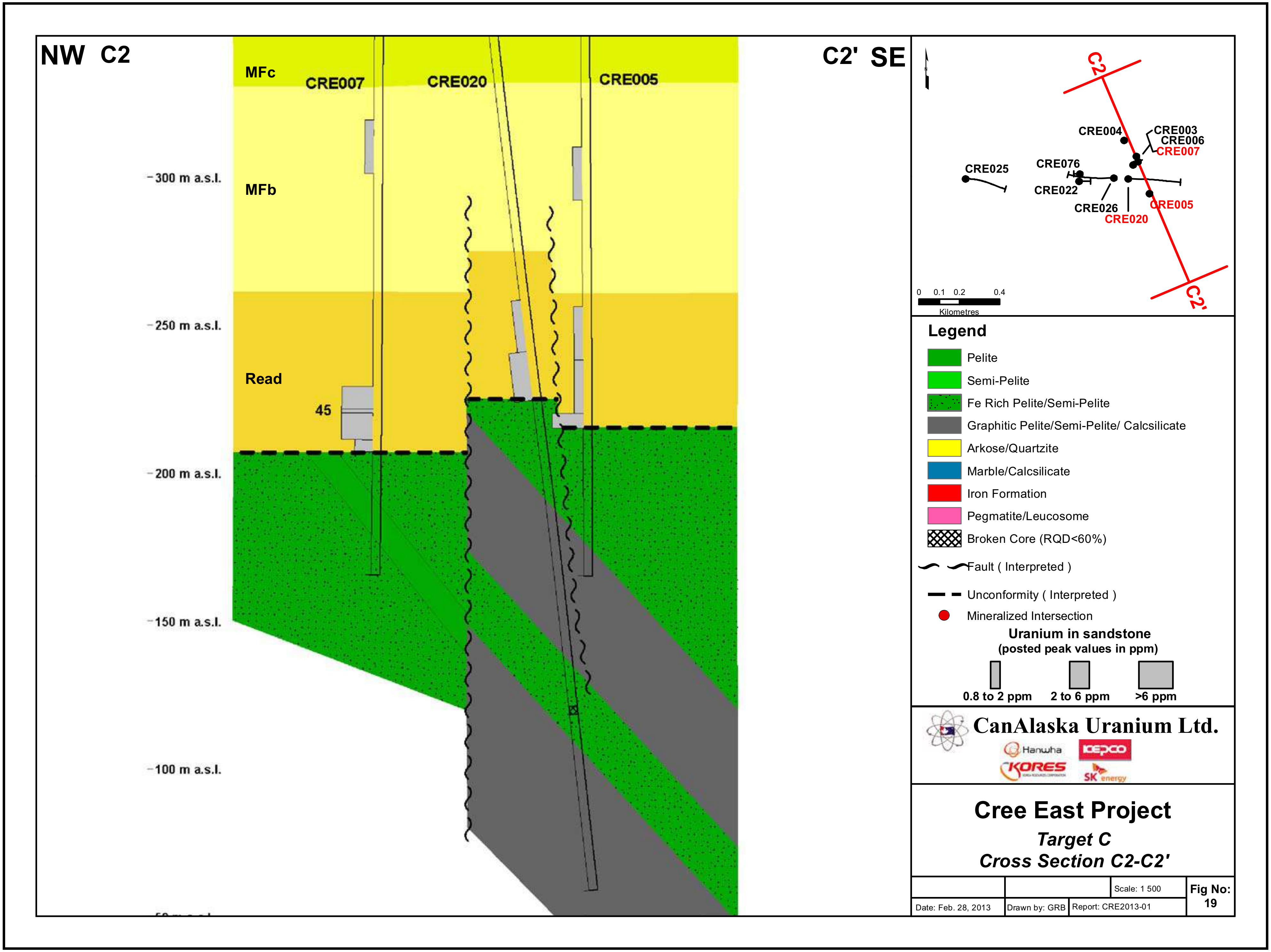
Area C lies in northern Binkley Bay about 1 km south-southwest of Zone A. Two drill fences have been drilled on this target, a six-hole fence trending easterly (Figure 18) and a short four-hole fence trending northerly (Figure 19).

Area C Stratigraphy: Unconformity elevation at Area C ranges from 206 to 220 m ASL. The Read Formation ranges from 38 m in CRE026 to 55 m in CRE007, but shows no apparent thickening trend. The MFb member thins westward from 68 m in CRE026 and CRE005 to 57 m in CRE025, whereas the MFc member is about 51 m thick in all holes.

Area C Basement: Basement rocks at Area C include graphitic pelites, pelites and semipelites.

Area C Structural Geology: The northeasterly trending basement conductor, shown by drilling at Area A to be a fault zone, extends south-southwesterly through areas I and C. Strong brittle structures in CRE005 and CRE007 are probable manifestations of this. Small offsets on the unconformity among the holes are probably also due to this fault zone. Low RQD (i.e., abundant fracturing) within the MFd member in CRE026 and CRE007 suggests that faulting post-dates deposition of the Manitou Falls Formation.


W
C1
C1'
E
400 m a.s.l.
300 m a.s.l.
200 m a.s.l.
100 m a.s.l.
CRE025
CRE026
CRE020
CRE007
CRE005
MFd
MFc
MFb
Read
45
EM Conductor
CRE004
CRE003
CRE006
CRE007
CRE025
CRE076
C1
C1'
CRE022
CRE026
CRE005
CRE020
0 0.1 0.2 0.4
Kilometres
Legend
Pelite
Semi-Pelite
Fe Rich Pelite/Semi-Pelite
Graphitic Pelite/Semi-Pelite/ Calcsilicate
Arkose/Quartzite
Marble/Calcsilicate
Iron Formation
Pegmatite/Leucosome
Broken Core (RQD<60%)
Fault (Interpreted)
Unconformity (Interpreted)
Mineralized Intersection
Uranium in sandstone
(posted peak values in ppm)
0.8 to 2 ppm
2 to 6 ppm
>6 ppm
CanAlaska Uranium Ltd.
Hanwha
KEPCO
KORES
SK energy
Cree East Project
Target C
Cross Section C1-C1'
Scale: 2 500
Fig No: 18
Date: Feb. 28, 2013
Drawn by: GRB
Report: CRE2013-01



NW C2
C2' SE
MFc
MFb
Read
CRE007
CRE020
CRE005
45
300 m a.s.l.
250 m a.s.l.
200 m a.s.l.
150 m a.s.l.
100 m a.s.l.
C2
C2'
CRE004
CRE003
CRE006
CRE007
CRE076
CRE025
CRE022
CRE026
CRE020
CRE005
0 0.1 0.2 0.4
Kilometres
Legend
Pelite
Semi-Pelite
Fe Rich Pelite/Semi-Pelite
Graphitic Pelite/Semi-Pelite/ Calcsilicate
Arkose/Quartzite
Marble/Calcsilicate
Iron Formation
Pegmatite/Leucosome
Broken Core (RQD<60%)
Fault (Interpreted)
Unconformity (Interpreted)
Mineralized Intersection
Uranium in sandstone
(posted peak values in ppm)
0.8 to 2 ppm
2 to 6 ppm
>6 ppm
CanAlaska Uranium Ltd.
Hanwha
KEPCO
KORES
SK energy
Cree East Project
Target C
Cross Section C2-C2'
Scale: 1 500
Fig No: 19
Date: Feb. 28, 2013
Drawn by: GRB
Report: CRE2013-01

Area C Sandstone Alteration: The illite/dickite mixture typical of background clay alteration in eastern Athabasca Basin predominates in the upper sandstone, although illite generally declines in abundance with depth. Elevated kaolinite occurs above the unconformity in CRE020 and CRE026 close to the northeast trending fault zone, whereas elevated dravite and sudoite occur above the unconformity further away from it in CRE005 and CRE025. Slightly elevated sandstone uranium values (> 0.5 ppm) extend about 116 m above the unconformity into lower MFc in CRE025 and about the same height to the top of MFb in the other three holes.

Area C Basement Alteration: Chlorite and kaolinite are the dominant basement clays, with local phengite in CRE025.

Area C Mineralization: No significant mineralization was found in Area C.

7.4.4 Target Area D

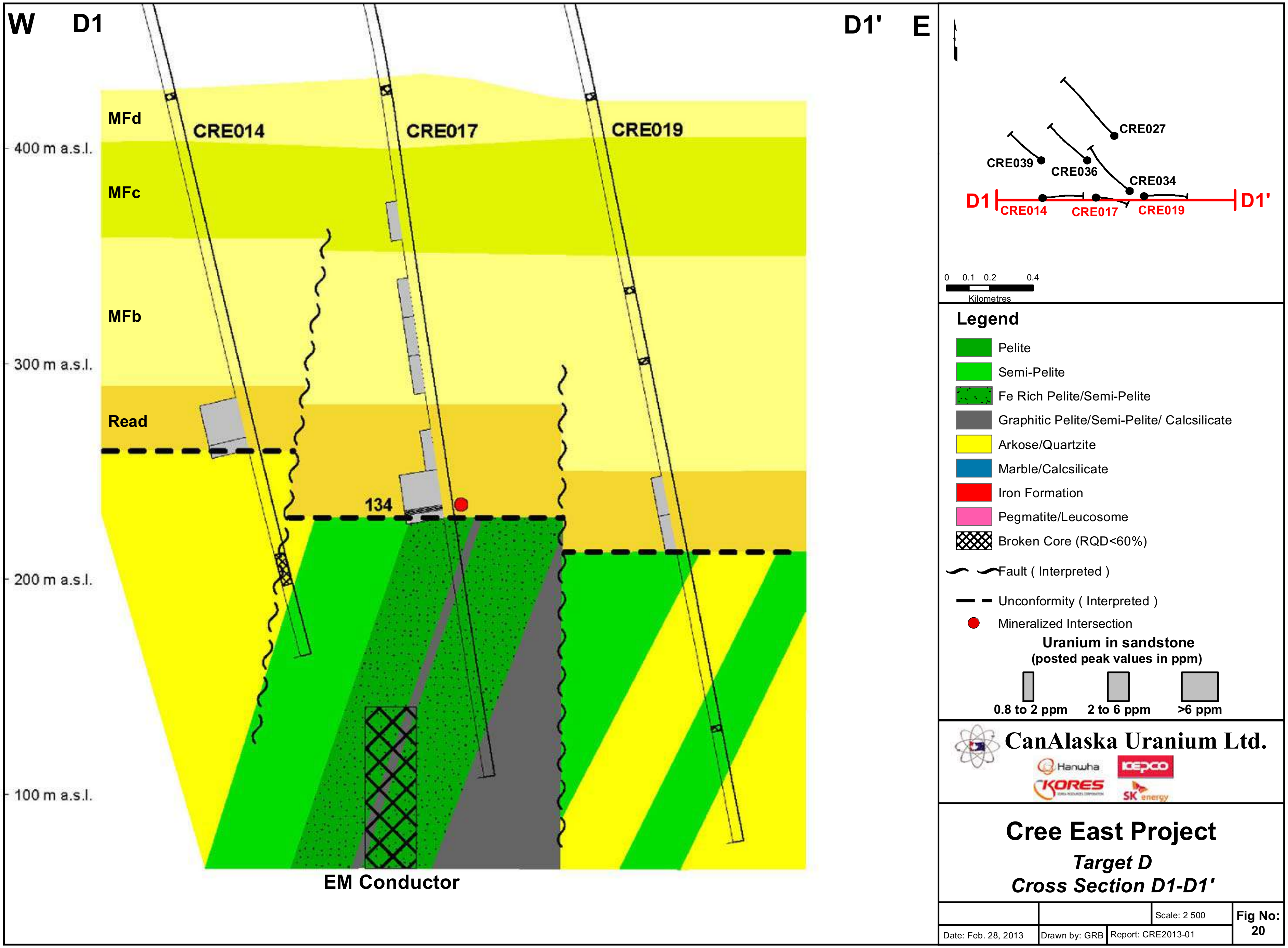
Area D lies in the axial part of Binkley Bay about 1 km south-southwest of Zone C. Two easterly trending fences have been drilled on this target, one of three holes and one of four holes (Figures 20 to 22).

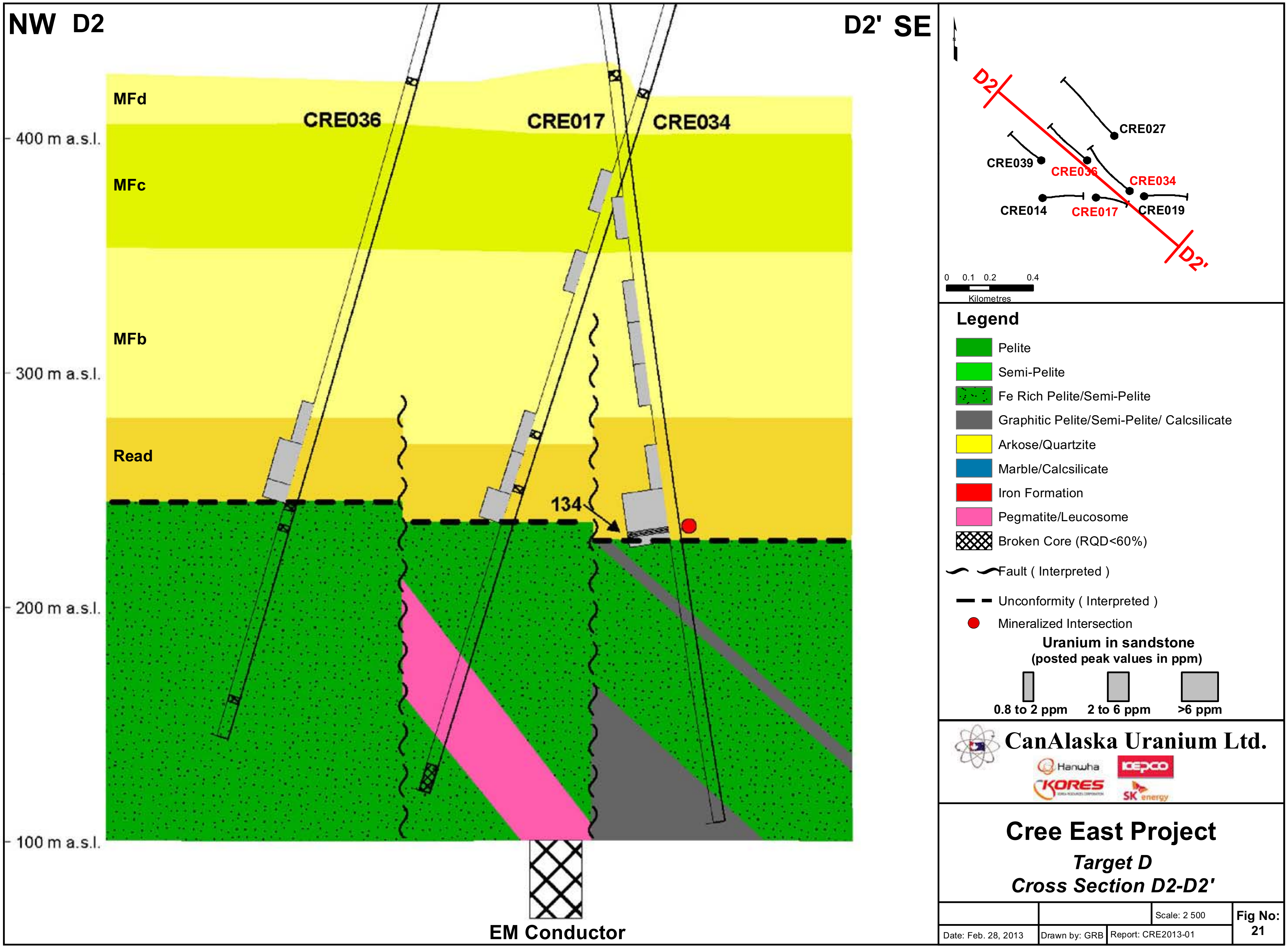
Area D Stratigraphy: The unconformity elevation steps down from west to east, from 254 m ASL in CRE014 to 207 m ASL in CRE019. The thickness of the Read Formation increases eastward from 25 m in CRE039 to 36 m in CRE019. The thickness of the MFb member also increases eastward from 68 m in CRE014 to 102 m in CRE 019. The thickness of the MFc is variable, from 45 m in CRE014 to 57 m in CRE039, but there is no clear thickening trend.

Area D Basement: Basement rocks in the northern holes are dominated by Fe-rich pelite with minor semipelite and arkose (e.g., CRE027, CRE036 and CRE039). The southern holes have more variable basement lithologies. Holes CRE017 and CRE034 encountered pelite and semipelite. The basement rocks in CRE019 are primarily arkosic with minor pelite and semipelite. Hole CRE014 intersected Fe-rich quartzite with minor quartzite, pelite and semipelite. The only hole with significant amounts of graphitic pelite was CRE017.

Area D Structural Geology: The 12.5 m offset in the lake bottom between CRE036 and CRE039 corresponds to an easterly trending magnetic feature interpreted to be a fault zone. Foliation in the basement rocks to the south of this dips steeply to the southeast, whereas to the north it dips steeply both north and south.

All the drill holes along the northern fence intersected significant structure, with drill hole CRE027 encountering the strongest brittle deformation. The main northerly trending conductor was not intersected by any of the Area D holes, but a northeasterly trending fault, oblique to the main fault, was intersected in three of the holes. The unconformity offset indicates downthrow to the southeast. Offset on the MFc/MFd contact between CRE014 and CRE017 has the same sense as the corresponding unconformity offset, but a much smaller displacement, suggesting that at least some fault movement was syndepositional.


W
D1
D1'
E
MFd
MFc
MFb
Read
CRE014
CRE017
CRE019
400 m a.s.l.
300 m a.s.l.
200 m a.s.l.
100 m a.s.l.
134
EM Conductor
CRE027
CRE039
CRE036
CRE034
D1
CRE014
CRE017
CRE019
D1'
0 0.1 0.2 0.4
Kilometres
Legend
Pelite
Semi-Pelite
Fe Rich Pelite/Semi-Pelite
Graphitic Pelite/Semi-Pelite/ Calcsilicate
Arkose/Quartzite
Marble/Calcsilicate
Iron Formation
Pegmatite/Leucosome
Broken Core (RQD<60%)
Fault (Interpreted)
Unconformity (Interpreted)
Mineralized Intersection
Uranium in sandstone
(posted peak values in ppm)
0.8 to 2 ppm
2 to 6 ppm
>6 ppm
CanAlaska Uranium Ltd.
Hanwha
KEPCO
KORES
SK energy
Cree East Project
Target D
Cross Section D1-D1'
Scale: 2 500
Date: Feb. 28, 2013
Drawn by: GRB
Report: CRE2013-01
Fig No:
20


NW D2
D2' SE
400 m a.s.l.
300 m a.s.l.
200 m a.s.l.
100 m a.s.l.
MFd
MFc
MFb
Read
CRE036
CRE017
CRE034
134
EM Conductor
D2
D2'
CRE027
CRE039
CRE036
CRE034
CRE014
CRE017
CRE019
0 0.1 0.2 0.4
Kilometres
Legend
Pelite
Semi-Pelite
Fe Rich Pelite/Semi-Pelite
Graphitic Pelite/Semi-Pelite/ Calcsilicate
Arkose/Quartzite
Marble/Calcsilicate
Iron Formation
Pegmatite/Leucosome
Broken Core (RQD<60%)
Fault (Interpreted)
Unconformity (Interpreted)
Mineralized Intersection
Uranium in sandstone
(posted peak values in ppm)
0.8 to 2 ppm
2 to 6 ppm
>6 ppm
CanAlaska Uranium Ltd.
Hanwha
KEPCO
KORES
SK energy
Cree East Project
Target D
Cross Section D2-D2'
Scale: 2 500
Fig No: 21
Date: Feb. 28, 2013
Drawn by: GRB
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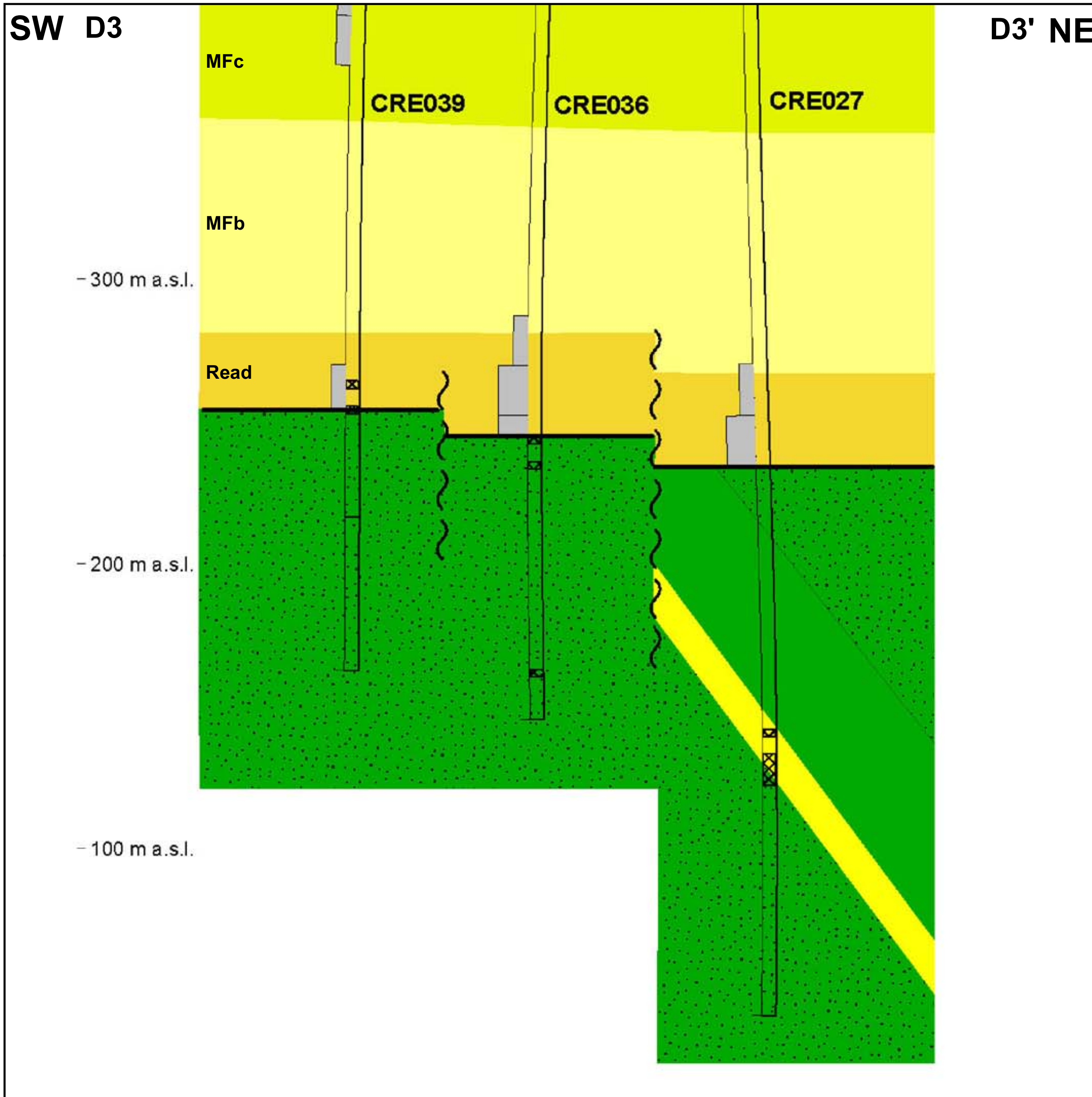
MFd



Legend

- Pelite
- Semi-Pelite
- Fe Rich Pelite/Semi-Pelite
- Graphitic Pelite/Semi-Pelite/ Calcsilicate
- Arkose/Quartzite
- Marble/Calcsilicate
- Iron Formation
- Pegmatite/Leucosome
- Broken Core (RQD<60%)
- Fault (Interpreted)
- Unconformity (Interpreted)
- Mineralized Intersection

Uranium in sandstone
(posted peak values in ppm)

0.8 to 2 ppm **2 to 6 ppm** **>6 ppm**

CanAlaska Uranium Ltd.

Cree East Project

Target D

Cross Section D3-D3'

		Scale: 2 500	Fig No: 22
Date: Feb. 28, 2013	Drawn by: GRB	Report: CRE2013-01	

Area D Sandstone Alteration: Regional background illite/dickite alteration is typical of the upper sandstone section (above mid-MFb) in most holes, but in CRE034 and CRE036, in the central part of the drillhole cluster, illite/dickite appears to extend throughout MFb as well. In CRE026, dickite predominates, and illite is only developed locally. Dravite or dravite/sudoite is well developed above the unconformity in the four northern holes, CRE027, CRE034, CRE036 and CRE039. Boron content in the northern holes ranges up to 740 ppm (CRE027), whereas maximum values in the southern holes ranges from 125 to 142 ppm. The basal sandstone in CRE019 is sudoite-rich. Silicification is stronger and more pervasive in the southern holes. Slightly elevated sandstone uranium (> 0.5 ppm) extends from the unconformity into upper MFc in CRE034 and CRE019, and into basal MFd in CRE039.

Area D Basement Alteration: Basement clay alteration in Area D is complex. Chlorite, illite, phengite and kaolinite are locally predominant. Prominent phengite-rich zones in CRE034, CRE036 and CRE039 are likely associated with faulting. The basement is deeply hematised in CRE019, 027, 034, and 036.

Area D Mineralization: Area D shows uranium enrichment up to 30-40 metres above the unconformity. The only significant mineralized intersection was reported in CRE017, with 0.012% U3O8 over 1.7 m in sandstone 4.2 m above the unconformity, with minor Ni and As.

7.4.5 Target Area E

Area E lies about 1 km south of Area D near the eastern shore of Binkley Bay. A three hole fence was drilled across this target area.

Area E Stratigraphy: The unconformity elevation drops slightly towards the east-northeast from 201 m ASL in CRE024 and CRE012 to 196 m ASL in CRE023. The Read Formation thins slightly to the east from 66 m in CRE024 to 62 m in CRE023; whereas the MFb member thickens slightly to the east from 102 m in CRE024 to 106 m in CRE021 and CRE023. MFc thickens ranges from 38 m in CRE024 to 55 m in CRE021, but shows no clear thickening trend. There is little relief on the unconformity surface at Area E, in contrast to most other target zones.

Area E Basement: CRE024 contains graphitic pelite, pelite and calcsilicate rock, whereas the pelite predominates in the other two holes.

Area E Structural Geology: Little structure was encountered in any of the Area E holes. Stratigraphic offsets are minor, consistent with the lack of other evidence for faulting at Area E. In light of this, the apparent offset on the MFc/MFd contact between CRE021 and the other holes is most likely due to difficulty defining this transitional stratigraphy boundary.

Area E Sandstone Alteration: The upper sandstone section, above the MFb/MFc transition, is characterized by background style illite/dickite alteration. Most of the lower sandstone section is dominated by dickite. The basal sandstone in CRE023 is sudoite-rich, whereas the basal sandstone in CRE024 is kaolinite-rich. Slightly elevated sandstone uranium (>0.5 ppm) extends from the unconformity up to the base of MFc in CRE024.

Area E Basement Alteration: Below the unconformity is a zone of kaolinite, above illite and chlorite in CRE021 and CRE023, with kaolinite, illite and chlorite to the ends of the holes. The basal part of CRE024 had strong hematization.

Area E Mineralization: No significant mineralization was reported in Area E.

7.4.6 Target Area G

Zone G lies on land east of Binkley Bay, between the latter and the "Chain of Lakes" where considerable historical drilling was done. Although Area G is underlain by a broad conductive zone, no narrow linear conductor such as those found to the northwest and northeast has been detected by ground EM surveys. A total of 17 holes have been drilled in Zone G, mostly on three fences. These include a southeasterly trending 8-hole fence, a northeasterly trending 6-hole fence joining the northwest end of the first fence, and a second northeasterly trending fence of 4 holes about 500 m further northwest.

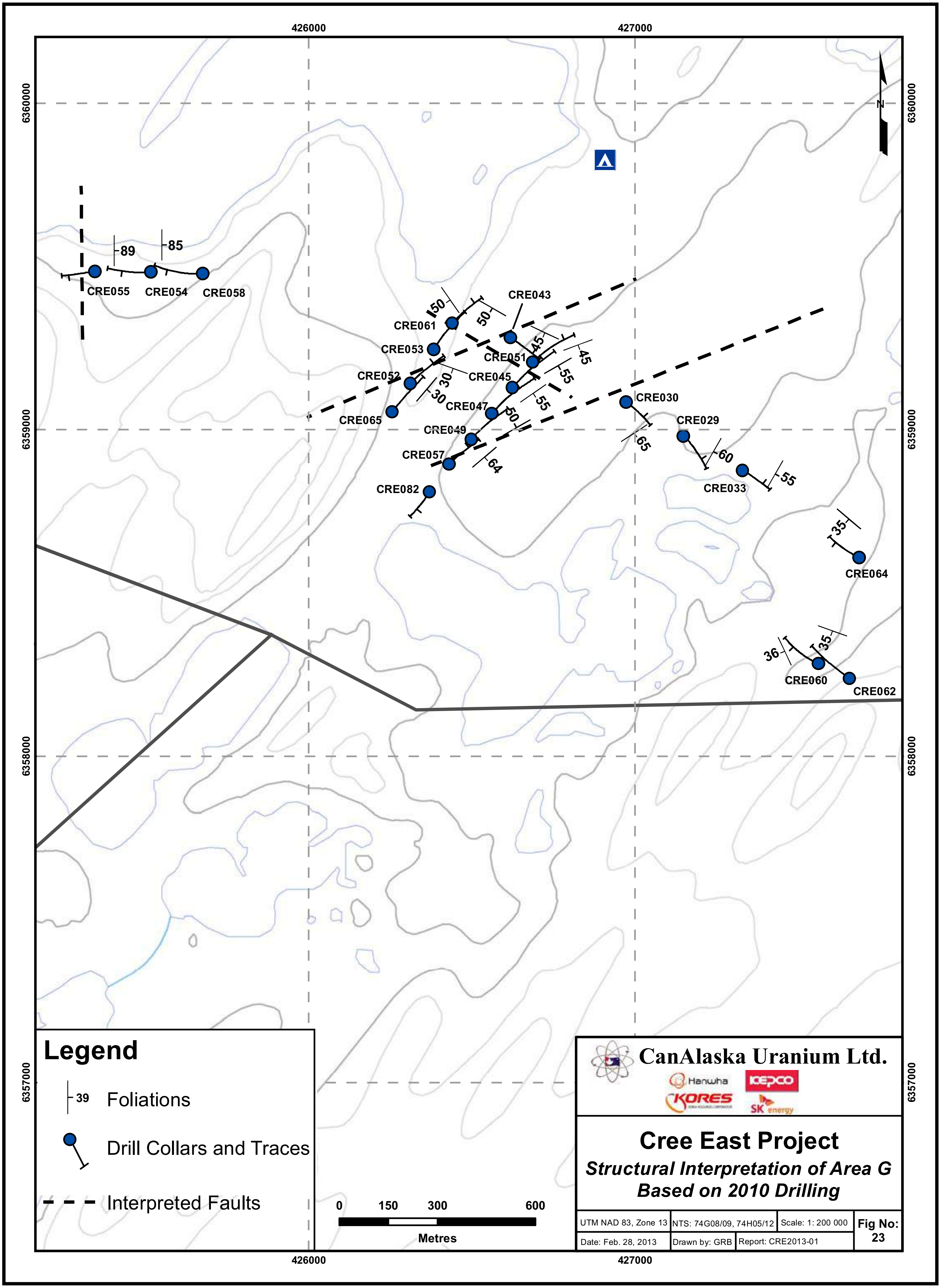
Area G Stratigraphy: Unconformity elevation drops northward from 227 m ASL in CRE062 and CRE082 to 173 m ASL in CRE043. Large offsets are mainly in the northwest part of the area. The thickness of the Read Formation ranges from 41 m in CRE064 to 69 m CRE043 and appears to thicken to the northwest. The MFb member ranges from 96 m in CRE030 to 133 m in CRE051, and similarly thickens towards the northwest. The MFc member ranges from 26 m in CRE033 to 69 m in CRE030, but shows no obvious thickening trend.

Area G Basement: The main basement lithologies in Area G are pelite and semipelite, with subordinate arkose and quartzite. In contrast with target areas to the north, only minor Fe-rich pelite occurs. Graphitic rocks are common towards the southwest (e.g., CRE047, CRE049, CRE082, CRE052 and CRE065), whereas to the northeast, basement rocks are only weakly graphitic (e.g., CRE029, CRE030, CRE033 and CRE043).

Area G Structural Geology: Foliations in the southeastern part of Area G dip southeasterly, whereas foliations in the northwest dip southwesterly (Figure 23). Foliation in CRE065 is an exception, as it dips to the southeast. This foliation pattern may reflect refolding of a northwest-trending fold by northeasterly trending ones.

Zones of clay fault gouge are reported in several of the northern drill holes, particularly CRE043, CRE045 and CRE053. On the basis of unconformity offsets, a pair of east-northeasterly trending faults have been interpreted to lie between CRE052 and CRE053 and between CRE043 and CRE030 (Figure 23). A northwesterly trending fault is interpreted to lie between CRE045 and CRE051. In contrast with the northwestern drill holes, the southeastern ones show little fracturing.

Area G Sandstone Alteration: Variable proportions of dickite and illite predominate in the sandstone of Area G holes. A zone of dickite enrichment typically corresponds to the middle MFb and lower Read beds, with illite enrichment associated with lower MFb and upper Read. Illite is relatively low when compared to other areas on the Cree East property. The illite content decreases towards the east and is almost absent in CRE060, CRE064 and CRE062. Illite is associated with the fault zones in the northern drill holes, especially in drill holes CRE043, CRE053, and CRE045. Minor kaolinite occurs sporadically in the sandstone, generally within the MFb sandstone unit. A zone of sudoite occurs above the unconformity in all the Area G drill holes except for CRE060 and CRE062, drilled in the southeast corner. Drill holes CRE053 and CRE061 intersected sudoite up to 40 metres above the unconformity. Drill hole CRE053 intersected sudoite 20 metres above the unconformity. Drill



426000
427000
6360000
6359000
6358000
6357000
89
85
CRE055
CRE054
CRE058
CRE043
CRE061
CRE053
CRE051
CRE052
CRE045
CRE047
CRE065
CRE049
CRE057
CRE082
CRE030
CRE029
CRE033
CRE064
CRE060
CRE062
50
45
55
30
64
65
60
35
36
N
Legend
39
Foliations
Drill Collars and Traces
Interpreted Faults
0
150
300
600
Metres
CanAlaska Uranium Ltd.
Hanwha
KEPCO
KORES
SK energy
Cree East Project
Structural Interpretation of Area G
Based on 2010 Drilling
UTM NAD 83, Zone 13
NTS: 74G08/09, 74H05/12
Scale: 1: 200 000
Fig No:
23
Date: Feb. 28, 2013
Drawn by: GRB
Report: CRE2013-01

holes CRE043 and CRE045 intersected sudoite and magnesium chlorite up to 40 metres above the unconformity. This zone of alteration correlates with significant structure in the sandstone, which suggests hydrothermal alteration in drill holes CRE061, CRE053, CRE043 and CRE045. Elevated uranium was reported in sandstone in four of the northwestern holes, CRE057, CRE049, CRE047, and CRE045. It is mainly confined to the Read Formation, except in CRE043, where it has likely moved up fractures into the MFb member. No uranium enrichment was reported from the southeastern holes, except CRE064, which has uranium enrichment above the unconformity.

Area G Basement Alteration: Basement clay alteration in Area G is characterized by a mixture of kaolinite, illite and Mg- to intermediate chlorite with minor amounts of phengite in CRE029, sudoite close to the unconformity in CRE033. In CRE043, the basement has deep kaolinite alteration with some illite. CRE029, CRE030 and CRE033 are all characterized by moderate to high values of As, B, Cu, Ni, Pb, U and Zn. CRE043, however, has low values of As, B, Cu, and Pb and high values of U and Ni.

Area G Mineralization: Four holes in the western part of Area G intersected weak uranium mineralization in basement. The best intersections were 0.017% U3O8 over 1.6 m in Fe-rich pelite in CRE043, 0.014% over 0.5 m in pegmatite in CRE047, 0.018%% U3O8 over 0.75 m in graphitic semipelite in CRE049 and 0.03% in semipelite and pegmatite in CRE057. Most of the mineralized intersections have very low U/Th ratios, lack associated alteration, deformation, or diagnostic elements such as Ni or As, and tend not to be associated with any structure. With the possible exception of mineralized intercepts in CRE043, all the mineralized intersections in basement in Area G are thus interpreted to be of metamorphic origin.

7.4.7 Target Area H

Area H lies on the eastern shore of Binkley Bay about 1 km south of Area E and 1 km west of Area G. A three-hole fence was drilled to test this target area.

Area H Stratigraphy: The unconformity elevation drops easterly from 255 m ASL in CRE055 to 229 m ASL in CRE058. The Read Formation thickens easterly from 26 m in CRE055 to 43 m in CRE058. The MFb member apparently thins eastward from 132 m in CRE054 to 117 m in CRE058 and westward to 106 m in CRE055. The MFc member appears to thicken eastward from 40 m in CRE054 to 62 m in CRE058 and westward to 47 m in CRE055. Offset of stratigraphic contacts, including the MFc/MFd contact and local low RQD values indicate post-Manitou Falls displacement on a series of fault blocks downthrown to the east.

Area H Basement: CRE055 contains arkose and quartzite, in contrast to the other holes which have mainly pelite. CRE054 also contains graphitic pelite, semipelite and calcsilicate rocks.

Area H Structural Geology: Oriented core from CRE054 and CRE058 indicates that foliation dips steeply to the east. CRE055 intersected a steep fault in the sandstone, which probably accounts for the 20 m easterly downthrow on the unconformity between CRE054 and CRE055.

Area H Sandstone Alteration: Illite/dickite, the normal background clay alteration assemblage, predominates above middle MFb in all three holes. In CRE055, the illite/dickite alteration extends down to the unconformity, whereas in the other cores, dickite predominates in lower MFb; with sudoite and dravite enrichment in the Read Formation. In CRE058, slightly elevated sandstone uranium values extend from the unconformity up into the upper MFc member.

Area H Mineralization: No mineralization was found in Area H.

7.4.8 Target Area I

Zone I lies midway between zones A and C. A southeast-trending four-hole fence was drilled to test this target area (Figure 24).

Area I Stratigraphy: Unconformity elevation drops eastward from 255 to 229 m ASL. The Read Formation thickens southeastward from 18 m in CRE074 to 21 m CRE042. The MFb member thins southeastward from 76 m in CRE040 to 61 m in CRE042 and northwestward to 67 m in CRE074, whereas the MFc member thickens southeastward from 36 m in CRE040 to 59 m in CRE042 and northwestward to 48 m in CRE074.

Area I Basement: Basement lithologies are quite similar among the drill holes, with locally graphitic or pyrite-rich pelite and semipelite. Fe-pelite becomes more common toward the northwest, where CRE074 also contains quartzite and banded iron-formation.

Area I Structure: Intense fracturing and rotated sandstone blocks in CRE040 and CRE042 suggest a fault dipping toward the east. Offset on the MFc/MFd contact and low RQD in MFd (i.e. abundant brittle deformation) in all holes suggests most fault movement here is post-depositional.

Area I Sandstone Alteration: Regional background illite/dickite alteration predominates in the sandstones, although elevated sudoite is found above the unconformity, particularly in CRE040. Slightly elevated sandstone uranium values (>0.5 ppm), with associated Ni and As, can be detected from the unconformity to the lower MFc member in CRE040 and CRE074.

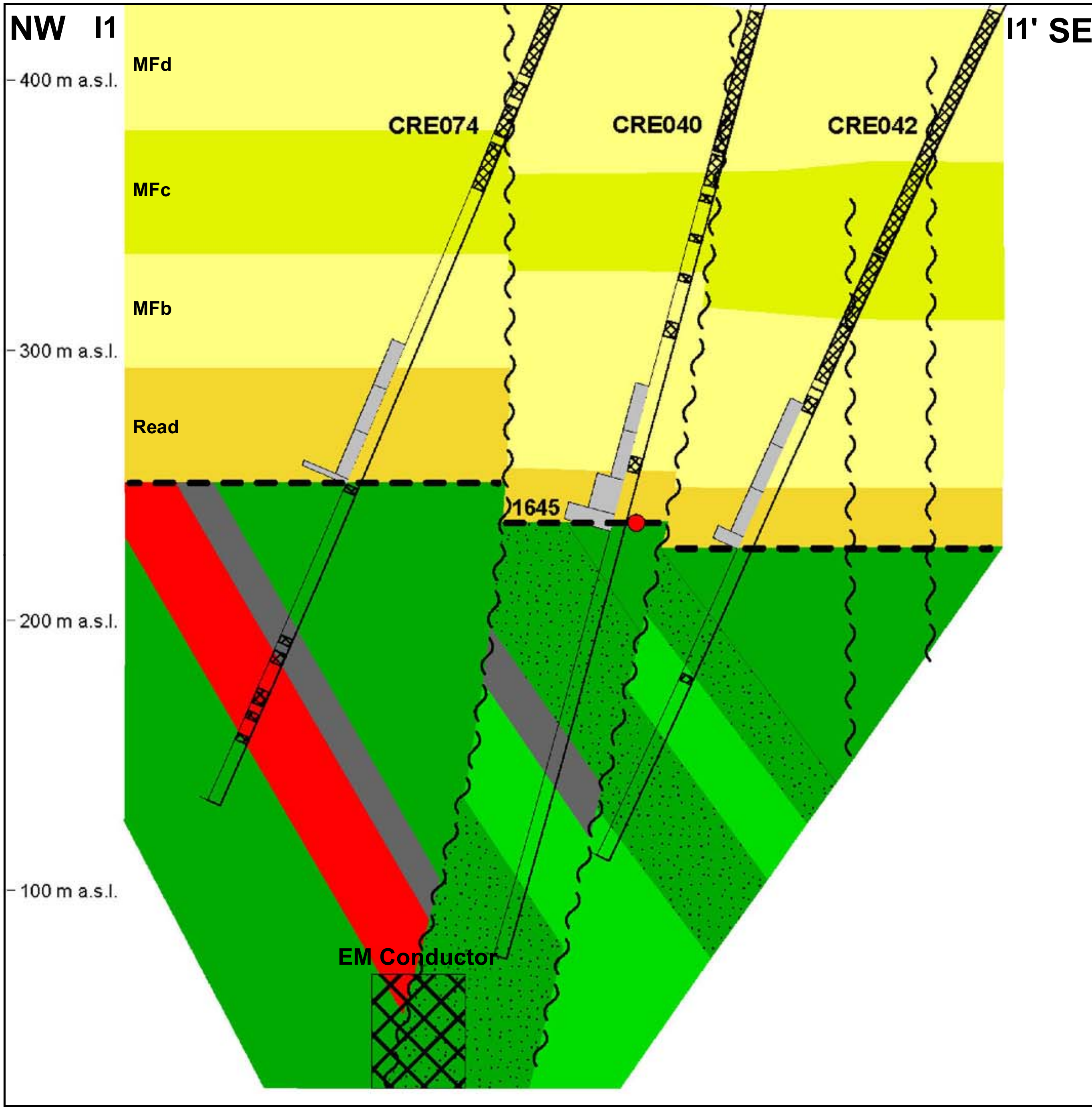
Area I Basement Alteration: Basement alteration at Area I is dominated by kaolinite with minor Fe-chlorite, intermediate chlorite and illite. As, Cu, V, Pb, Ni and Zn levels are moderate to high, but B is low.

Area I Mineralization: Uranium mineralization just above the unconformity in CRE040 grades 0.09% U3O8 over 1.4 m.

7.4.9 Target Area J

Area J is a horsehoe-shaped target zone open to the southwest and over a kilometre in diameter. It lies east of Binkley Bay and south of MacIntyre Lake and about 1 km east of Area G. As part of the 2012 drill program, a three-hole fence (Figure 25), about 1 km east of Area G, was drilled to test the western side of the ‘horseshoe’, and a single hole (CRE081) was drilled to test its northern end. Note that there are three historical drill fences, described in section 10.1 (Historical Drilling) of this report as Zone IV, between CanAlaska’s Area J fence and Area G, Zone V about 1.2 km northeast of the Area J fence and Zone VII on the southeastern side of the ‘horseshoe’.

Area J Stratigraphy: On CanAlaska’s Area J fence, the unconformity elevation drops northwesterly from 208 m in CRE079 to 180 m ASL in CRE077. Unconformity elevations are much higher to the south at historical drill Zone VII (215 - 222 m ASL), somewhat higher to the southwest at Zone IV (189 – 208 m ASL) and lower to the northeast at Zone V (134 – 138). Overall, therefore, unconformity elevation at Area J drops basinward.



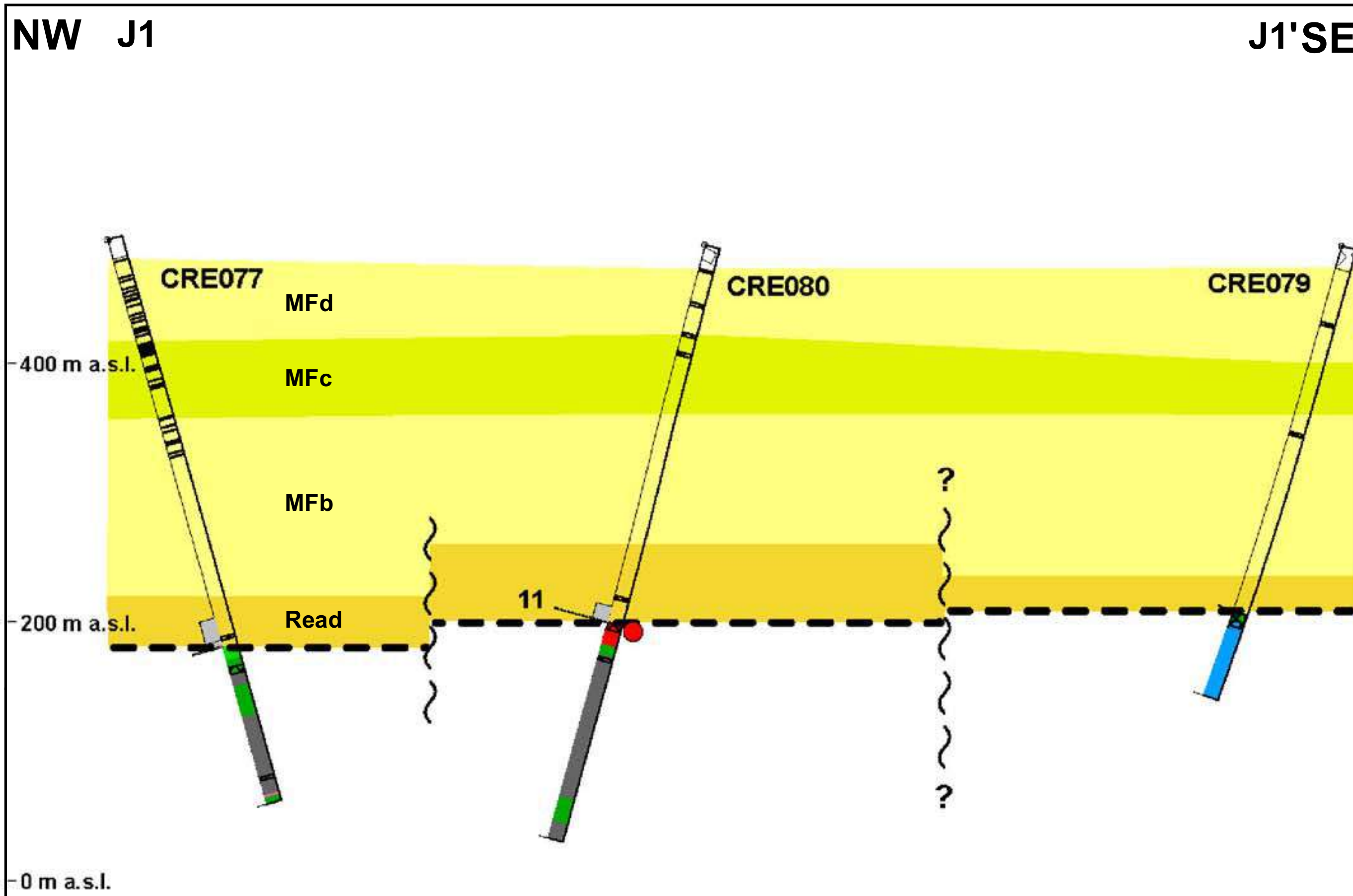
CanAlaska Uranium Ltd.

Cree East Project

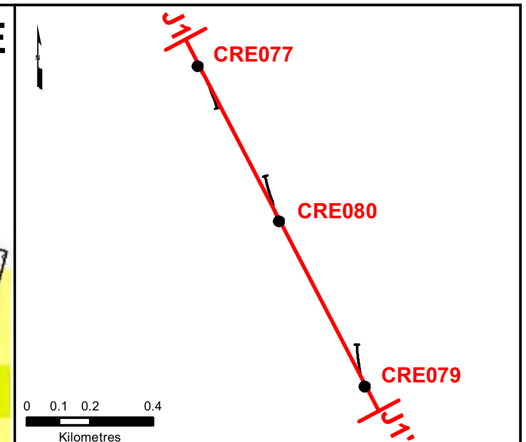
Target I

Cross Section I1-I1'

		Scale: 2 500	Fig No: 24
Date: Feb. 28, 2013	Drawn by: GRB	Report: CRE2013-01	



Basement lithologies cannot be interpreted/correlated because the drill holes are too far apart.



Legend

- Pelite
- Semi-Pelite
- Fe Rich Pelite/Semi-Pelite
- Graphitic Pelite/Semi-Pelite/ Calcsilicate
- Arkose/Quartzite
- Marble/Calcsilicate
- Iron Formation
- Pegmatite/Leucosome
- Broken Core (RQD<60%)
- Fault (Interpreted)
- Unconformity (Interpreted)
- Mineralized Intersection

Uranium in sandstone
(posted peak values in ppm)

0.8 to 2 ppm **2 to 6 ppm** **>6 ppm**

CanAlaska Uranium Ltd.

Hanwha KEPCO KORES SK energy

Cree East Project

Target J
Cross Section J1-J1'

		Scale: 6 000	Fig No: 25
Date: Feb. 28, 2013	Drawn by: GRB	Report: CRE2013-01	

The Read Formation apparently thins both southeasterly from 63 m in CRE080 to 29 m in CRE079 and northwesterly to 40 m in CRE077; whereas the MFb member apparently thickens southeasterly from 100 m in CRE080 to 122 m in CRE079 and northwesterly to 137 m in CRE077. The MFc member thins southeasterly from 63 m in CRE077 and CRE080 to 37 m in CRE079. Sandstone unit thickness was not distinguished in historical drill holes.

The unconformity elevation in CRE081, south of MacIntyre Lake and about 2.5 km east of the main Area J fence, is 188 m ASL. The Read Formation is 52 m thick, the MFb member is 138 m thick and the MFc member is 55 m thick.

Area J Basement: The two northwestern holes contain graphitic pelite, absent in the southeastern hole. Other lithologies include pelite, garnet pelite, semipelite, calcsilicate rock and banded iron-formation. Locally graphitic biotite gneiss (pelite/semipelite) was reported in historical drill zones IV and V. In addition to biotite gneiss and graphitic biotite gneiss, amphibolite (calcsilicate rock?) was reported at Zone VII.

Area J Structural Geology: Strong fracturing and faulting was observed in the basement of all three holes in western Area J. The main fault likely trends northeasterly between CRE077 and CRE080 and is downthrown to the north. This fault likely extends through historical drill zones IV and V. In the single hole in eastern Area J, a fault zone and low RQD in the Read Formation indicate post-depositional faulting. Evidence for faulting was also reported at historical Zone VII.

Area J Sandstone Alteration: The clay alteration pattern at Area J is similar to that further west. The sandstone column above the lower MFb member is characterized by typical background illite/dickite alteration. Dickite predominates through most of MFb and the Read Formation, with elevated sudoite and dravite in sandstone above the unconformity. Elevated sandstone uranium values (>0.5 ppm) are confined to the Read Formation, except for local enrichment in upper MFb in CRE077. Clay alteration in sandstone at historical drill zone IV, between CanAlaska's areas G and J, was described as "normal", so it is likely the same as at Area J.

Area J Basement Alteration: Kaolinite is the dominant basement clay, except in the most southerly hole, which had strong chlorite alteration and vuggy quartz.

Area J Mineralization: Three weakly mineralized zones were intersected in one of the western fence holes, CRE080. The best intersection was 0.015% U3O8 over 0.6 m in banded iron-formation just below the unconformity. The only historical mineralized intersection was 0.01% U3O8 at the unconformity in ZF1-81 at Zone IV.

8 DEPOSIT TYPE

Uranium deposits are generally classified according to their geological setting (e.g., Cuney and Kyser, 2008). Uranium is the 51st most abundant element in the earth's crust and is relatively mobile; hence it occurs in a wide range of geological settings, and there are many deposit types. In order of percentage of resources, however, the most important deposit types are: Proterozoic unconformity-associated deposits (>33%, mainly in Canada and Australia), IOCG deposits (>31% in the Mesoproterozoic Olympic Dam deposit in South Australia), sandstone-hosted deposits (>18%, mainly in Kazakhstan, Niger and USA), surficial calcrete-type deposits (ca. 4%, mainly in Australia). Other deposit types include: early Proterozoic conglomerate-hosted deposits, black shale-, phosphorite- and lignite-hosted sedimentary deposits, vein deposits, intrusive- and volcanic-hosted deposits, metasomatic deposits and collapse breccia pipe deposits (Cuney and Kyser, 2008). The uranium deposits of Athabasca Basin belong to the unconformity-associated type.

8.1 Unconformity-Associated Uranium Deposits

Uranium deposits associated with the unconformity between flat-lying non-metamorphosed Proterozoic clastic sedimentary rocks and older crystalline rocks are the target deposit type in Athabasca Basin. Unconformity-associated deposits are known from several Proterozoic basins, mainly in Canada and Australia, but the richest deposits are those of Saskatchewan's Athabasca Basin (Jefferson et al., 2007; Cuney and Kyser, 2008; Rogers, 2011; Saskatchewan Geological Survey, 2003). The generalized geological setting and alteration of Athabasca Basin unconformity-associated deposits are shown in Figures 26 and 27.

The sedimentary host rocks are permeable fluviatile sandstone, pebbly sandstone and conglomerate. These have undergone early diagenetic oxidation (redbed formation) and later diagenetic bleaching. Primary sedimentary structures are locally overprinted by dissolution and collapse breccia or silicification and brecciation associated with fault reactivation. Mineral alteration is discussed below.

The basement of the eastern Athabasca Basin includes late Paleoproterozoic metasedimentary rocks of the Wollaston Supergroup (predominant in the Wollaston Domain), overlying late Archean granitic gneisses (predominant in the Mudjatik Domain). The metasedimentary rocks include locally graphitic or garnet-, sillimanite- or cordierite-bearing schists and gneisses, interpreted to be pelites, semipelites, psammites and meta-arkoses, quartzites and calc-silicate rocks. Primary structures have been completely overprinted by metamorphism and multiple phases of deformation. Most uranium deposits in the eastern Athabasca Basin lie along the transition between the Wollaston and Mudjatik domains. They are commonly associated with graphitic pelites, which commonly control fault reactivation and may generate reducing fluids, which could precipitate uranium from solution in oxidizing fluids moving along the unconformity.

The unconformity is commonly sharp, with local evidence for pre-Athabasca topographic relief in the form of sedimentary onlap, thinning or absence of basal Athabasca units and conglomerate or sedimentary breccia interpreted to be syndepositional fault scarp talus. Uranium mineralization is commonly associated with paleovalleys or structural lows on the unconformity surface. Below the unconformity, a zone of hematite alteration overlying a zone of chlorite alteration, both commonly metres to tens of metres thick, is interpreted to be a paleoweathered saprolite.

The deposits are commonly associated with faults, especially early ductile basement structures which have undergone episodic brittle movement. Mineralization commonly occurs in secondary structures: Riedel fractures, cross faults, breccia zones, and fault-bend dilation zones. Whereas faults are commonly localized by graphitic pelite units, along which pre- and syndepositional paleovalleys and fault scarps formed, mineralization is commonly found in structural lows on the unconformity surface.

As indicated below, deposit types can be distinguished on the basis of mineralization (monometallic vs polymetallic) and host rocks (sandstone- vs basement-hosted). Whereas a potential deposit on the Cree East property is likely to have similarities with known nearby deposits, the characteristics of the four major known deposits in southeastern Athabasca Basin are illustrated in Figures 28 to 31 and summarized in Table 8-1. (Note that the total indicated resource for the Phoenix deposit is from a 9 January 2013 Denison Mines news release.)

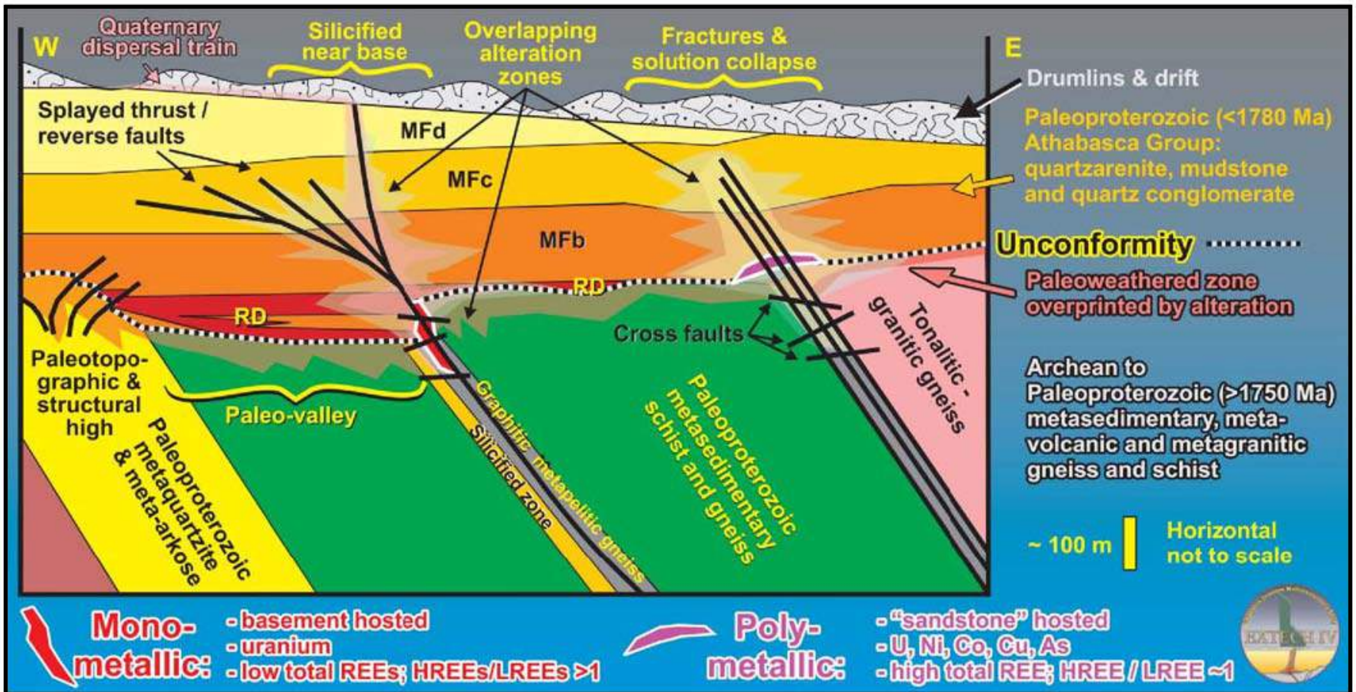


Figure 26a: Generalized geological elements of mono and polymetallic uranium deposits in the eastern Athabasca. The model illustrates the two end member styles of ore based on morphology of McArthur River and Cigar Lake deposits after Sibbald et al. (1976), Hoeve and Quirt (1984), McGill et al. (1993), Ruzicka (1996a), Thomas et al. (2000) and Tourigny et al. (2007) in Jefferson et al.

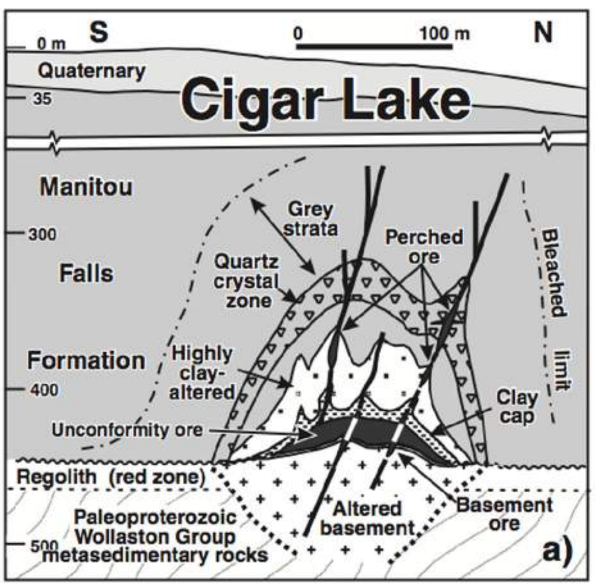


Figure 26b: Cigar Lake "egress-type" end member (in Jefferson et al., 2007)

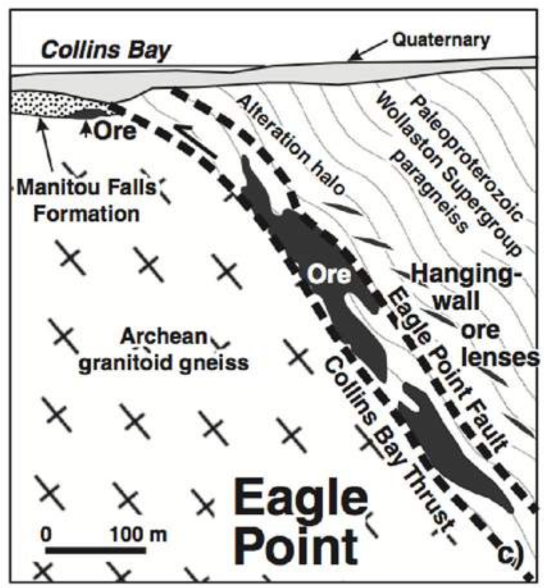


Figure 26c: Eagle Point "ingress-type" end member (in Jefferson et al., 2007)

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Unconformity Associated Uranium Deposit End-Member Models

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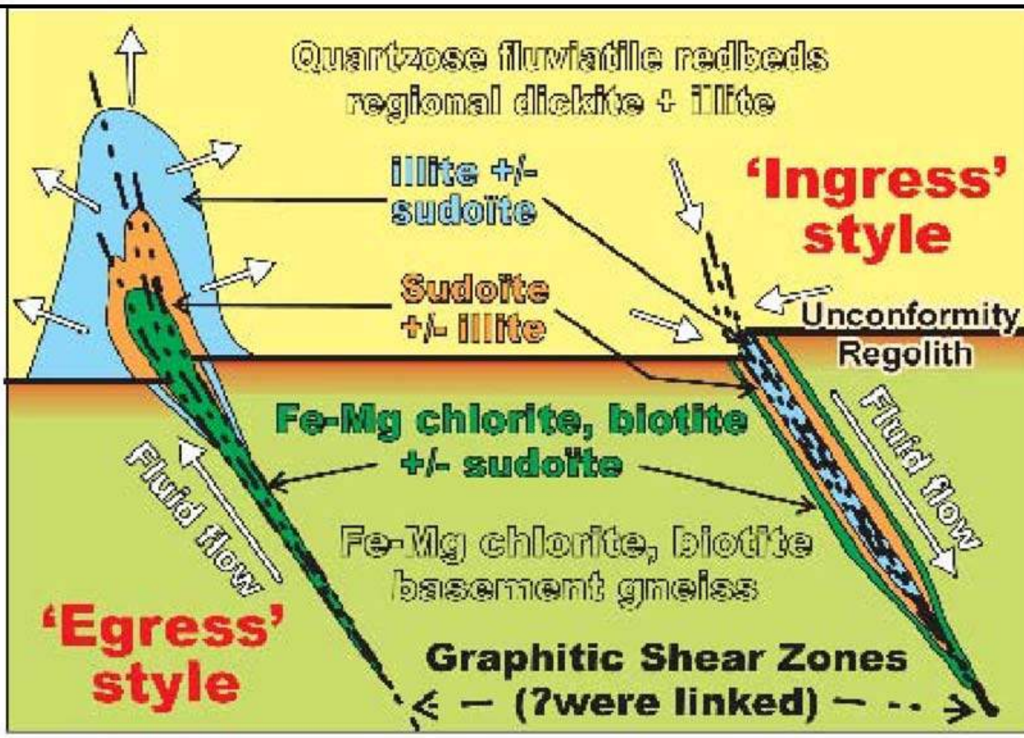

Figure 27a: Diagram illustrating 'egress' versus 'ingress'-style alteration zones for unconformity associated uranium deposits (after Hoeve and Quirt (1994), Sibbald (1985), Fayek and Kyser (1997) and Quirt (2003) in Jefferson et al. (2007)). Fluids flowing from the basement were reducing, fluids from the Athabasca sediments were oxidizing and U bearing. Fluid mixing resulted in U precipitation.

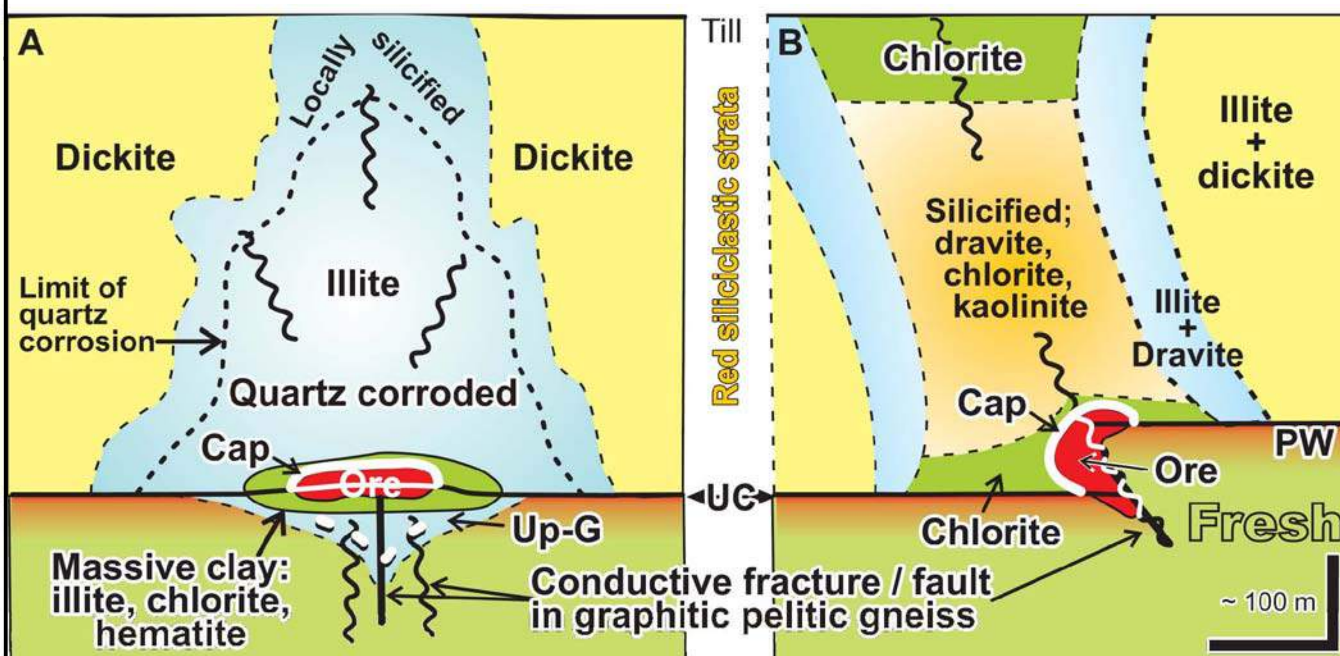

Figure 27b: Two end-member "egress-type "sandstone alteration models for uranium deposits in the eastern Athabasca Basin (after Mathews et al. (1997), Wasyliuk (2002) and Quirt (2003) in Jefferson et al. (2007)). A Quartz dissolution "egress style" (e.g. Cigar Lake, Midwest) B Silicification "egress style" (e.g. McArthur River, Key Lake)

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Unconformity Associated Uranium Deposit Alteration

UTM NAD 83, Zone 13	NTS: 74G08/09, 74H05/12	Scale: 1: 200 000	Fig No: 27
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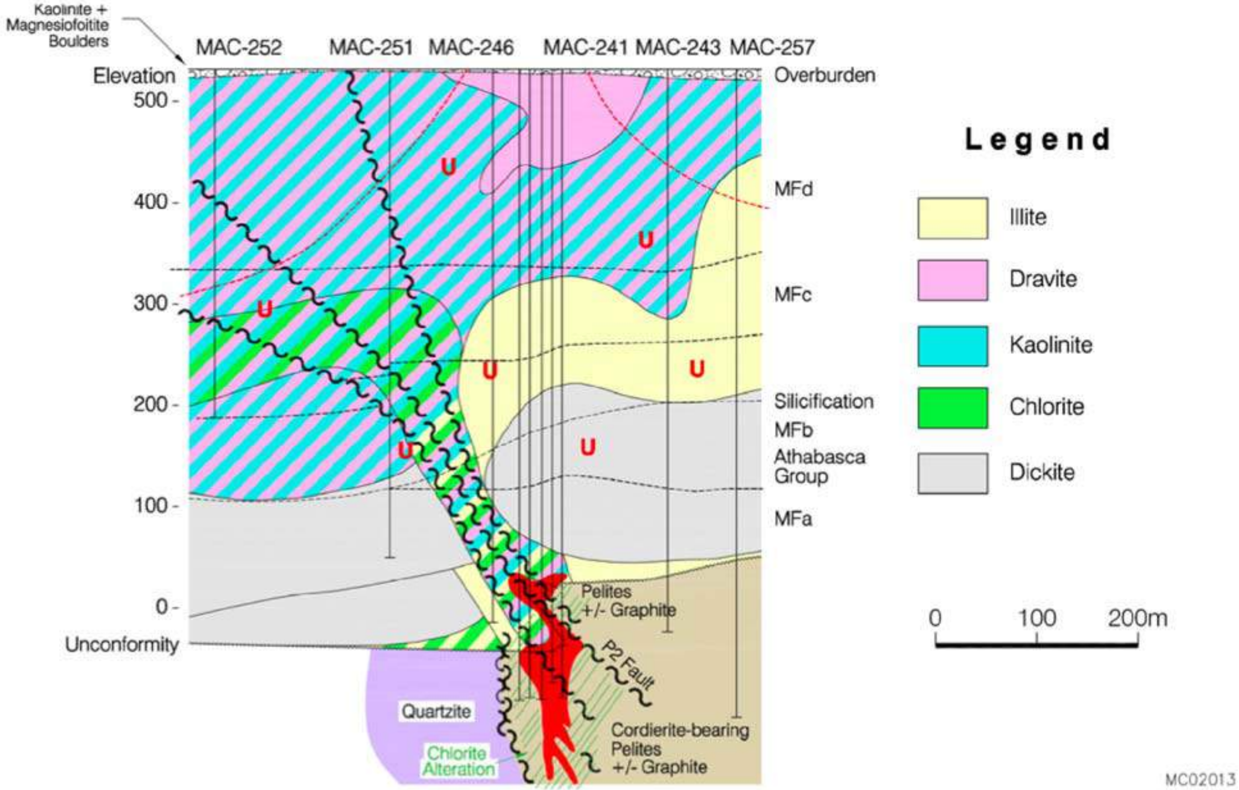
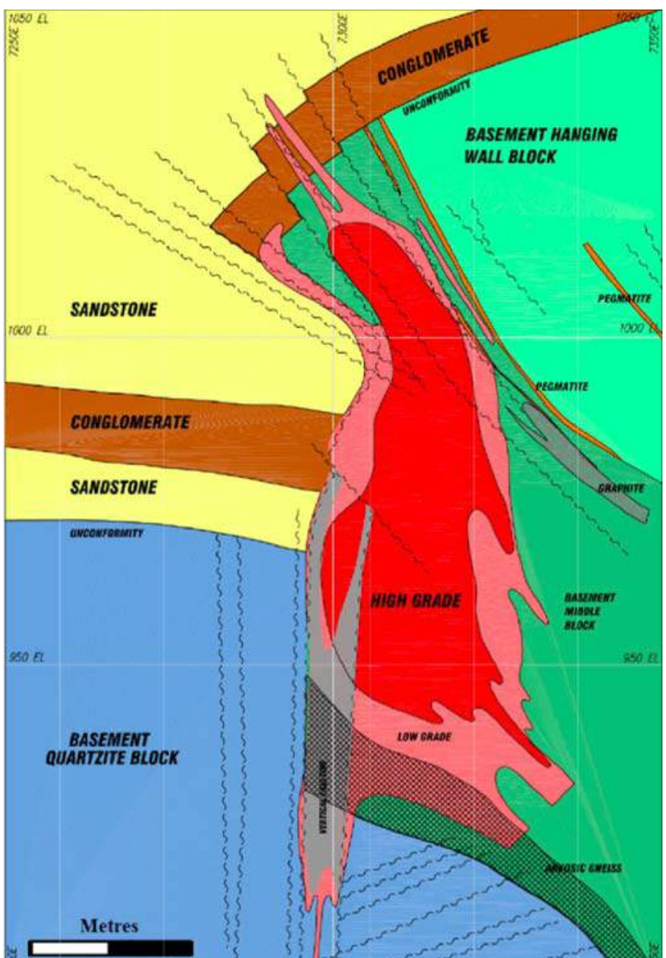
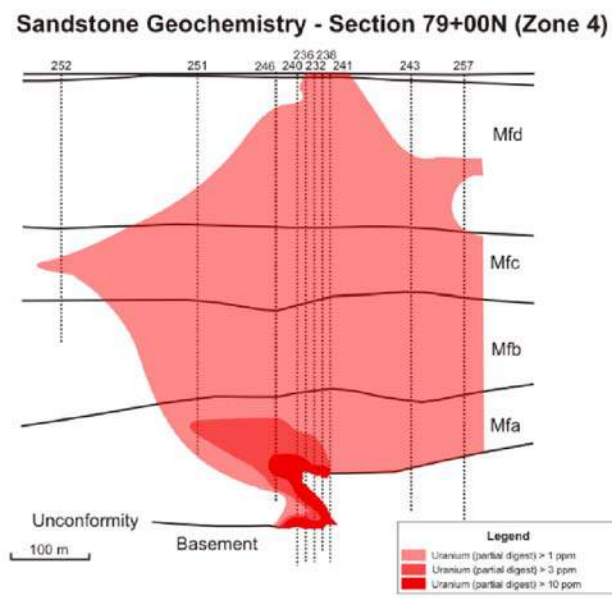


28a: Generalized Cross-Section (Craven and Perkins, 2009)



28b: Detail of UC Geology (Bronkhurst et al., 2012)



28c: Sandstone Geochem (Craven and Perkins, 2009)

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Geological Setting, Clay Alteration and Sandstone Uranium at McArthur River

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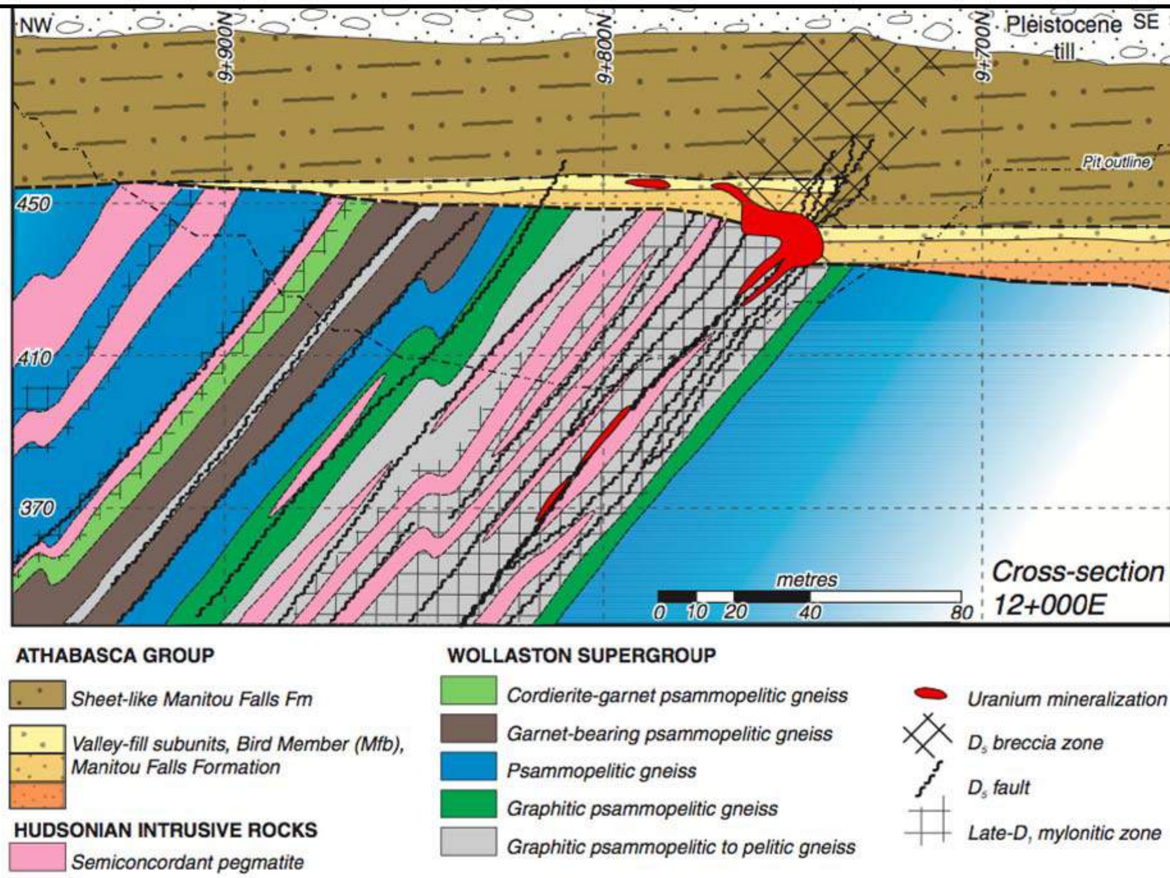
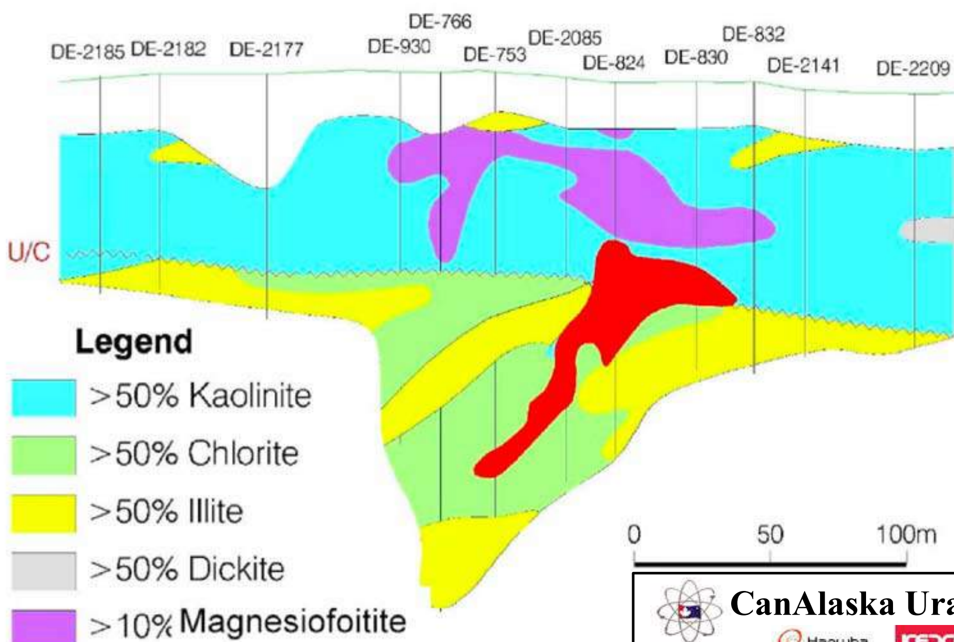


29a: Geological Section (Harvey and Bethune, 2007)



29b: Alteration (Wasyliuk, 2006)

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Geological Setting & Clay Alteration at Key Lake (Deilmann Pit)

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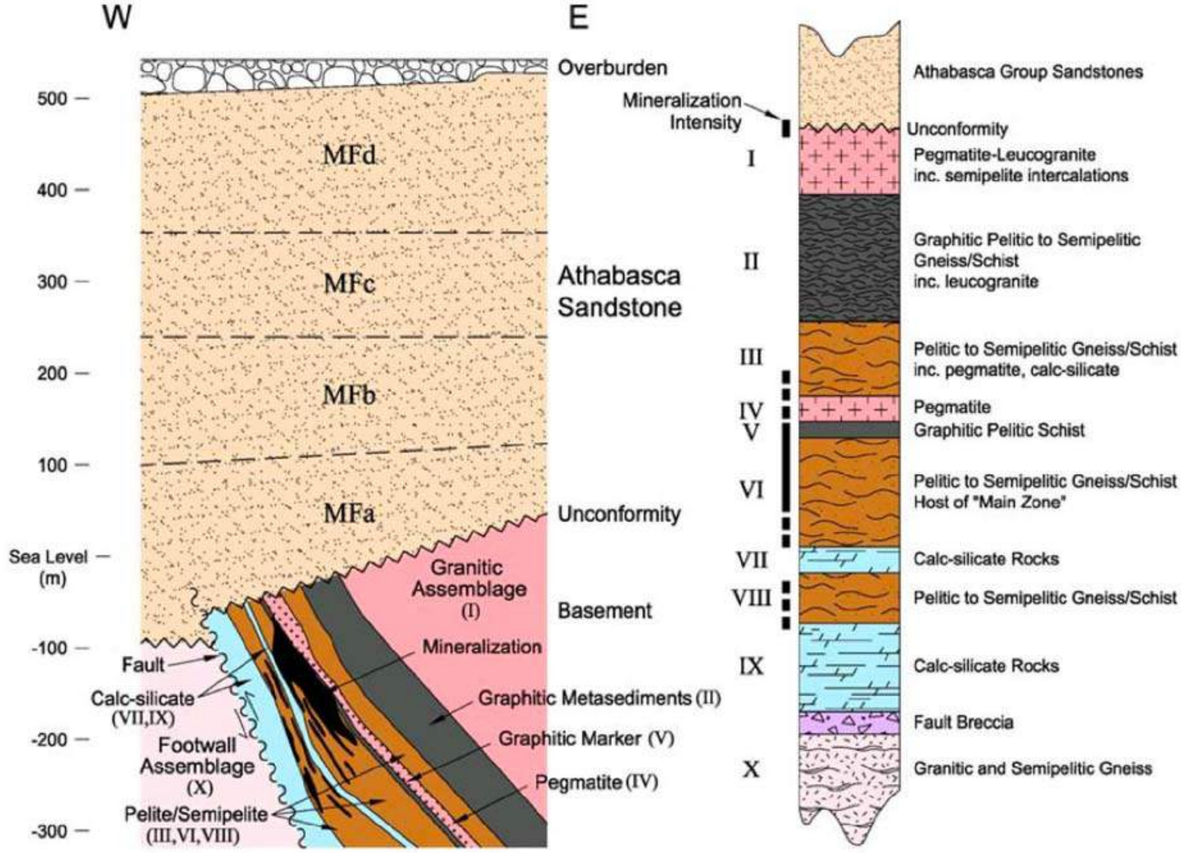
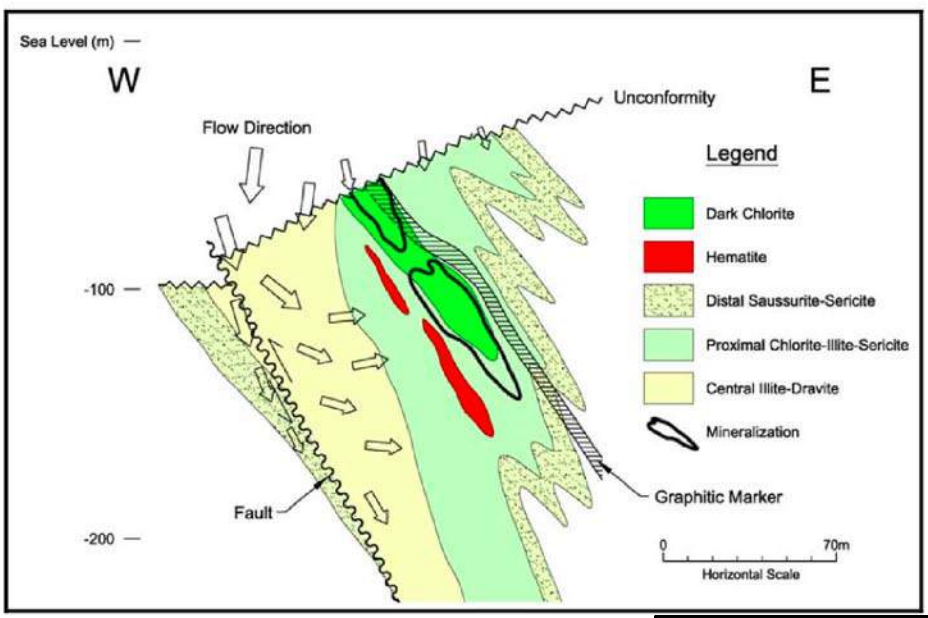


30a: Cross-section and Stratigraphic Column (Roy et al., 2005)



30b: Alteration (Roy et al., 2005)

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Geological Setting and Alteration of the Millenium Deposit

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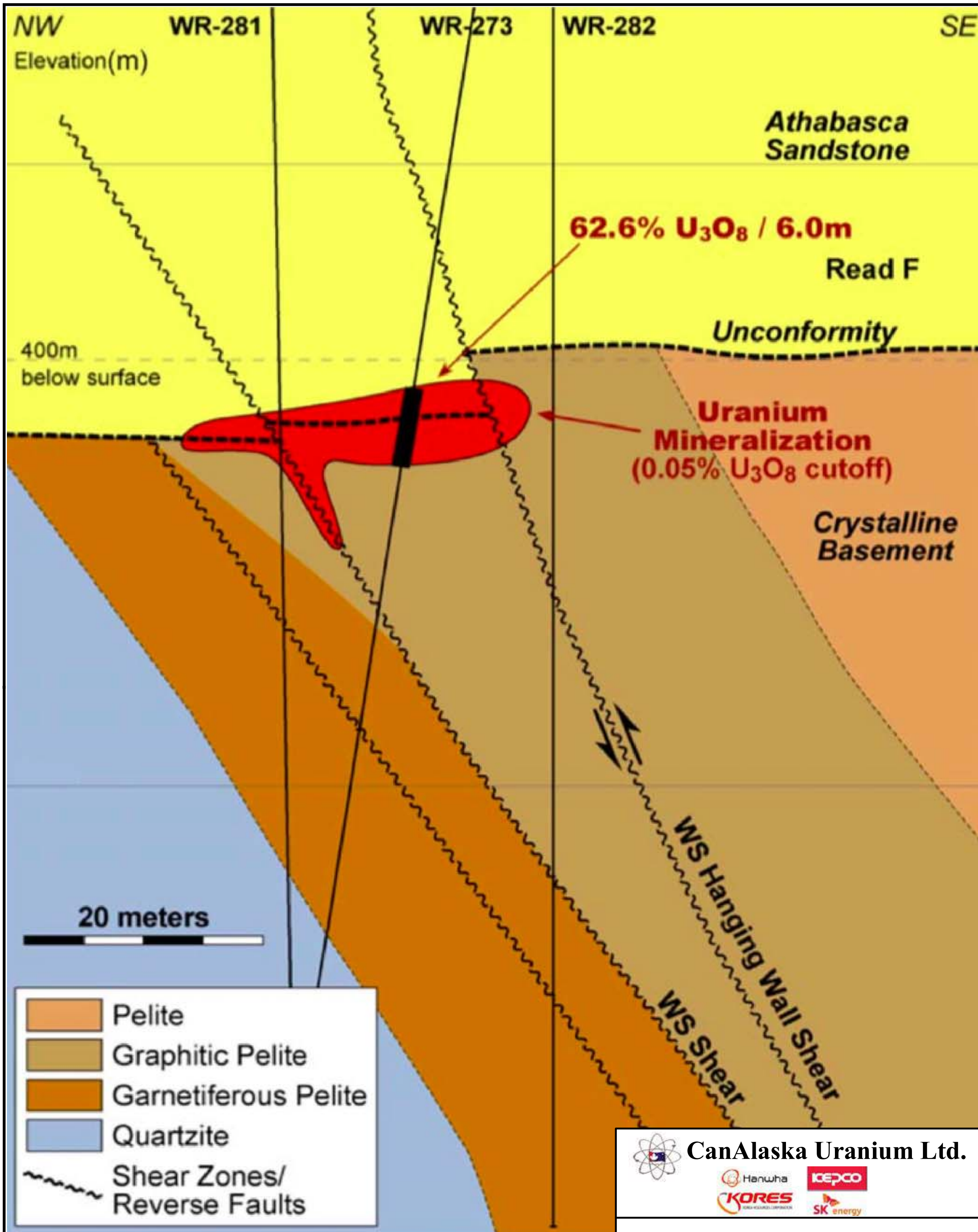

31: Generalized Cross-Section (Gamelin et al., 2010)

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Geological Setting of the Phoenix Deposit

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Date: Feb. 28, 2013	Drawn by: GRB	Report: CRE2013-01	

Table 8-1 - Comparison of the Key Lake, McArthur River, Millenium and Phoenix Deposits

Deposit	**Key Lake (Deilmann)**	**McArthur River**	**Millenium**	**Phoenix**
Discovery	1976: Boulder train follow-up	1988: Hole MAC-195 drilled on P2 conductor	2000: Hole CX-40 follow-up alteration in hole CX-38 drilled on B1 conductor	2008: Hole WR-249 drilled to test resistivity "chimney"
Size & Grade	Total Reserves: 122.9 Mlbs @ 2.5%	Total Reserves: 385.5 Mlbs @16.5% U3O8	Total Resources: 47.2 Mlbs @ 2.0 – 3.2 % U3O8	Total Resources: 52.3 Mlbs @ 15.6% U3O8*
Depth	50 m	500-640 m	600-820 m	390-420 m
Dimensions (L x W x H)	900 x 30-50 x 90 m	500 x 20 x 30-90 m	230 x 20-30 x 70 m	Zone A: 330 x 30 x 12.5 m; Zone B: 195 x 20 x 8.2 m
Geological Setting	W flank of Archean granite gneiss dome	Adjacent to "quartzite ridge" in P2 Fault footwall	Bend in B1 Fault	Hanging wall side of "quartzite ridge"
Sandstone thickness & nature of basal strata	45-60 m: Read Fm: onlaps basement; offset by fault	480-560 m: Read Fm thins on P2 hanging wall; basal conglomerate thicker on footwall	500-750 m: Read Fm thickens W from 80 to 195 m	390-420m: Read Fm & MFb pinch out over "quartzite ridge" further S; but sheet-like over the Phoenix deposit
Basement Topography	Paleovalley	"Quartzite Ridge"	Paleovalley	"Quartzite Ridge" has talus wedge on

				faulted W flank
Sandstone Alteration	Proximal dravite ca. 60 m wide & kaolinite ca. 250 m wide; distal illite halo; background dickite	Silicification; Proximal chlorite-kaolinite-dravite plume ca. 50 m wide extends ca 300 m above deposit; kaolinite-dravite alteration >600 m wide extends to surface; distal illite; background dickite	Bleaching & increased clay in lower sandstone	Silicification, hydrothermal hematite, pyrite, druzy quartz; kaolinite, chlorite, dravite plume < 100m wide extends to surface; illite to within 75 m of surface; background dickite
Sandstone Geochemistry		>1ppm U halo >500 m wide extends 550m to surface	Recent sampling by Dann & Hattori found surface geochem anomaly	Strong U (>4ppm), Mo, Co, Ag, W at top of MFd sandstone & overlying soils
Basement Rocks	Psammopelite, gt, co & gr psammopelite & pelite; pegmatite	Quartzite, arkose, semipelite, pelite, gt, co & gr pelite; pegmatite	Granite gneiss; pelite, semipelite, gr pelite, calc-silicates; pegmatite; granite	Granite; quartzite; gt, co & gr pelite & semipelite
Host Rocks	Graphitic pelite & psammopelite	Graphitic cordierite pelite & pelite	Pelite & semipelite; minor gr pelite	Graphitic pelite
Major Fault	Key Lake Fault: SE-verging, syn-depositional	P2 Fault: NW-verging, syn-depositional reverse fault;	B1 Fault: W-verging syn-depositional reverse fault;	WS Shear: NW-verging reverse fault; 2nd parallel

	dextral reverse fault	parallel faults in footwall	2^{nd} parallel fault in hanging wall	fault in hanging wall
Minor Faults	SSE steep cross-faults	ESE & SSE steep cross-faults	E steep cross-fault at S end	ESE + E steep cross-faults
Mineralization	"Complex": pitchblende, coffinite; Ni arsenides & sulphides	"Simple": uraninite; minor py, cp & ga	"Simple": pitchblende, uraninite & coffinite	"Simple": pitchblende
Unconformity Alteration	Hematite – chlorite "regolith" overprinted by hydrothermal alteration	Hematite – chlorite "regolith" overprinted by hydrothermal alteration	Hematite-chlorite "regolith"	Hematite-chlorite "regolith"
Basement Alteration	Chlorite	Illite, chlorite, dravite, apatite, carbonate	Proximal chlorite & chlorite-illite-sericite 60 m wide; distal illite-dravite & saussurite-sericite 150 m wide @ U/C	Normal
Basement Geochemistry			U, Pb, Va & B zone 110-140 m wide	
References	Harvey and Bethune (2007)	Bronkhorst et al. (2012)	Roy et al. (2005); Cloutier et al. (2009); Beshear (2010)	Arseneau & Revering (2010); Kerr, 2010; Power et al. (2012)

Orebodies may be tabular, cylindrical, pod-like, or irregular. Multiple, spatially associated orebodies are common. Orebodies occur in two end-member settings: 1) as dominantly basement-hosted, linear, fracture-controlled and breccia-hosted, disseminated to massive mineralization within brittle, moderately to steeply-dipping structural features (e.g., Key Lake and Millenium); and 2) as dominantly sandstone–hosted mineralization developed along the unconformity or immediately above it as clay-encased, semi-massive to massive, flattened, elongate pods and linear bodies (e.g., McArthur River and Phoenix) with high-grade cores and lower-grade halos. Disseminated uraninite in sandstone perched above the unconformity and adjacent to or within fracture and breccia zones is commonly an indicator of an unconformity deposit at depth. Basement-hosted orebodies tend to be monometallic (e.g. Millenium), whereas sandstone-hosted orebodies tend to be polymetallic, but this is not a strict rule. McArthur River and Phoenix, for example, are sandstone-hosted monometallic deposits, whereas Key Lake (Deilmann) and Roughrider are partly basement-hosted, but polymetallic.

The origin of unconformity-associated uranium deposits is still controversial, but there is general acceptance that uranium is precipitated from oxidizing fluids circulating in the sandstone on mixing with reducing fluids, most likely generated from the crystalline basement (Jefferson et al., 2007; Cuney and Kyser, 2008; Yeo and Potter, 2010; and others.)

8.2 Uranium Mineralization

The principal ore minerals are uraninite and pitchblende, with minor coffinite. Uraninite is medium to coarse-grained and crystalline, whereas pitchblende has botryoidal, spherulitic, radial or colloform texture. Multiple stages of mineral development as veins, semi-massive to massive breccia fillings, or disseminations is common. Two end-member types of mineralization are distinguished. Monometallic (simple) deposits, such as McArthur, Millenium and Phoenix, have uranium only, whereas polymetallic (complex) deposits, such as Key Lake, may contain trace to minor pyrite, chalcopyrite, galena, sphalerite, arsenopyrite, pentlandite, nickeline, millerite, molybdenite, gersdorffite, brannerite, other Ni and Co-bearing sulphides and arsenides, native gold, silver, and selenium, selenides and Au, Bi, Ni, Pb and Pd tellurides. Nickel is a significant and potentially economic commodity in some deposits. At Cluff Lake, 8090 oz of gold was produced from the 'D" Zone. The main ore-forming hydrothermal events were at 1600 to 1500 Ma and 1460 to 1350 Ma, with minor remobilization ca. 1176, 900, and 300 Ma.

8.3 Alteration Patterns

Both regional and deposit-scale diagenetic alteration patterns are associated with uranium mineralization in Athabasca Basin.

District-scale alteration includes: regional early quartz cementation, clay alteration and alumino-phosphate mineral diagenesis. Diagenetic dickite (a variety of kaolinite) is the predominant background clay, with a broad corridor of elevated illite, chlorite and dravite extending from Key Lake to Cigar Lake in eastern Athabasca Basin. Alumino-phosphate mineral diagenesis includes pre-ore formation of fluorapatite and related minerals.

Deposit-scale alteration features include: diagenetic clays and dravite, silicification and de-silicification, and precipitation of iron minerals.

Illite, chlorite and sudoite (Mg-rich chlorite) concentrations are elevated close to deposits. Dravite is commonly elevated. Early quartz is commonly dissolved and late quartz is precipitated, both as pervasive silicification and as drusy quartz. Brick-red hematite staining (in contrast to the maroon of early diagenetic hematite) is common. Finely disseminated pyrite results in a grey alteration in sandstone.

Two distinctive alteration patterns are though to be related to the dominant flow direction of diagenetic fluids. “Egress-type” alteration, thought to result where reducing fluids move upward from basement fault zones to form alteration halos up to 500 m wide in the sandstones, may be dominated by illite and quartz dissolution or by kaolinite, dravite and distal silicification. “Ingress-type” alteration, thought to result where oxidizing uranium-bearing fluids move downward into basement rocks, are characterized by narrow alteration halos, typically zoned from proximal illite ± sudoite to sudoite ± illite to distal Fe-Mg chlorite ± sudoite. Ingress-type alteration is typical of basement-hosted uranium mineralization, whereas egress-type alteration is typical of sandstone-hosted deposits.

The hydrothermal systems are generally recognised by the gradual increase in illite (over dickite), the presence of dravite and, closer to mineralisation, by the appearance of sudoite, both in the sandstone and the basement. The physical aspect and properties of the sandstone changes as well, becoming more friable (desilicification) or harder (pervasive silicification).

8.4 Geochemical Patterns

Elevated U (> 1 ppm) has been found in the uppermost sandstone above several Athabasca deposits, including McArthur River and Phoenix. Elevated K and B, respectively associated with illite and dravite alteration, is common. Elevated U, Mo, Co, Ag and W reported in soils and uppermost sandstones at the Phoenix deposit (Power et al., 2012) are thought to have been transported up the WS fault zone.

8.5 Geophysical Responses

A range of airborne and ground geophysical techniques have proven useful in exploration in Athabasca Basin (Powell et al., 2007). Radiometric surveys detect near surface deposits and mineralized surficial materials, which can potentially be traced back to their sources. Electromagnetic surveys detect conductors, such as fault zones and graphitic pelites. Magnetic surveys are useful for indirect mapping of basement lithologies. Audio-magnotelluric surveys also detect conductors and alteration zones based on resistivity contrasts. DC/IP resistivity surveys are used to identify low resistivity zones, which may be associated with alteration and faulting. Gravity surveys can potentially distinguish low-density clay alteration or disaggregated rock and high-density silicified sandstone. Seismic reflection surveys can map structural features, such as fault offsets of the typically strong seismic reflector at the unconformity.

The Athabasca sandstones are electrically resistant and essentially non-magnetic; hence they are effectively transparent to both EM and magnetic surveys. The heavy minerals commonly preserved in the MFb member are slightly magnetic, but have little overall effect. This transparency allows mapping basement lithologies and structures using EM and magnetics and detecting sandstone alteration by DC/IP and EM. Near-surface conductive anomalies can be produced by clay-rich overburden (Napier, 2011).

Mineralogical and physical changes in the sandstone cause variations in the porosity of the rocks, and hence their resitivity. This can be detected by DC Induced Polarization Resistivity (DC/IP), Time Domain EM (TDEM) and Audiomagnetotelluric (AMT) methods. Due to increased clay content, the alteration halo is generally considered to present a diffuse, weakly conductive anomaly in the sandstone, most effectively detected by galvanic resistivity methods such as DC/IP surveys (Napier, 2011).

As discussed above, unconformity-associated uranium deposits in Athabasca Basin are nearly always associated with brittle fault zones and commonly, although not invariably, associated with basement graphitic pelites, which commonly control fault development. Graphitic pelite units are typically detected as strong EM conductors. Faults commonly show up as EM conductors, but they may also appear as Total Magnetic Field lows, due to the destruction of magnetite in the basement rocks by the hydrothermal fluids moving along the fault conduits (Napier, 2011).

9 EXPLORATION

Results of geochemical and geophysical surveys are reviewed by area in this section. Year to year work is summarized in Part 6.2 (Exploration History) of this report.

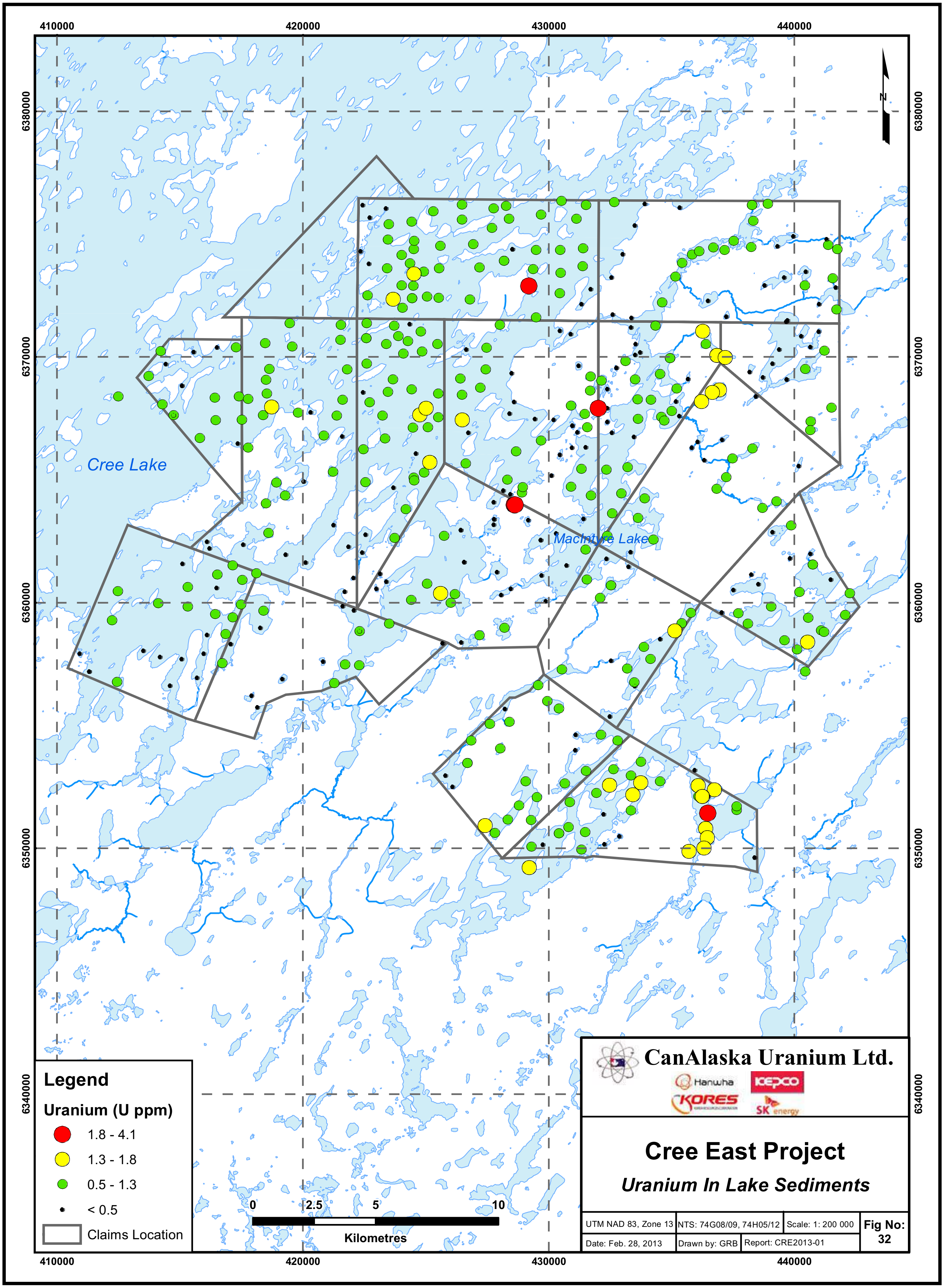
9.1 Geochemical Surveys

A series of property-scale sandstone boulder, soil and lake sediment sampling programs carried out in 2006 and 2007 defined three broad zones of anomalous surficial geochemistry (Shirmohammad and Schimann, 2008).

9.1.1 Lake Sediment Sampling

In 2006 and 2007, lake sediment samples were collected by float-equipped helicopter using a Hornbrook- type torpedo sampler and samples placed in large plastic bags.Details of GPS location, sample depth, sample description and colour, date, and sampler name were recorded for each sample site. For quality control, a duplicate field sample was taken at every twentieth site. A total of 478 lake sediment samples were collected: 413 in 2006, and a further 65 in 2007. Samples were field dried and sent to ACME Labs in Vancouver for 36-element ICP-MS analysis.

The 98th percentile value for uranium in lake sediment samples from eastern Cree Lake is 1.4 ppm. Values range up to 4.1 ppm. Elevated values define a trend from Gilchrist Bay to Binkley Bay and another broad anomaly in the Morin – Holgar lakes area (Figure 32).



410000
420000
430000
440000
6380000
6370000
6360000
6350000
6340000
N
Cree Lake
MacIntyre Lake
Legend
Uranium (U ppm)
1.8 - 4.1
1.3 - 1.8
0.5 - 1.3
< 0.5
Claims Location
0
2.5
5
10
Kilometres
CanAlaska Uranium Ltd.
Hanwha
KEPCO
KORES
SK energy
Cree East Project
Uranium In Lake Sediments
UTM NAD 83, Zone 13
NTS: 74G08/09, 74H05/12
Scale: 1: 200 000
Fig No: 32
Date: Feb. 28, 2013
Drawn by: GRB
Report: CRE2013-01

9.1.2 Sandstone Boulder Sampling

Boulder sampling was carried out over the entire property in 2006 on a series of northwest-trending lines 600 m apart. Encouraging results were followed up in 2007 by lines at intermediate spacing (i.e., 300 m) and more closely spaced sample sites. Numerous islands in eastern Cree Lake were also sampled. At each sample location, a chip was taken from each of 10 sandstone boulders within a 10 metre radius. Only sandstone was sampled; conglomeratic units were avoided. Angular boulders were preferentially sampled. Details of GPS location, landform, drift type, boulder density, maximum and minimum boulder size, roundness of boulders, percentage of basement boulders, date and sampler name were recorded at each sample site. A total of 3430 boulder samples were collected, including 2049 in 2006 and a further 1381 in 2007.

Clay mineralogy was determined using a portable ASD TerraSpec short-wave infrared (SWIR) spectrometer. Each of the ten sample pieces was scanned individually. The proportion of each clay species (kaolinite, dickite, illite, and chlorite) and dravite was determined by a trained geologist comparing the spectrum onbtained on each sample with spectra of Athabasca mineral standards. These results were averaged for each sample, expressed as a percentage of total clay + dravite, and recorded in the database. The ten sample chips were then combined as a bulk sample and shipped to ACME Analytical Laboratories Ltd. in Vancouver for 36-element ICP-MS analysis.

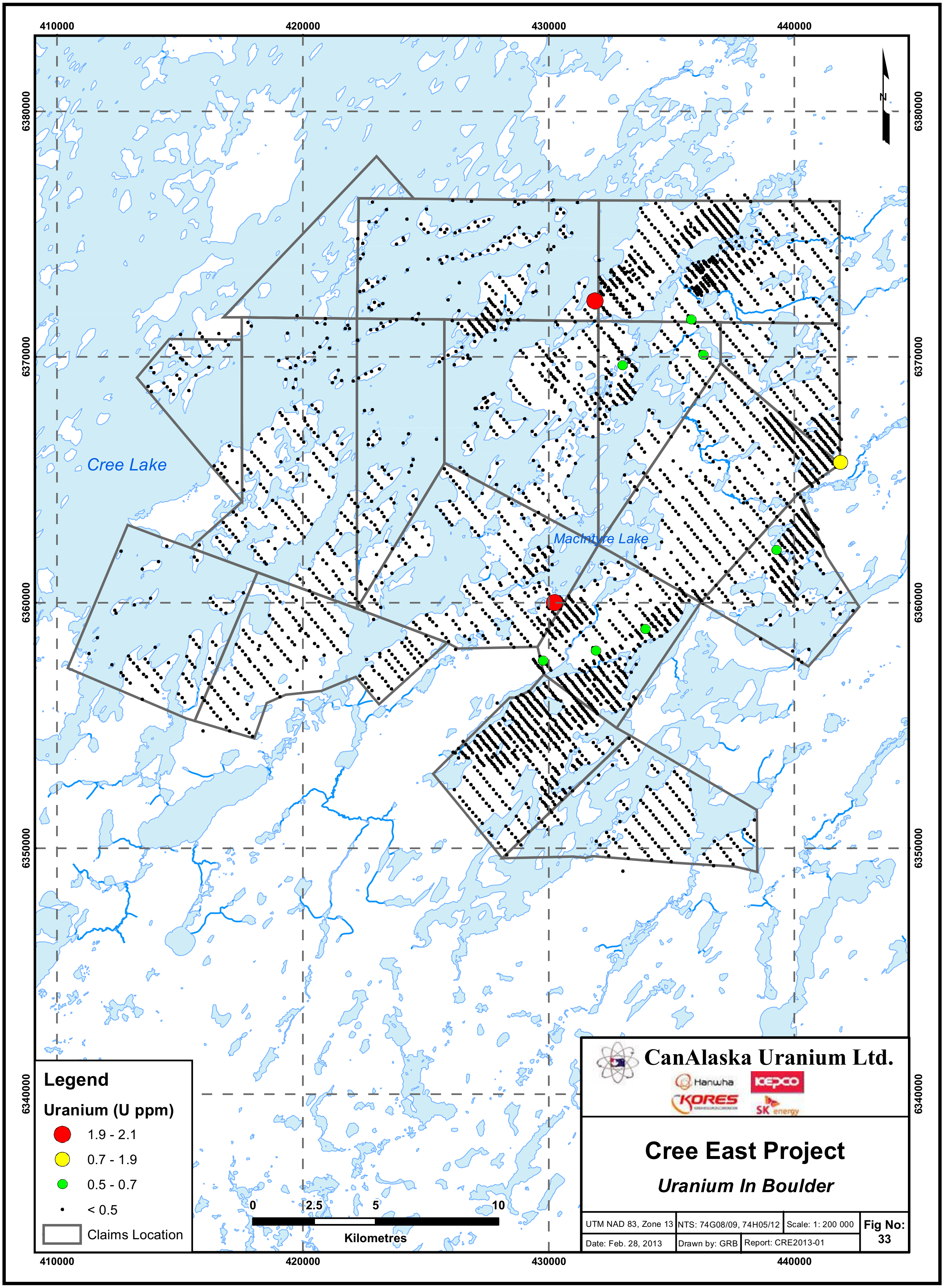
The 98th percentile value for uranium in the Cree Lake sandstone boulders is 0.3 ppm, and 123 samples (3.6%) range from 0.3 to 2.1 ppm U. Most of the anomalous values are less than 1 ppm, however. Uranium tends to increase with thorium, suggesting that it is associated with resistate heavy minerals (e.g., monazite, zircon, etc.) in the sandstone; not with hydrothermal processes. Anomalous uranium values form a southwesterly tend from north of Phillips Lake to Perpete Lake, with a broad cluster in the Gilchrist Bay area (Figure 33).

The 98th percentile value for boron, an important uranium pathfinder element, is 60 ppm, and 65 samples have values from 60 to 326 ppm. Anomalous boron values form a broader trend overlapping with the Phillips – Perpete lakes U trend, and with the Gilchrist Bay U anomalies (Figure 34).

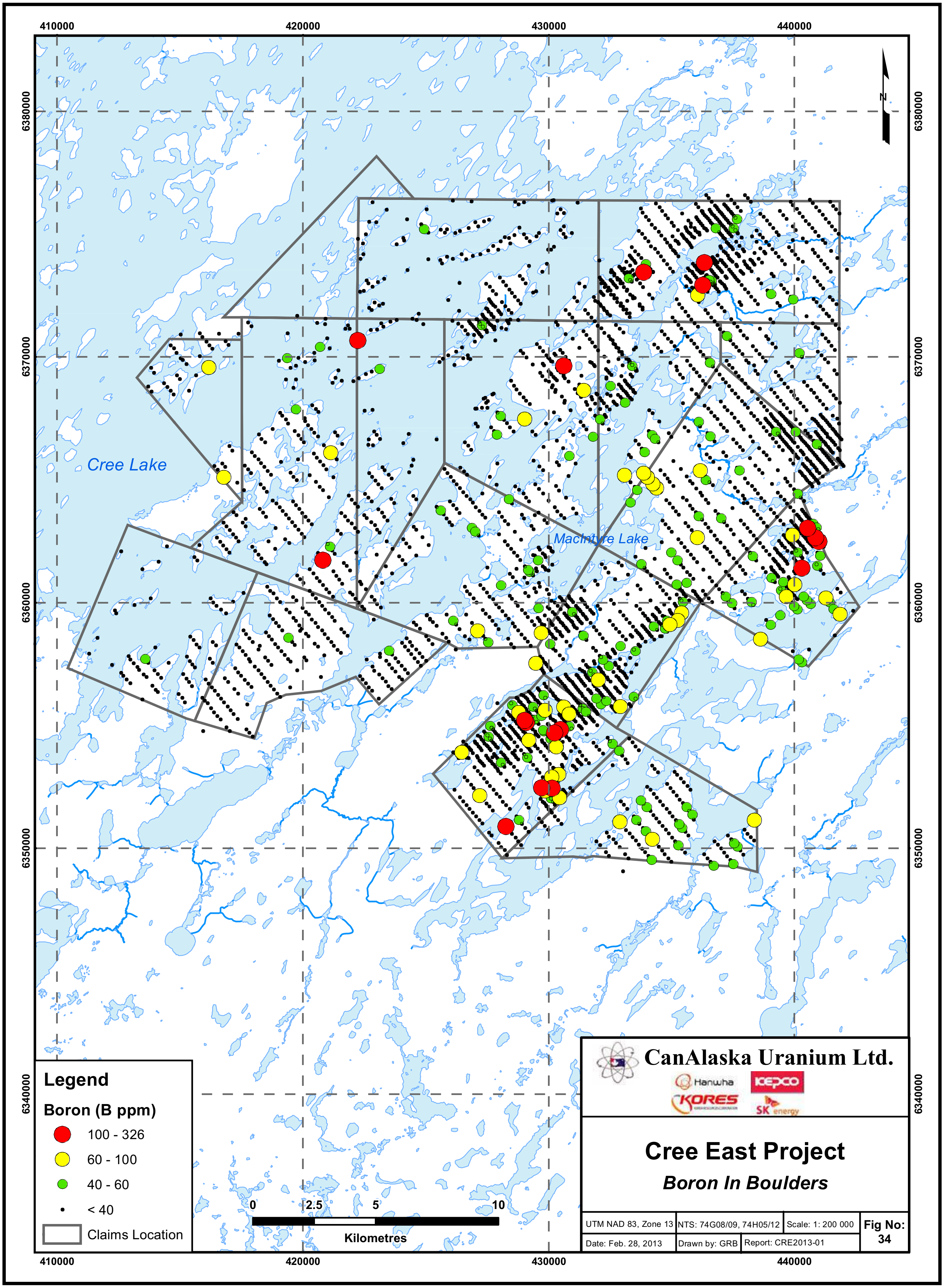
SWIR data from the sandstone boulders indicate elevated illite, kaolinite and dravite trends, also overlapping the Phillips Lake – Perpete Lake and Gilchrist Bay area uranium and boron anomalies (Figures 35 to 37).

9.1.3 Soil Sampling

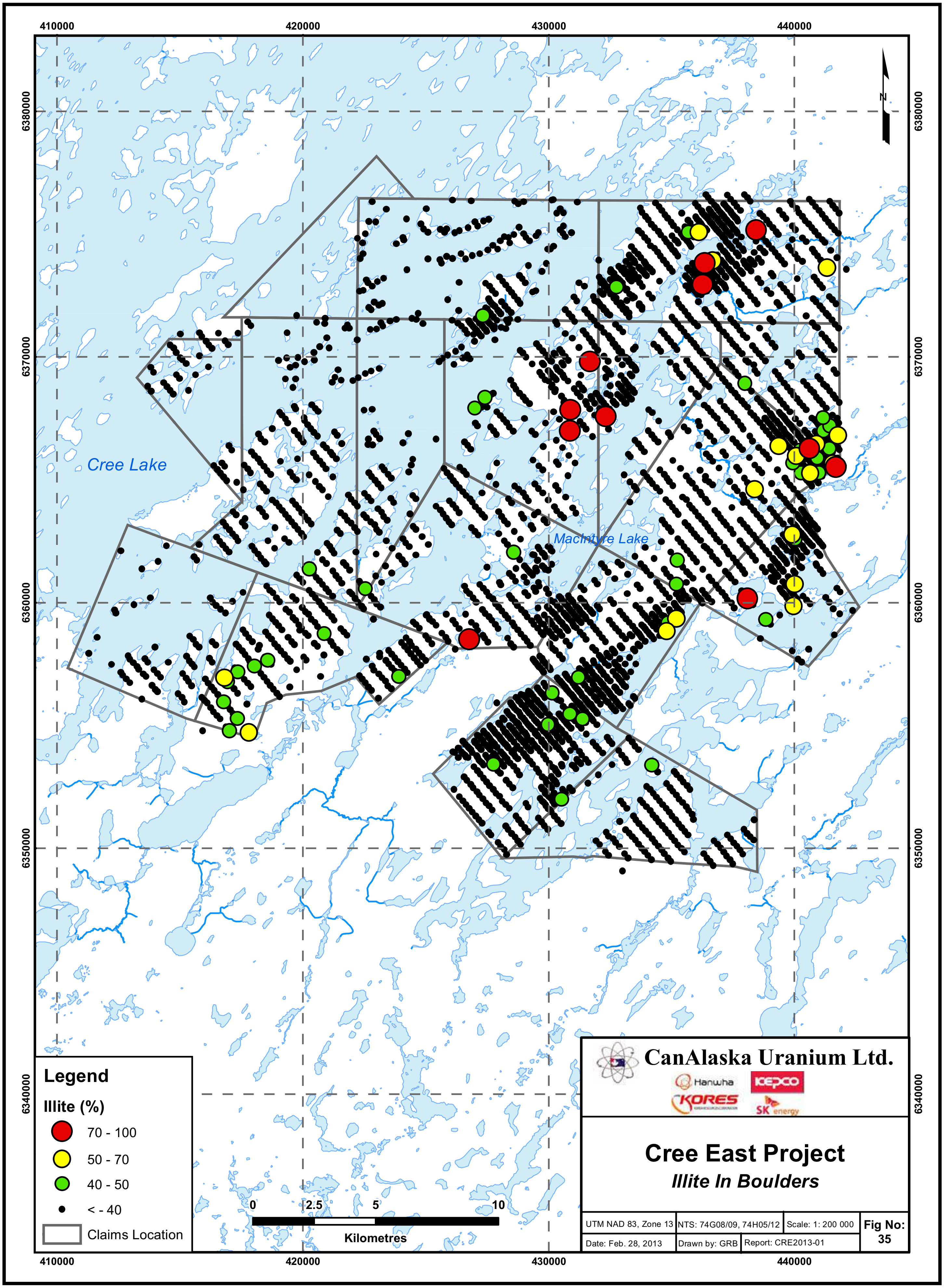
Soil samples were collected at boulder sample locations wherever possible during the 2007 follow-up sampling campaign. The ‘C’ horizon was preferentially sampled. A hand-auger was used where muskeg vegetation was thick. Details of GPS location, sample depth, sample description and colour, date, and sampler name were recorded for each sample site. 602 soil samples were collected. Soil samples were field dried and shipped to ACME Labs in Vancouver for 36-element ICP-MS analysis.



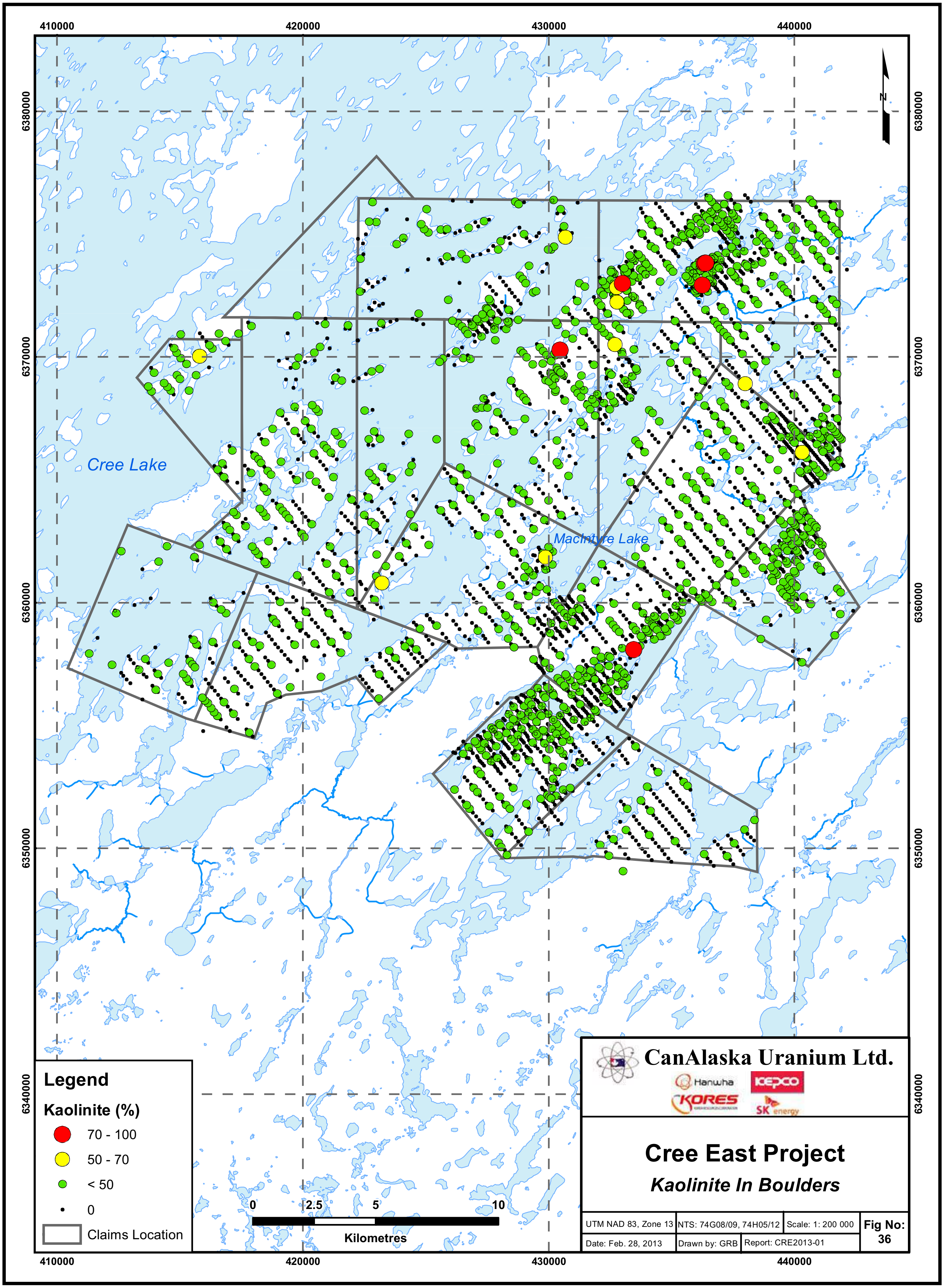
410000
420000
430000
440000
6380000
6370000
6360000
6350000
6340000
N
Cree Lake
MacIntyre Lake
0
2.5
5
10
Kilometres
Legend
Uranium (U ppm)
1.9 - 2.1
0.7 - 1.9
0.5 - 0.7
< 0.5
Claims Location
CanAlaska Uranium Ltd.
Hanwha
KEPCO
KORES
SK energy
Cree East Project
Uranium In Boulder
UTM NAD 83, Zone 13
NTS: 74G08/09, 74H05/12
Scale: 1: 200 000
Fig No: 33
Date: Feb. 28, 2013
Drawn by: GRB
Report: CRE2013-01



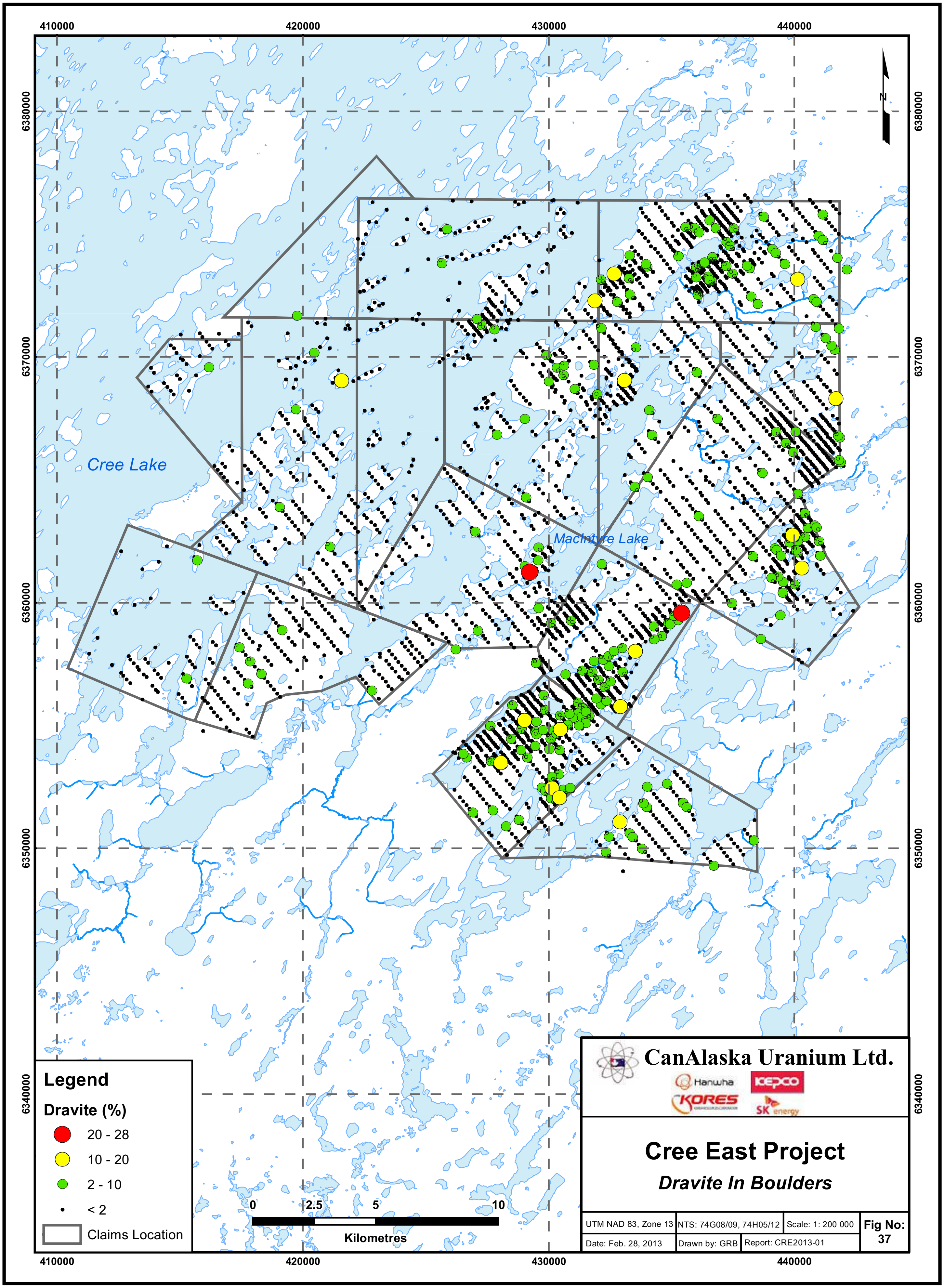
410000
420000
430000
440000
6380000
6370000
6360000
6350000
6340000
N
Cree Lake
MacIntyre Lake
Legend
Boron (B ppm)
100 - 326
60 - 100
40 - 60
< 40
Claims Location
0
2.5
5
10
Kilometres
CanAlaska Uranium Ltd.
Hanwha
KEPCO
KORES
SK energy
Cree East Project
Boron In Boulders
UTM NAD 83, Zone 13
NTS: 74G08/09, 74H05/12
Scale: 1: 200 000
Fig No: 34
Date: Feb. 28, 2013
Drawn by: GRB
Report: CRE2013-01



410000
420000
430000
440000
6380000
6370000
6360000
6350000
6340000
N
Cree Lake
MacIntyre Lake
Legend
Illite (%)
70 - 100
50 - 70
40 - 50
< - 40
Claims Location
0
2.5
5
10
Kilometres
CanAlaska Uranium Ltd.
Hanwha
KEPCO
KORES
SK energy
Cree East Project
Illite In Boulders
UTM NAD 83, Zone 13
NTS: 74G08/09, 74H05/12
Scale: 1: 200 000
Fig No: 35
Date: Feb. 28, 2013
Drawn by: GRB
Report: CRE2013-01



410000
420000
430000
440000
6380000
6370000
6360000
6350000
6340000
N
Cree Lake
MacIntyre Lake
Legend
Kaolinite (%)
70 - 100
50 - 70
< 50
0
Claims Location
0
2.5
5
10
Kilometres
CanAlaska Uranium Ltd.
Hanwha
KEPCO
KORES
SK energy
Cree East Project
Kaolinite In Boulders
UTM NAD 83, Zone 13
NTS: 74G08/09, 74H05/12
Scale: 1: 200 000
Fig No: 36
Date: Feb. 28, 2013
Drawn by: GRB
Report: CRE2013-01


410000
420000
430000
440000
6380000
6370000
6360000
6350000
6340000
N
Cree Lake
MacIntyre Lake
Legend
Dravite (%)
20 - 28
10 - 20
2 - 10
< 2
Claims Location
0
2.5
5
10
Kilometres
CanAlaska Uranium Ltd.
Hanwha
KEPCO
KORES
SK energy
Cree East Project
Dravite In Boulders
UTM NAD 83, Zone 13
NTS: 74G08/09, 74H05/12
Scale: 1: 200 000
Fig No: 37
Date: Feb. 28, 2013
Drawn by: GRB
Report: CRE2013-01

In contrast with boulders and lake sediment samples, the distribution of soil samples is not broadly uniform over the property (Figure 38). Most soil samples were collected in areas with elevated sandstone boulder geochem, as part of the 2007 follow-up program. The strongest clusters of anomalous soil uranium are north of Phillips Lake and east of Perpete Lake, roughly coincident with a regional zone of anomalous uranium – boron - illite - kaolinite – dravite in sandstone boulders.

9.1.4 Anomalous Surficial Geochemical Zones at Cree East

Three zones, characterized by anomalous uranium in lake sediments associated with elevated illite and dravite in sandstone boulders, can be distinguished (Figure 39). All trend southwesterly, parallel to the predominant direction of glacial ice movement.

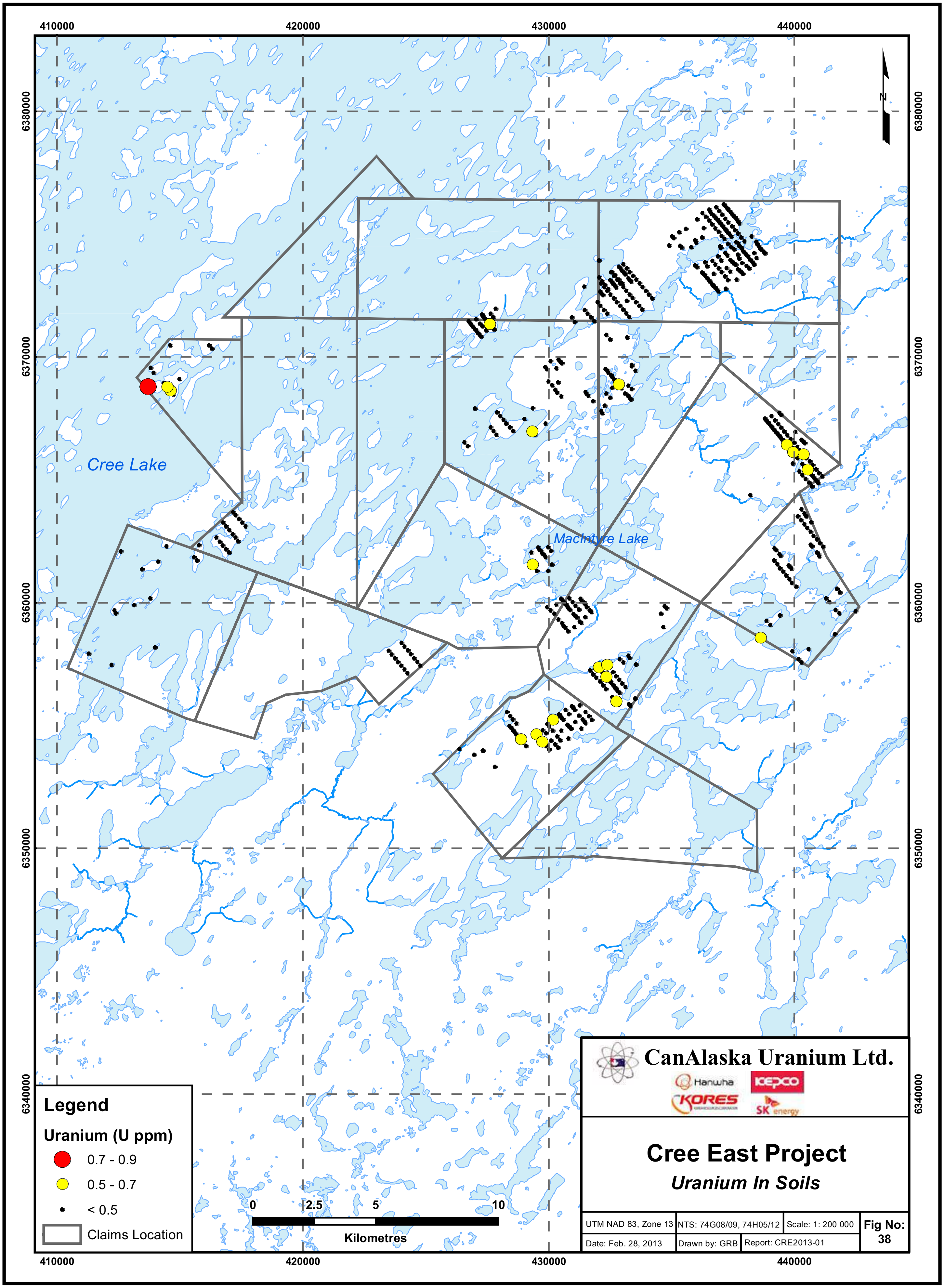
Zone 1 covers an area of about 25 x 5 km in the southeastern part of the property between MacIntyre Bay and Holgar and Phillips lakes. Elevated uranium, boron, illite and dravite in boulders, and uranium in soils and lake sediments characterize it. The Zone 1 geochemical anomaly is loosely associated with the Grid 5 and Grid 6 VTEM conductors, discussed below.

Zone 2 covers an area of about 10 x 3 km in the south-central part of the property overlying eastern Binkley Bay and the peninsula between MacIntyre Lake and Morris Bay. It is characterized by elevated illite and dravite in sandstone boulders and uranium in lake sediments. The Zone 2 geochemical anomaly is closely associated with the Grid 7 VTEM conductor.

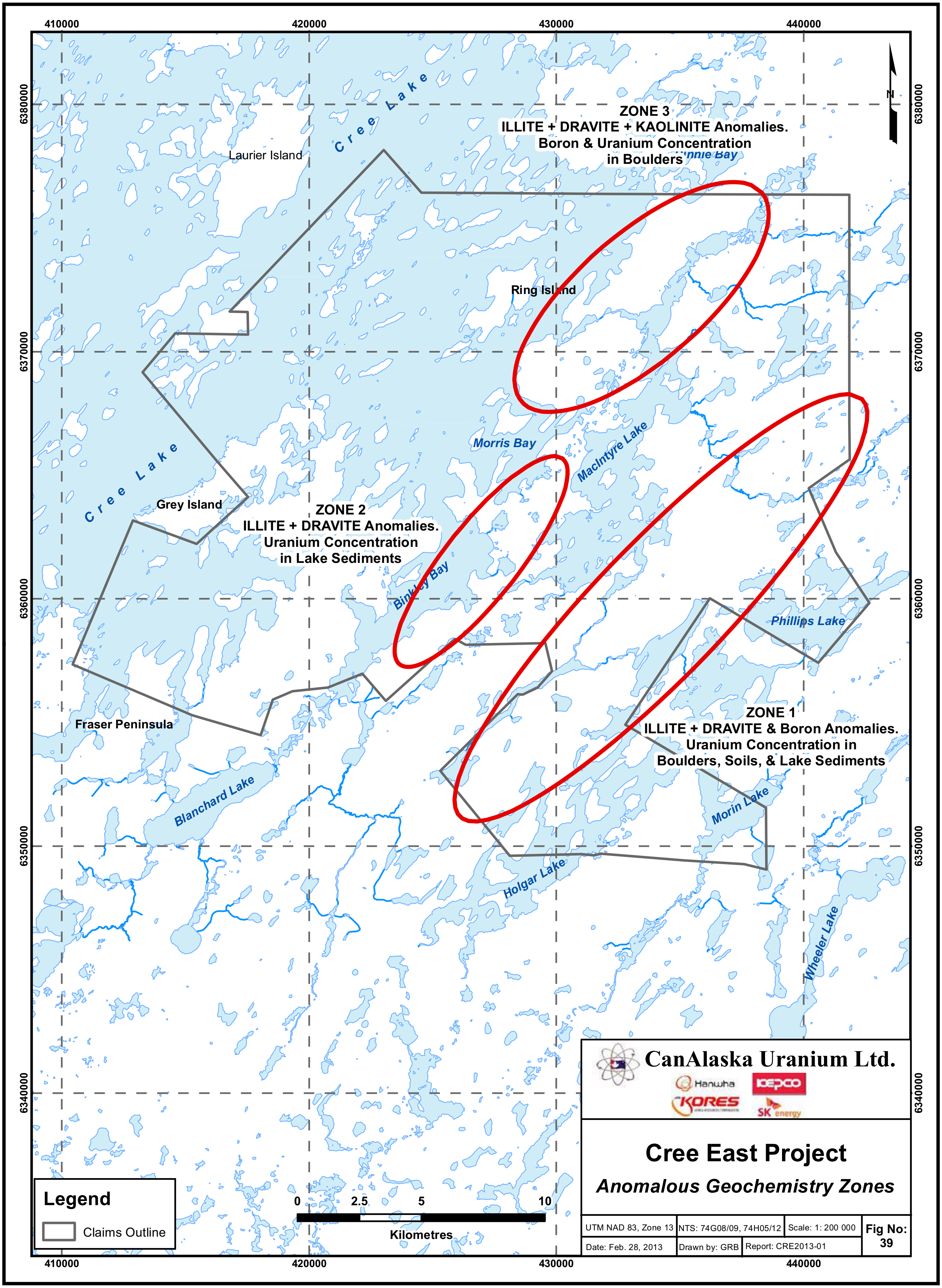
Zone 3 covers an area of about 12 x 5 km in the northern part of the property, extending from the peninsula between Binnie Bay and the upper reaches of Gilchrist Bay, southwest almost to Emmerson Island. Elevated uranium, boron, illite and dravite in boulders, and uranium in lake sediments characterize it. Although the Zone 3 geochemical anomaly is not associated with a VTEM conductor, it does lie close to the Ring Island VTEM, AMT and TDEM anomaly on Grid 3.

9.2 Geophysical Exploration

Because undiscovered unconformity-associated uranium deposits are likely to be deep, exploration relies heavily on indirect detection methods, especially geophysics. Powell et al. (2007) provide a concise recent review of the effectiveness of various geophysical methods for uranium exploration in Athabasca Basin. In addition to gravity and magnetic surveys, a broad range of electrical and electromagnetic methods have been used. Seismic surveys have been attempted, but are generally not cost-effective since there is little acoustic contrast within the Athabasca sandstone or crystalline basement sections, and potential targets, such as faults and alteration plumes are relatively steep.



410000
420000
430000
440000
6380000
6370000
6360000
6350000
6340000
N
Cree Lake
MacIntyre Lake
Legend
Uranium (U ppm)
0.7 - 0.9
0.5 - 0.7
< 0.5
Claims Location
0
2.5
5
10
Kilometres
CanAlaska Uranium Ltd.
Hanwha
KEPCO
KORES
SK energy
Cree East Project
Uranium In Soils
UTM NAD 83, Zone 13
NTS: 74G08/09, 74H05/12
Scale: 1: 200 000
Fig No: 38
Date: Feb. 28, 2013
Drawn by: GRB
Report: CRE2013-01



410000
420000
430000
440000
6380000
6370000
6360000
6350000
6340000
ZONE 3
ILLITE + DRAVITE + KAOLINITE Anomalies.
Boron & Uranium Concentration
in Boulders
Cree Lake
Laurier Island
Ring Island
Morris Bay
MacIntyre Lake
Cree Lake
Grey Island
ZONE 2
ILLITE + DRAVITE Anomalies.
Uranium Concentration
in Lake Sediments
Binkley Bay
Phillips Lake
Fraser Peninsula
ZONE 1
ILLITE + DRAVITE & Boron Anomalies.
Uranium Concentration in
Boulders, Soils, & Lake Sediments
Blanchard Lake
Morin Lake
Holgar Lake
Wheeler Lake
N
Legend
Claims Outline
0
2.5
5
10
Kilometres
CanAlaska Uranium Ltd.
Hanwha
KEPCO
KORES
SK energy
Cree East Project
Anomalous Geochemistry Zones
UTM NAD 83, Zone 13
NTS: 74G08/09, 74H05/12
Scale: 1: 200 000
Fig No: 39
Date: Feb. 28, 2013
Drawn by: GRB
Report: CRE2013-01

Regional airborne geophysical surveys are generally undertaken in the early stages of a mineral exploration program to identify the underlying lithologies and structures. In the Athabasca Basin, the first exploration concern is generally to differentiate early Proterozoic metasedimentary rocks (e.g., Wollaston Supergroup), with which uranium might be associated, from barren Archean granite gneisses using airborne magnetic and electromagnetic surveys. The metasedimentary rocks are generally characterized by low magnetic susceptibilities and are commonly conductive because of the presence of graphite or sulphides, whereas Archean granites typically have higher magnetic susceptibilities and are non-conductive.

Ground geophysical surveys are undertaken following airborne geophysical surveys, to accurately locate and resolve crystalline basement conductive trends, such as graphitic pelites, and lithostructural features such as fault zones or alteration haloes (which affect porosity and hence, electrical resistivity) in sandstone.

Conductors are detected and located using various electromagnetic survey methods which vary according to the size, orientation, spacing, etc. of the transmitter and receiver. In all electromagnetic surveys, the ground is energized by a magnetic field produced by a current flowing through a closed wire transmitter loop on surface. If this primary magnetic field encounters a conductive body, such as a graphitic pelite unit, it sets up weak electrical currents which, in turn, induce a secondary magnetic field whose strength and orientation can be detected at a surface receiver. The anomalies mapped by EM methods are due to the absolute resistivity of the underlying rocks; not resistivity contrast, and they are typically plotted as lines on a map (i.e., 2-D representation).

In electrical survey methods, such as DC-Resistivity or AMT surveys, the ground is energized by an electrical current. Anomalies result from contrasts in electrical resistivity; not absolute resistivity, and they are typically plotted as sections or depth slices (i.e., 3-D representation). Resistivity surveys are used to map structural zones which may have channeled mineralizing fluids and sandstone alteration haloes that may be associated with hydrothermal fluid activity. DC-resistivity surveys are effective in mapping such alteration haloes to depths of over 700 m. At greater basement depths, AMT techniques are more effective.

Year-to-year historical geophysical surveys on the Cree East property are outlined in a previous section of this report and summarized in Table 9-1. In this section, the geophysical features of each target area are summarized.

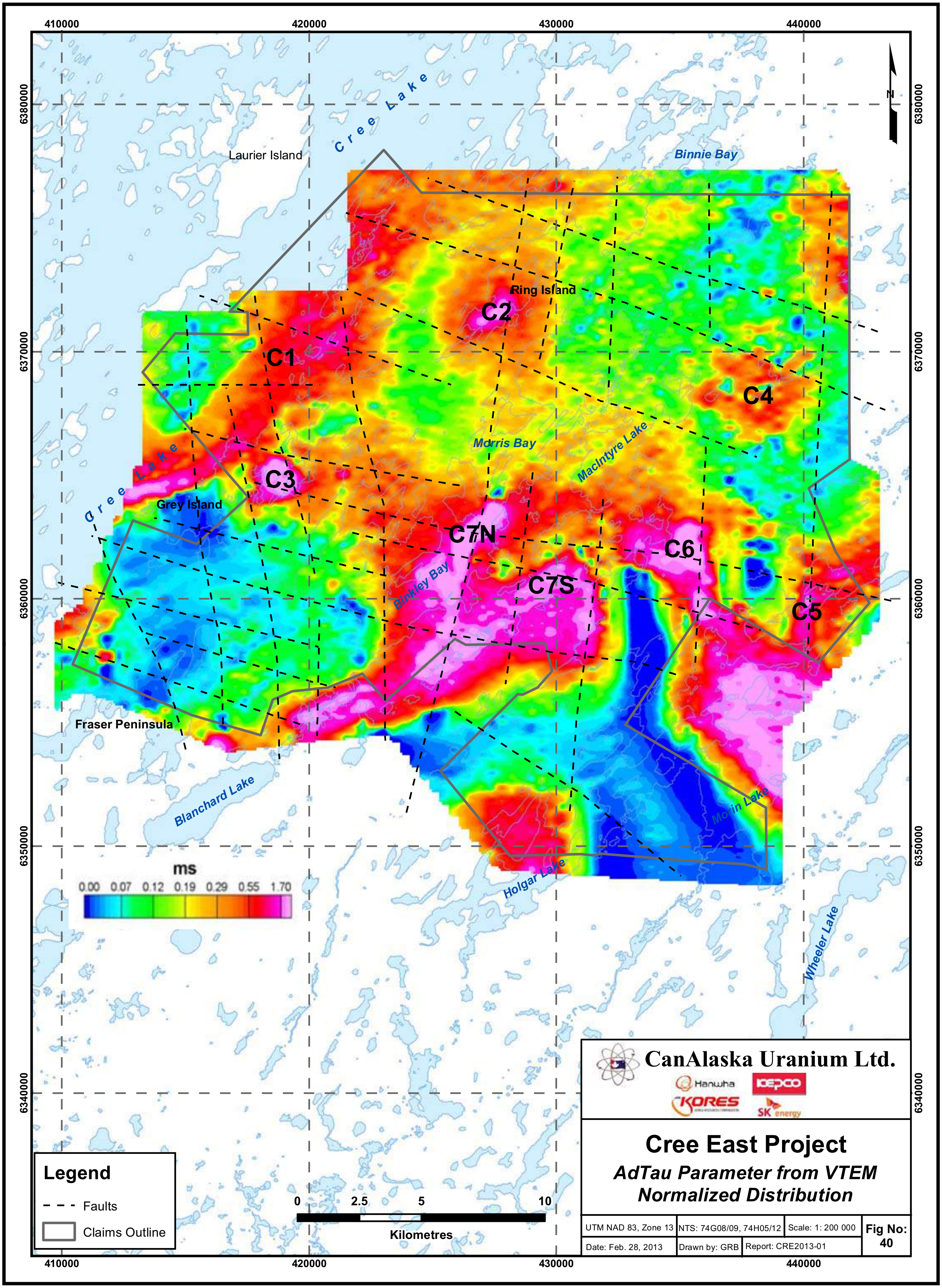
Table 9-1 - Geophysical Surveys on the Cree East Property (2006-2012)

Grid	**Survey**	**Year**	**Company**	**Kms**	**Remarks**
			Airborne Surveys		
Property wide	VTEM	2006	Geotech Ltd.	1161	400 m line spacing
7	VTEM	2009	Geotech Ltd.	388	200 m line spacing
Property wide	Magnetics	2009	Goldak	3985	200 m line spacing
			Ground Surveys		

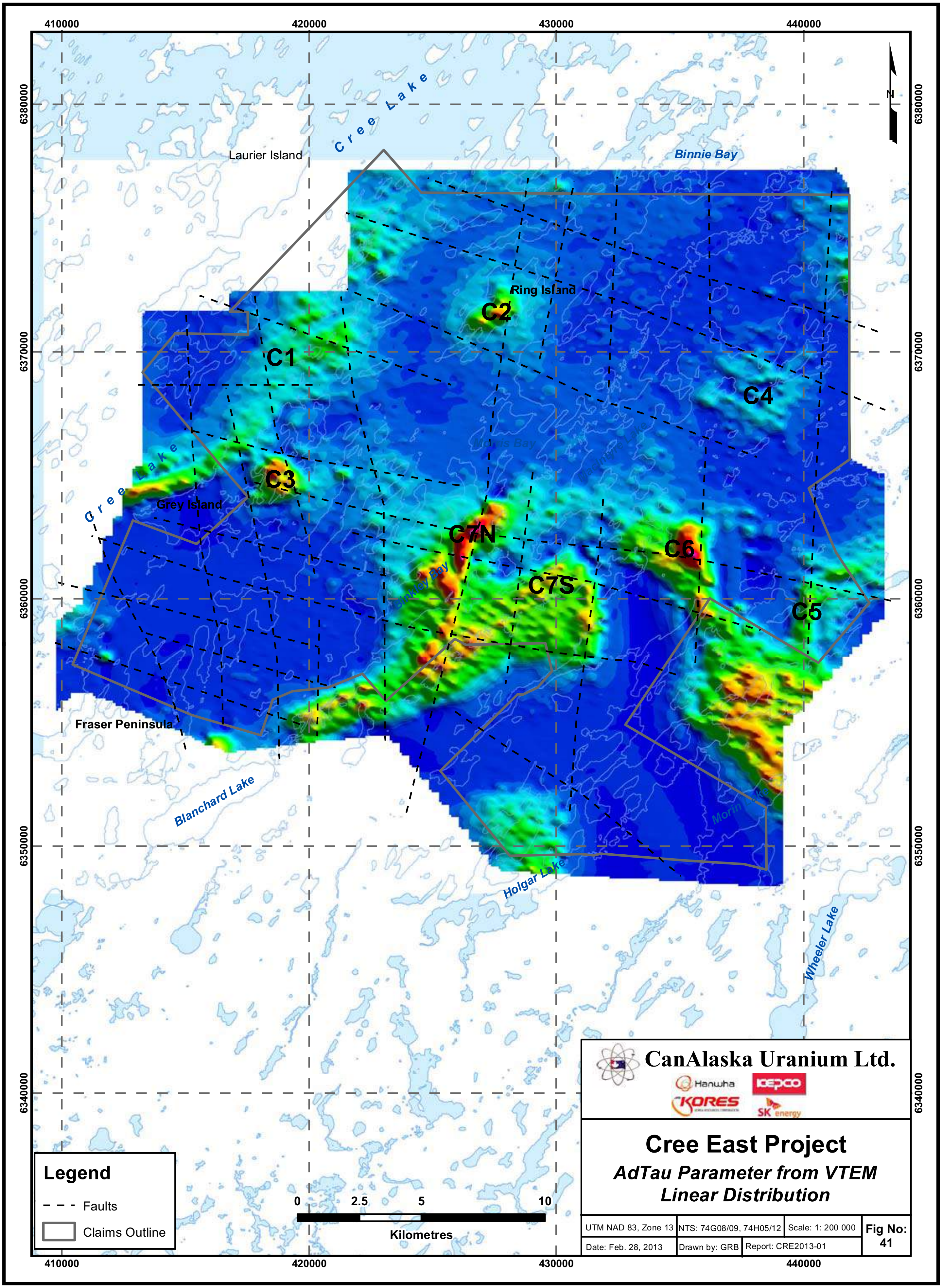
1, 2, 3	AMT	2007	Geosystems		226 stations
5, 6, 7	DC/IP	2007	Discovery Geophysics	270.2	
7	DC/IP pole-dipole	2007	Walcott	26.1	
7	DC/IP pole-dipole	2008	Discovery Geophysics	36	
6, 7	Seismic & bathymetry	2008	Frontier Geophysics	165	
7	DC/IP pole-dipole	2009	Discovery Geophysics	125.1	
7	BHTEM	2010	Abitibi Geophysics		16 DDH
7	BHTEM	2010	Abitibi Geophysics		7 DDH
7	Crosshole DC Resistivity Tomography	2010	KIGAM		14 sections
1, 2, 3, 7	TDEM – surface SQUID MLTDEM	2010	Discovery Geophysics	37	
5, 6, 7	TDEM – surface SQUID MLTDEM	2011	Discovery Geophysics	59.3	
	BHTEM	2011	Discovery Geophysics		3 DDH
7	TDEM – surface SQUID MLTDEM	2012	Patterson Geophysics	26.2	

9.2.1 Airborne VTEM and Magnetic Surveys

Adaptive Tau (AdTau) plots, generated following a property-scale VTEM survey in 2006, indicated a series of conductive anomalies (Figure 40). AdTau plots are based on fitting TDEM decay curves to idealized conductive bodies, and indicate the location of conductive bodies as ‘bright spots’ or ‘Tau anomalies’, regardless of depth. Work on the property has focused on seven grids laid over the major VTEM anomalies (Figure 40; Schimann et al., 2008). Most of the work was carried out on Grid 7, which has been subdivided into several target areas, A to K. A more detailed follow-up VTEM survey was done on Grid 7 in 2009 and the combined 2006 and 2009 data re-processed to generate a higher resolution AdTau plot (Figure 41).



410000
420000
430000
440000
6380000
6370000
6360000
6350000
6340000
Cree Lake
Laurier Island
Binnie Bay
Ring Island
C2
C1
C4
Morris Bay
MacIntyre Lake
C3
Grey Island
C7N
C6
C7S
Binkley Bay
C5
Fraser Peninsula
Blanchard Lake
Moffin Lake
Holgar Lake
Wheeler Lake
ms
0.00 0.07 0.12 0.19 0.29 0.55 1.70
Legend
Faults
Claims Outline
0 2.5 5 10
Kilometres
CanAlaska Uranium Ltd.
Hanwha
KEPCO
KORES
SK energy
Cree East Project
AdTau Parameter from VTEM
Normalized Distribution
UTM NAD 83, Zone 13
NTS: 74G08/09, 74H05/12
Scale: 1: 200 000
Fig No: 40
Date: Feb. 28, 2013
Drawn by: GRB
Report: CRE2013-01



410000
420000
430000
440000
6380000
6370000
6360000
6350000
6340000
Cree Lake
Laurier Island
Binnie Bay
Ring Island
C1
C2
C3
C4
C5
C6
C7N
C7S
Grey Island
Fraser Peninsula
Blanchard Lake
Holgar Lake
Wheeler Lake
N
0
2.5
5
10
Kilometres
Legend
Faults
Claims Outline
CanAlaska Uranium Ltd.
Hanwha
KEPCO
KORES
SK energy
Cree East Project
AdTau Parameter from VTEM
Linear Distribution
UTM NAD 83, Zone 13
NTS: 74G08/09, 74H05/12
Scale: 1: 200 000
Fig No: 41
Date: Feb. 28, 2013
Drawn by: GRB
Report: CRE2013-01

The property-scale magnetic features of the Cree East Property are shown in Figures 42 to 46. The dominant structural trends are northeasterly. The total field magnetics (Figure 42) indicate a series of broadly northerly trending, amoeboid magnetic highs, interpreted to be due to magnetite-bearing rocks granite gneiss, surrounded by magnetic lows, interpreted to be underlain by magnetite-poor Wollaston Supergroup metasedimentary rocks. A basement pseudo-geology map was constructed from the total field magnetic pattern (Figure 43). The horizontal and vertical magnetic gradient maps (Figures 44 and 45) show a more complex pattern of thin, folded, high intensity anomalies, which may be due to alternating iron-poor and iron-rich metasedimentary rocks (e.g., iron-formation). Breaks and dislocations in the magnetic pattern are interpreted to be northerly, north-northeasterly and easterly trending faults. Magnetic intensity drops off to the north because basement rocks are deeper there; hence a depth-to-basement map can be constructed from the magnetic data (Figure 46). This shows a series of rectilinear highs and lows, which are probably fault blocks.

As discussed below, the VTEM conductors tend to lie between or along the margins of magnetic highs. In much of eastern Athabasca Basin, magnetic highs correspond to granite gneiss domes, suggesting that the adjacent conductive features are likely due to conductive metasedimentary rocks (e.g., graphitic pelites).

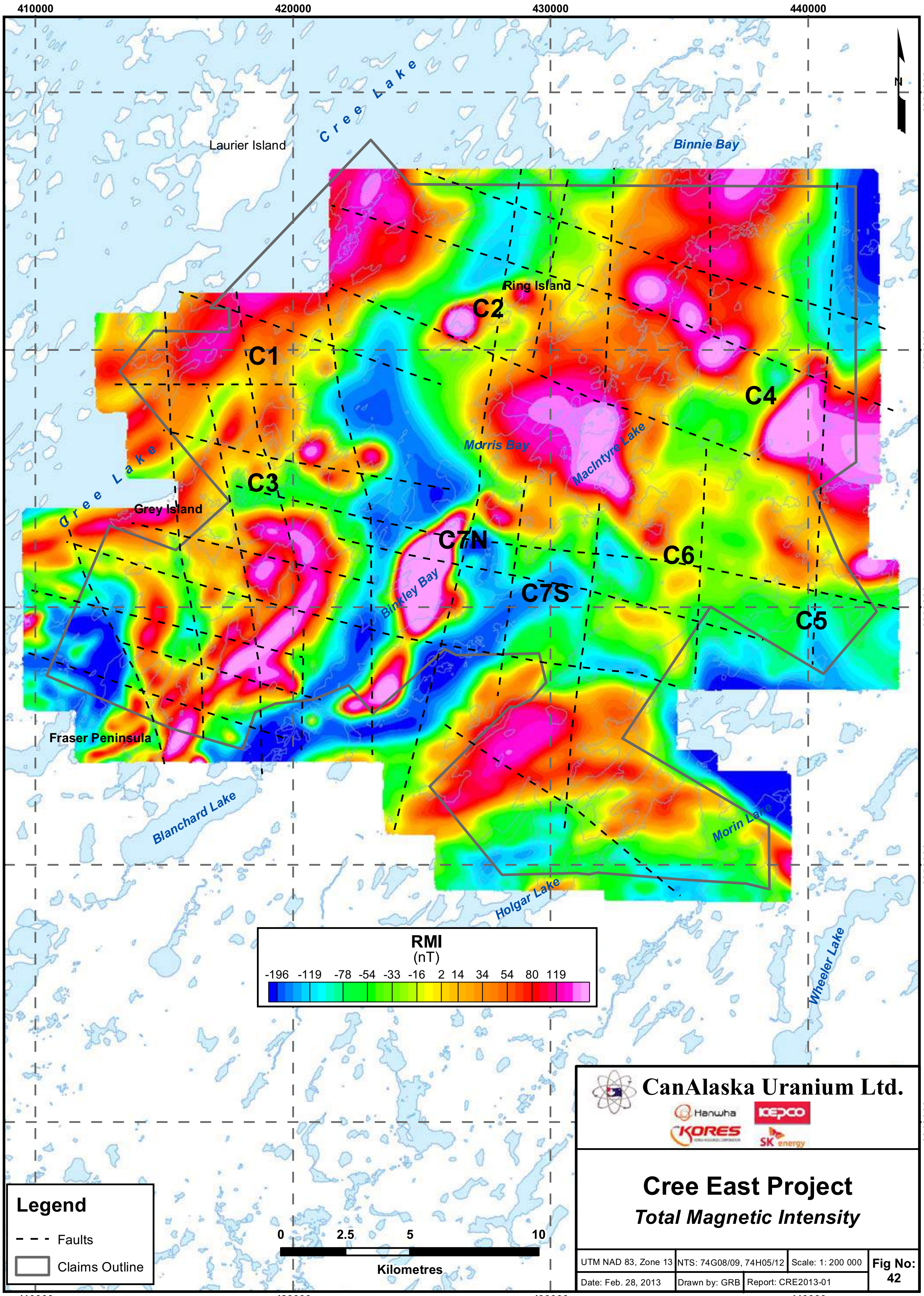
9.2.2 Ground Geophysical Surveys

As noted above, work on the property has focused on a series of grids laid over major VTEM anomalies (Figures 47 and 48). Note that although there is a VTEM anomaly C4, Grid 4 was never laid out. Ground geophysics on the Cree East property has included Audio-magnetotellurics (AMT), Moving Loop Time Domain EM (MLTDEM) using Superconducting Quantum interference Devices (SQUID) receivers, and DC/IP Resistivity. Results of these surveys are reviewed below on a grid-by-grid basis.

9.2.2.1 Grid 1

Grid 1 lies on the west side of the property over northern Grey Island and parts of Cree Lake to the north and west. It was laid out over VTEM anomaly C1 (Figure 40), an extensive conductive feature trending northeasterly along the channel west of Grey Island, and VTEM anomaly C3 (Figure 40), a small circular conductive feature in the centre of Grey Island. The axis of the C1 VTEM anomaly corresponds to a narrow Total Field Magnetic low, which dies out to the northeast and is flanked by broad highs. The C3 VTEM anomaly corresponds to a Total Field Magnetic low, which trends easterly.

A 2007 AMT survey showed a northeasterly trending conductor on grids 1 and 2 (Figures 49 to 51). This was confirmed by a 2010 MLTDEM survey.



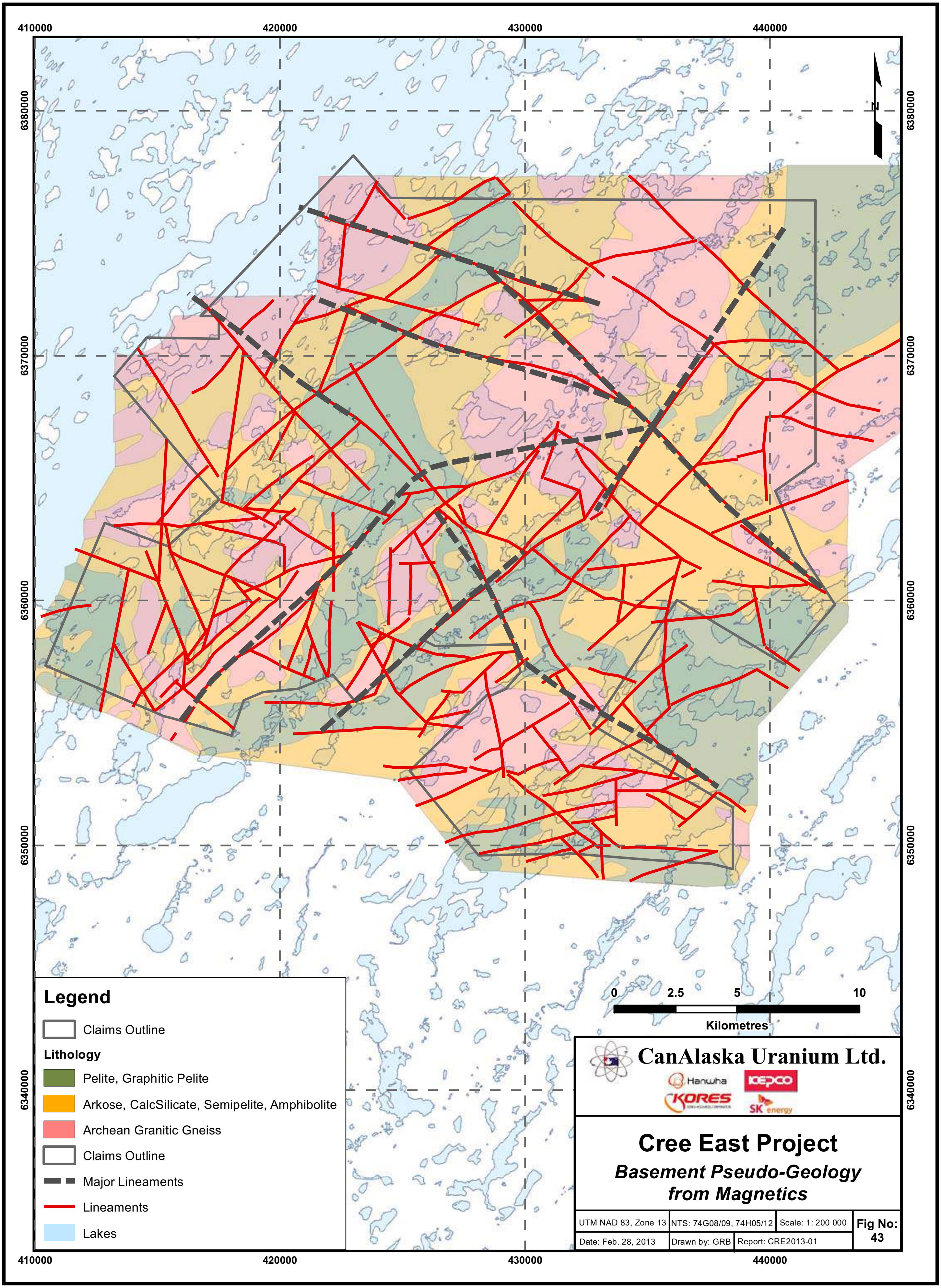
CanAlaska Uranium Ltd.

Hanwha KEPCO KORES SK energy

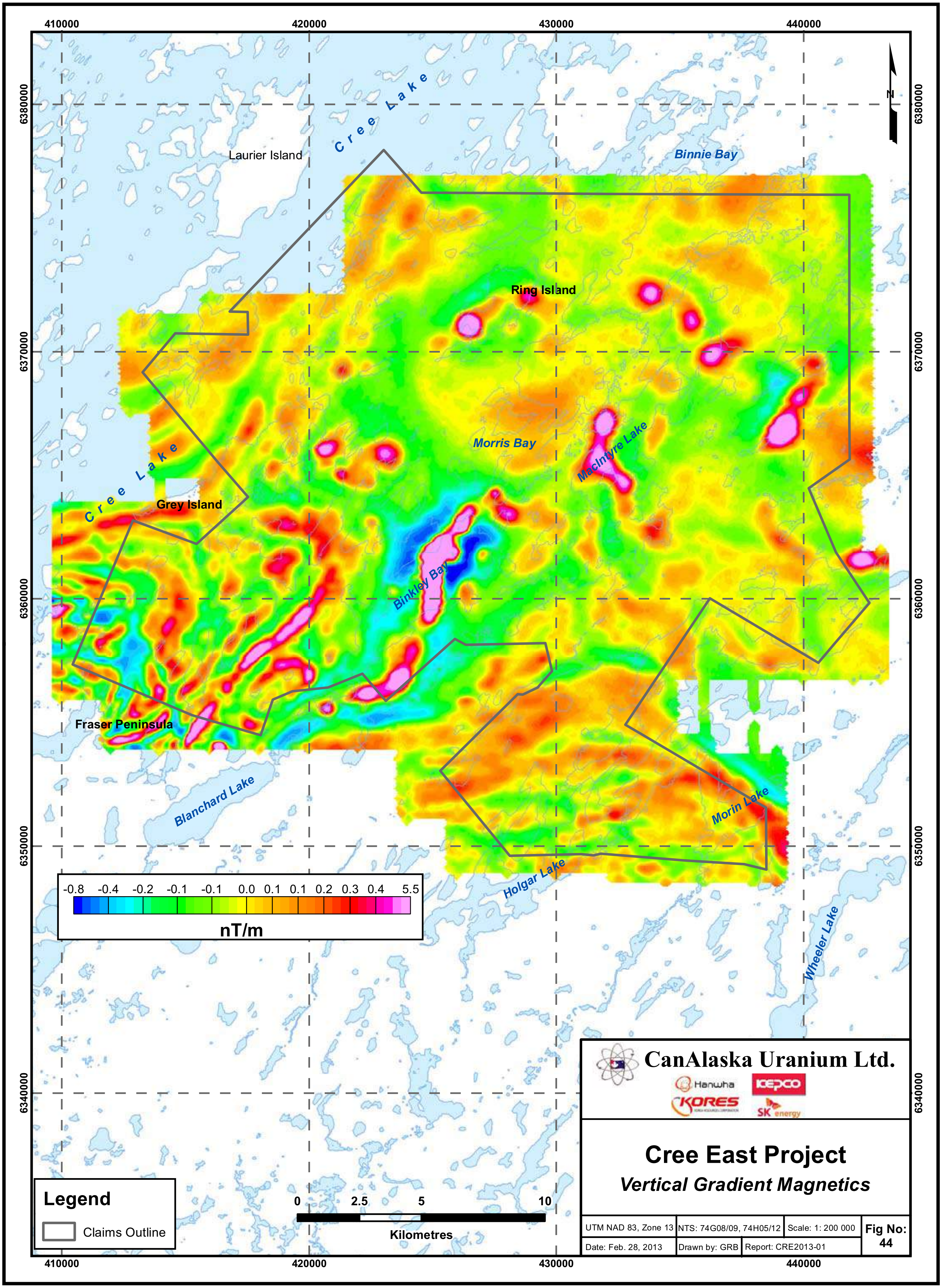
Cree East Project

Total Magnetic Intensity

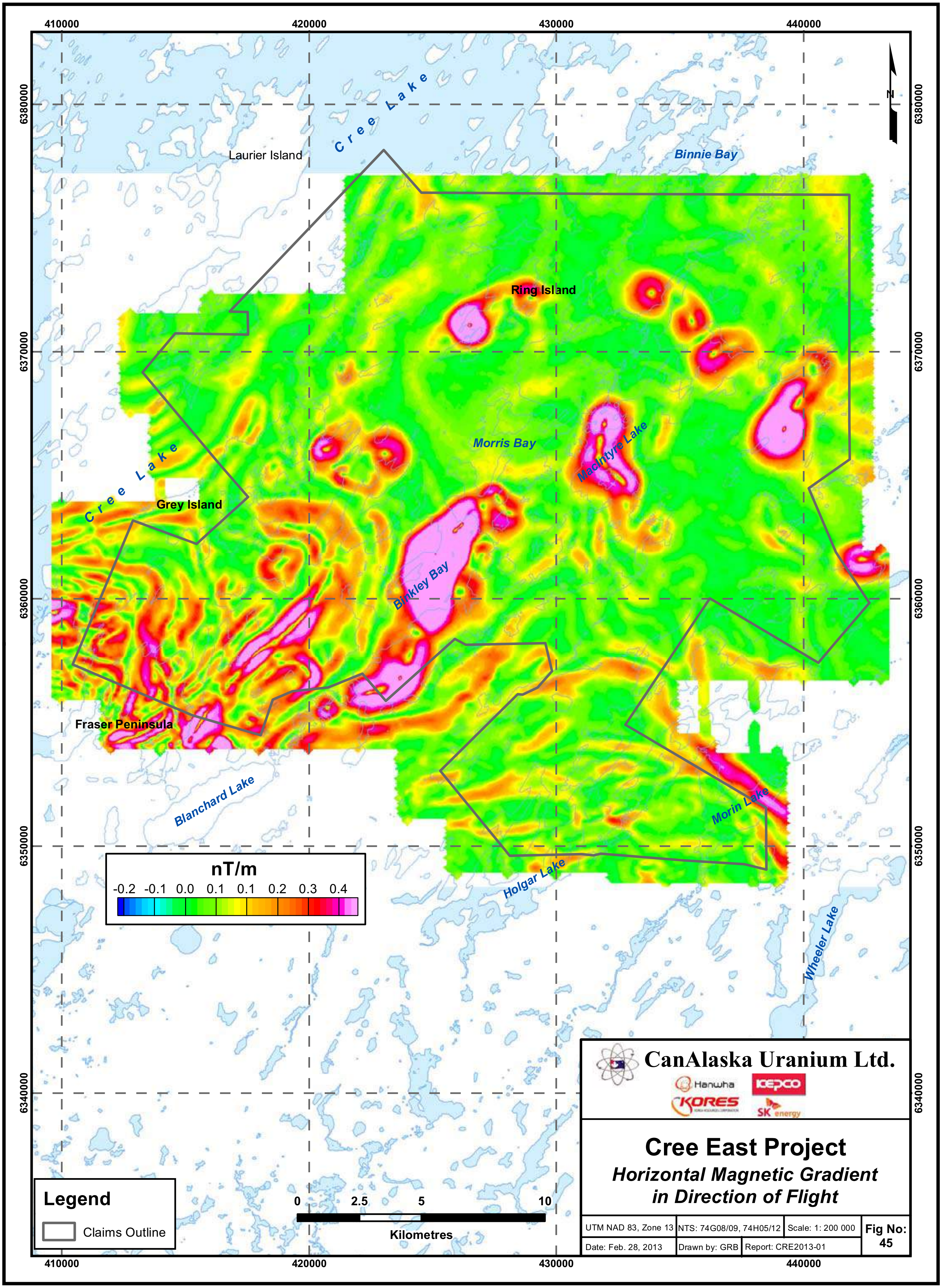
UTM NAD 83, Zone 13	NTS: 74G08/09, 74H05/12	Scale: 1: 200 000	Fig No: 42
Date: Feb. 28, 2013	Drawn by: GRB	Report: CRE2013-01	

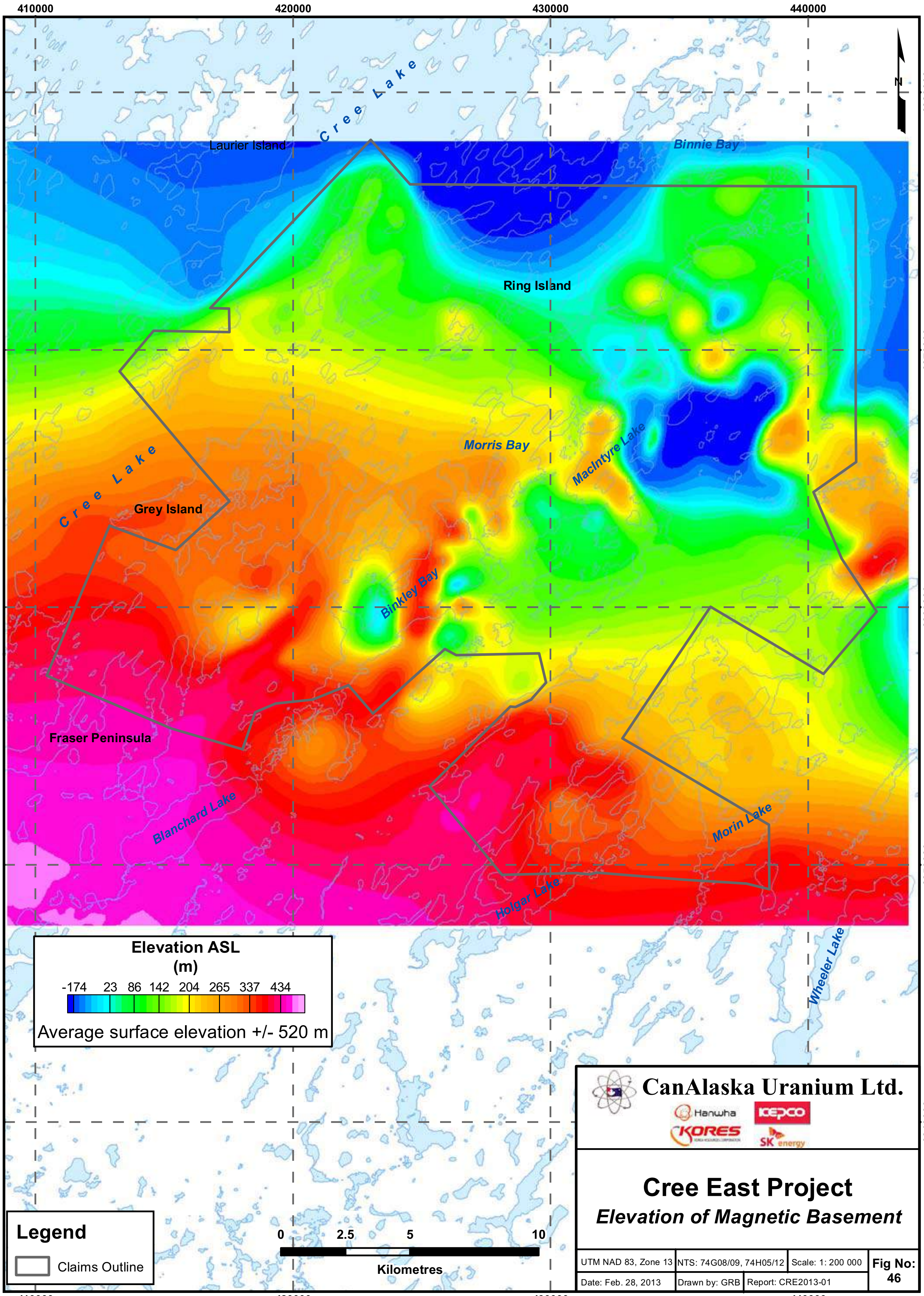


410000
420000
430000
440000
6380000
6370000
6360000
6350000
6340000
N
0 2.5 5 10
Kilometres
Legend
Claims Outline
Lithology
Pelite, Graphitic Pelite
Arkose, CalcSilicate, Semipelite, Amphibolite
Archean Granitic Gneiss
Claims Outline
Major Lineaments
Lineaments
Lakes
CanAlaska Uranium Ltd.
Hanwha
KEPCO
KORES
SK energy
Cree East Project
Basement Pseudo-Geology from Magnetics
UTM NAD 83, Zone 13
NTS: 74G08/09, 74H05/12
Scale: 1: 200 000
Fig No: 43
Date: Feb. 28, 2013
Drawn by: GRB
Report: CRE2013-01



410000
420000
430000
440000
6380000
6370000
6360000
6350000
6340000
N
Cree Lake
Laurier Island
Binnie Bay
Ring Island
Morris Bay
MacIntyre Lake
Cree Lake
Grey Island
Binkley Bay
Fraser Peninsula
Blanchard Lake
Morin Lake
Holgar Lake
Wheeler Lake
-0.8 -0.4 -0.2 -0.1 -0.1 0.0 0.1 0.1 0.2 0.3 0.4 5.5
nT/m
Legend
Claims Outline
0 2.5 5 10
Kilometres
CanAlaska Uranium Ltd.
Hanwha
KEPCO
KORES
SK energy
Cree East Project
Vertical Gradient Magnetics
UTM NAD 83, Zone 13
NTS: 74G08/09, 74H05/12
Scale: 1: 200 000
Fig No: 44
Date: Feb. 28, 2013
Drawn by: GRB
Report: CRE2013-01


410000
420000
430000
440000
6380000
6370000
6360000
6350000
6340000
Cree Lake
Laurier Island
Binnie Bay
Ring Island
Morris Bay
MacIntyre Lake
Cree Lake
Grey Island
Binkley Bay
Fraser Peninsula
Blanchard Lake
Morin Lake
Holgar Lake
Wheeler Lake
N
nT/m
-0.2 -0.1 0.0 0.1 0.1 0.2 0.3 0.4
Legend
Claims Outline
0 2.5 5 10
Kilometres
CanAlaska Uranium Ltd.
Hanwha
KEPCO
KORES
SK energy
Cree East Project
Horizontal Magnetic Gradient in Direction of Flight
UTM NAD 83, Zone 13
NTS: 74G08/09, 74H05/12
Scale: 1: 200 000
Fig No: 45
Date: Feb. 28, 2013
Drawn by: GRB
Report: CRE2013-01



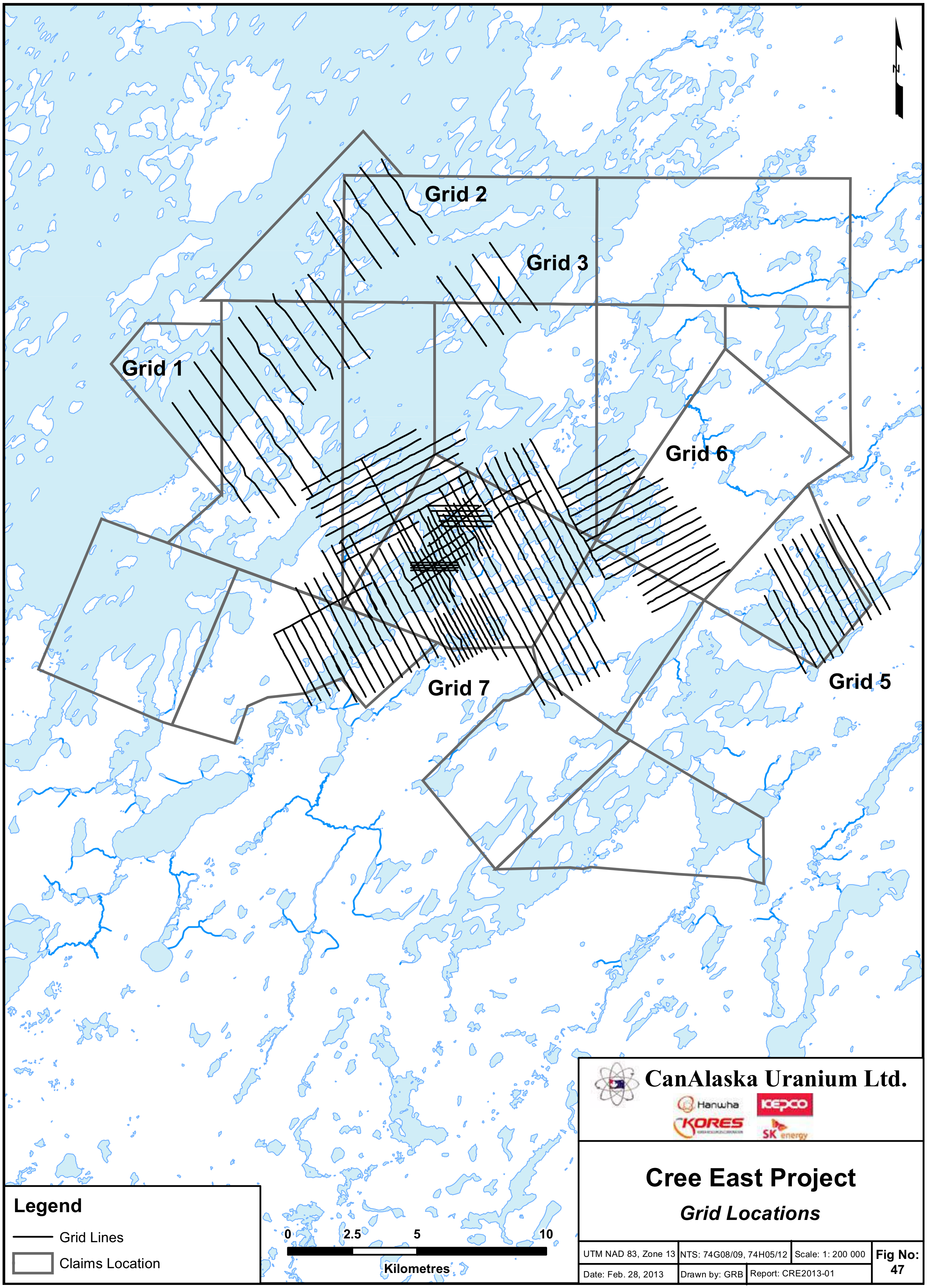
CanAlaska Uranium Ltd.

Hanwha KEPCO KORES SK energy

Cree East Project

Elevation of Magnetic Basement

UTM NAD 83, Zone 13	NTS: 74G08/09, 74H05/12	Scale: 1: 200 000	Fig No: 46
Date: Feb. 28, 2013	Drawn by: GRB	Report: CRE2013-01	



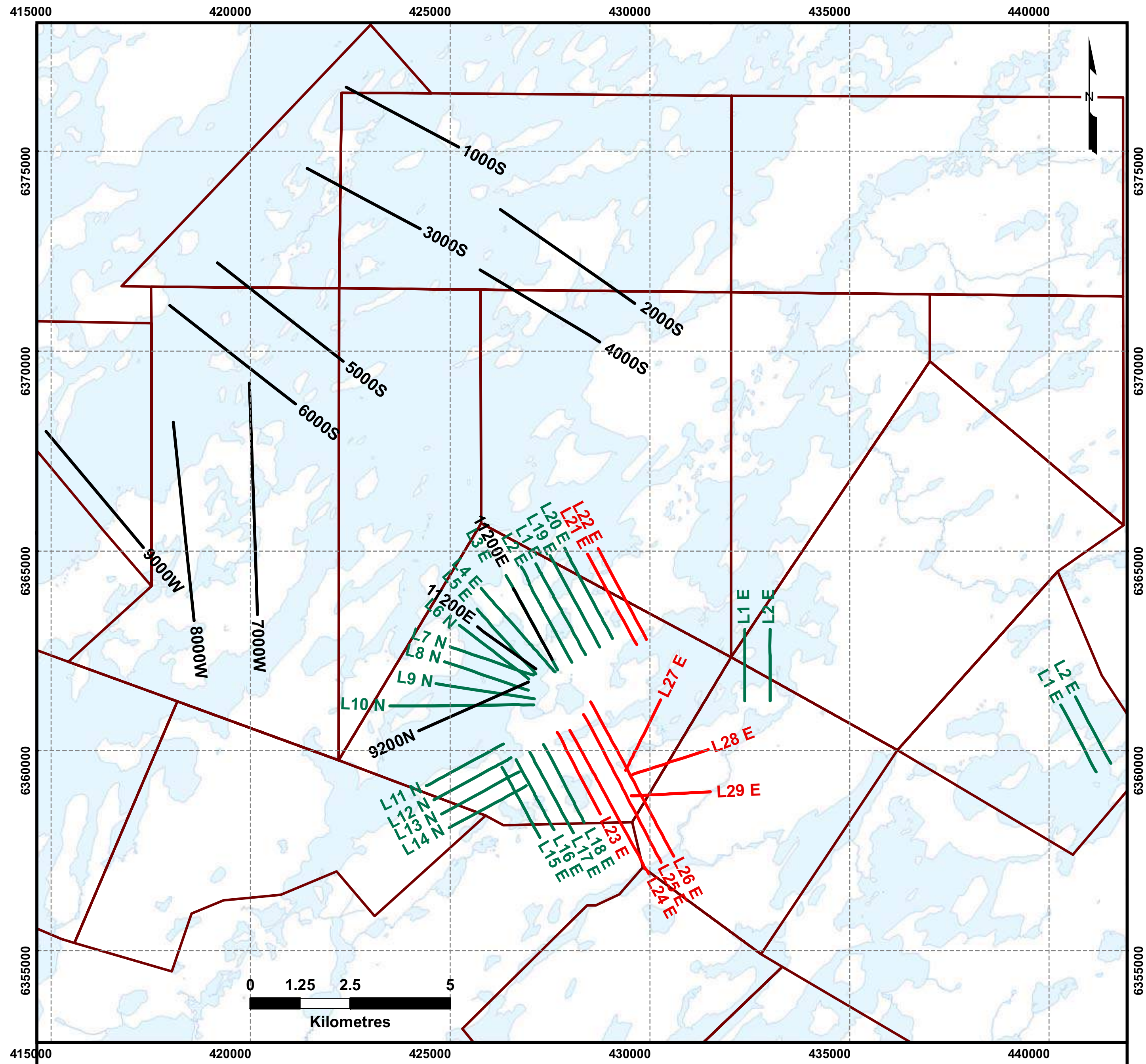
CanAlaska Uranium Ltd.

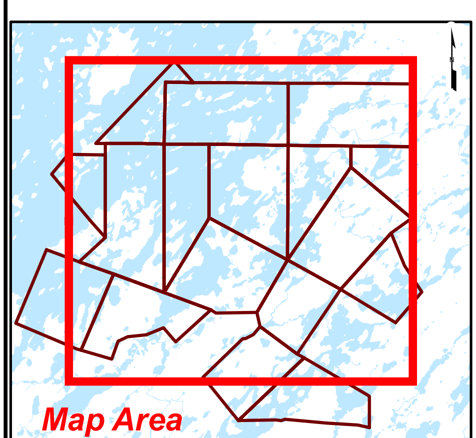
Hanwha KEPCO KORES SK energy

Cree East Project

Grid Locations

UTM NAD 83, Zone 13	NTS: 74G08/09, 74H05/12	Scale: 1: 200 000	Fig No: 47
Date: Feb. 28, 2013	Drawn by: GRB	Report: CRE2013-01	





Legend

- 2010 TEM Lines
- 2011 TEM Lines
- 2012 TEM Lines
- Claims
- Lakes
- Rivers

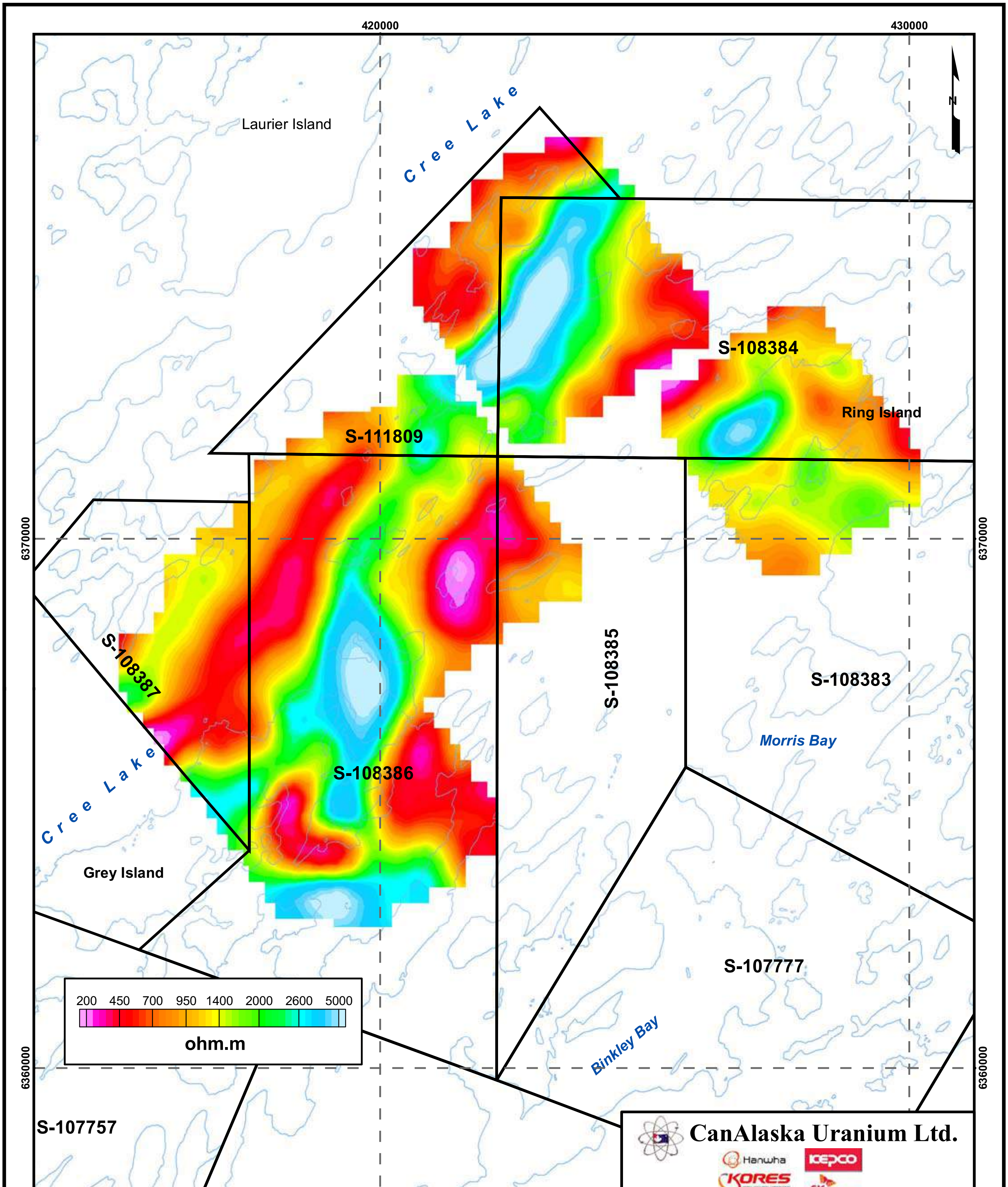
CanAlaska Uranium Ltd.

Hanwha
KEPCO
KORES
SK energy

Cree East Project

Location of TEM Survey Lines

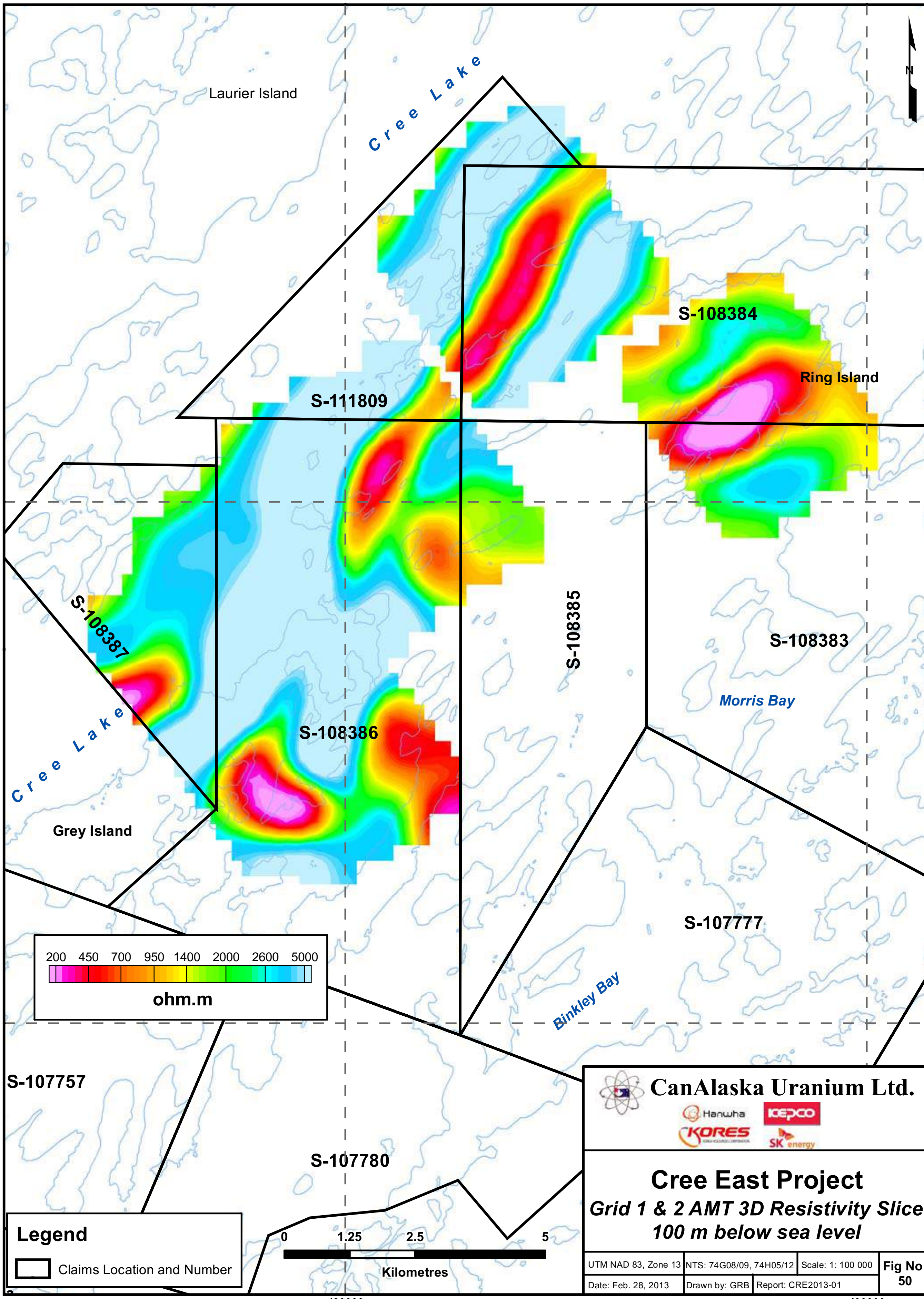
UTM NAD 83, Zone 13	NTS: 74G08/09, 74H05/12	Scale: 1: 150 000	Fig No: 48
Date: Feb. 28, 2013	Drawn by: GRB	Report: CRE2013-01	



Cree East Project

Grid 1 & 2 AMT 3D Resistivity Slice 200 m above sea level

UTM NAD 83, Zone 13	NTS: 74G08/09, 74H05/12	Scale: 1: 100 000	Fig No: 49
Date: Feb. 28, 2013	Drawn by: GRB	Report: CRE2013-01	



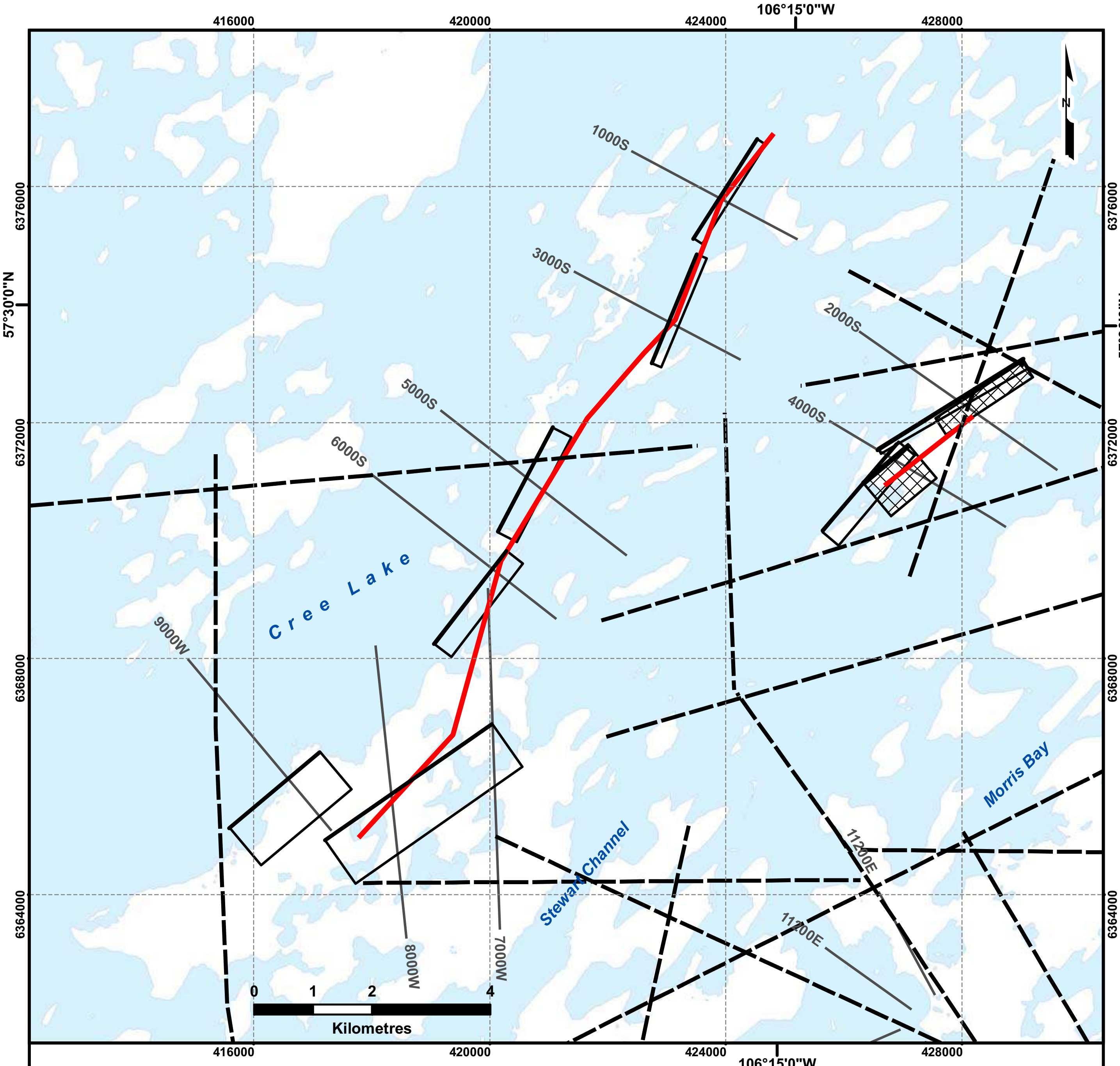
CanAlaska Uranium Ltd.

Hanwha KEPCO KORES SK energy

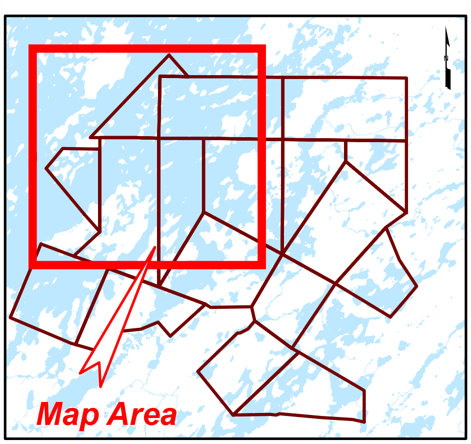
Cree East Project

Grid 1 & 2 AMT 3D Resistivity Slice 100 m below sea level

UTM NAD 83, Zone 13	NTS: 74G08/09, 74H05/12	Scale: 1: 100 000	Fig No: 50
Date: Feb. 28, 2013	Drawn by: GRB	Report: CRE2013-01	



Note the close agreement in the location of the conductors between the TEM and AMT surveys.



Legend

- Interpreted Axis of AMT Conductors
- Sub-vertical TEM Plate Model
- Sub-horizontal TEM Plate Model
- 2010 TEM Lines
- Faults
- Lakes

CanAlaska Uranium Ltd.

Hanwha KEPCO KORES SK energy

Cree East Project

Grids 1, 2 & 3 TEM Plate Model and Interpreted Axis of AMT Conductors

UTM NAD 83, Zone 13	NTS: 74G08/09, 74H05/12	Scale: 1: 100 000	Fig No: 51
Date: Feb. 28, 2013	Drawn by: GRB	Report: CRE2013-01	

9.2.2.2 Grid 2

Grid 2 lies over a small area of Cree Lake in the northwest part of the property. It was laid out to cover the northern extent of VTEM anomaly C1. As noted above, an EM conductor found in the 2007 AMT and the 2010 MLTDEM surveys also extends from Grid 1 to Grid 2.

9.2.2.3 Grid 3

Grid 3 lies over most of Ring Island. It was planned to cover VTEM anomaly C2 (Figure 40), a northeasterly trending conductive feature underlying Ring Island.

Because the VTEM lines were oriented about 45 degrees from the conductor trend, the precise location and dip of the conductor were not well constrained. The conductor is intense but appears to be only about 2 km in strike length. Although the conductive anomaly has a deep-seated source, the correspondence between the anomaly shape and the shape of Ring Island itself is striking. The early time VTEM data shows no significant conductive clay till layers on the island.

The northeastern extension of the Total Field Magnetic high associated with the C1 anomaly underlies this grid area. The orientation of the magnetic high parallel to the main conductor on Grid 7, suggests that the magnetic high may be due to an iron-rich stratigraphic unit such as Fe-rich pelite or iron-formation.

The AMT survey on Grid 3 indicated a conductive body similar to that identified by the VTEM survey (Figures 49 and 50). The AMT inversion models do not show an increase in conductivity in the sandstone nor do they show a surface conductor, but they show the sandstone to be anomalously resistive over the conductor. AMT data, however, are not particularly reliable for determining sandstone resistivity due to lack of signal in the high frequency range.

In 2010, two lines of MLTDEM data were acquired over the area (Figure 51). Modelling of the data suggests both a horizontal plate conductor and a subvertical plate conductor (dipping steeply northwest although dip is poorly constrained). The depth to the top of the subvertical conductors was estimated to be between 550 and 650 m, and the depth of horizontal conductors is about the same. This is close to the unconformity depth in the area estimated from the magnetic survey, although that has not yet been confirmed by drilling.

One possibility suggested by the configuration of the conductors is a steeply dipping graphitic conductor in basement associated with a localized but highly conductive alteration zone along the unconformity above it. Such a horizontal conductive feature has not been recognized in MLTDEM surveys elsewhere on the property.

The Ring Island anomaly is a priority for follow-up work, including a reconnaissance pole-pole DC/IP survey and geochemistry.

9.2.2.4 Grid 5

Grid 5 lies over Phillips Lake on the eastern side of the property. It was laid out to cover VTEM anomaly C5 (Figure 40), an irregular conductive feature which trends northerly across Phillips Lake before turning abruptly easterly. The tight curvature suggests intense folding or faulting of a basement conductor.

The C5 VTEM anomaly lies on the southern flank of an irregular Total Field Magnetic high.

The VTEM basement conductor was confirmed by the 2007 DC/IP resistivity data (Figures 52, 53 and 54), although no significant resistivity anomaly was detected in the overlying sandstone here. As on Grid 6, the DC/IP data showed variable resistivity near the surface and were consequently difficult to interpret. A low resistivity plume may lie just east of the claim boundary on DC/IP Lines 8600E and 9000E.

The MLTDEM survey detected two conductors (Figure 54), a weak southern conductor oriented at 27S on both MLEM lines and a much stronger conductor oriented at 160S, found only on the easternmost line. Both basement conductors appear to dip steeply north and have a depth of about 300 m.

Given the lack of a clear DC resistivity anomaly on Grid 5, the area is currently a lower priority for follow up.

9.2.2.5 Grid 6

Grid 6 lies over southern MacIntyre Lake and the area to the east. It was laid out to cover VTEM anomaly C6 (Figure 40), a strong northeasterly trending conductive feature on the southeast side of MacIntyre Lake.

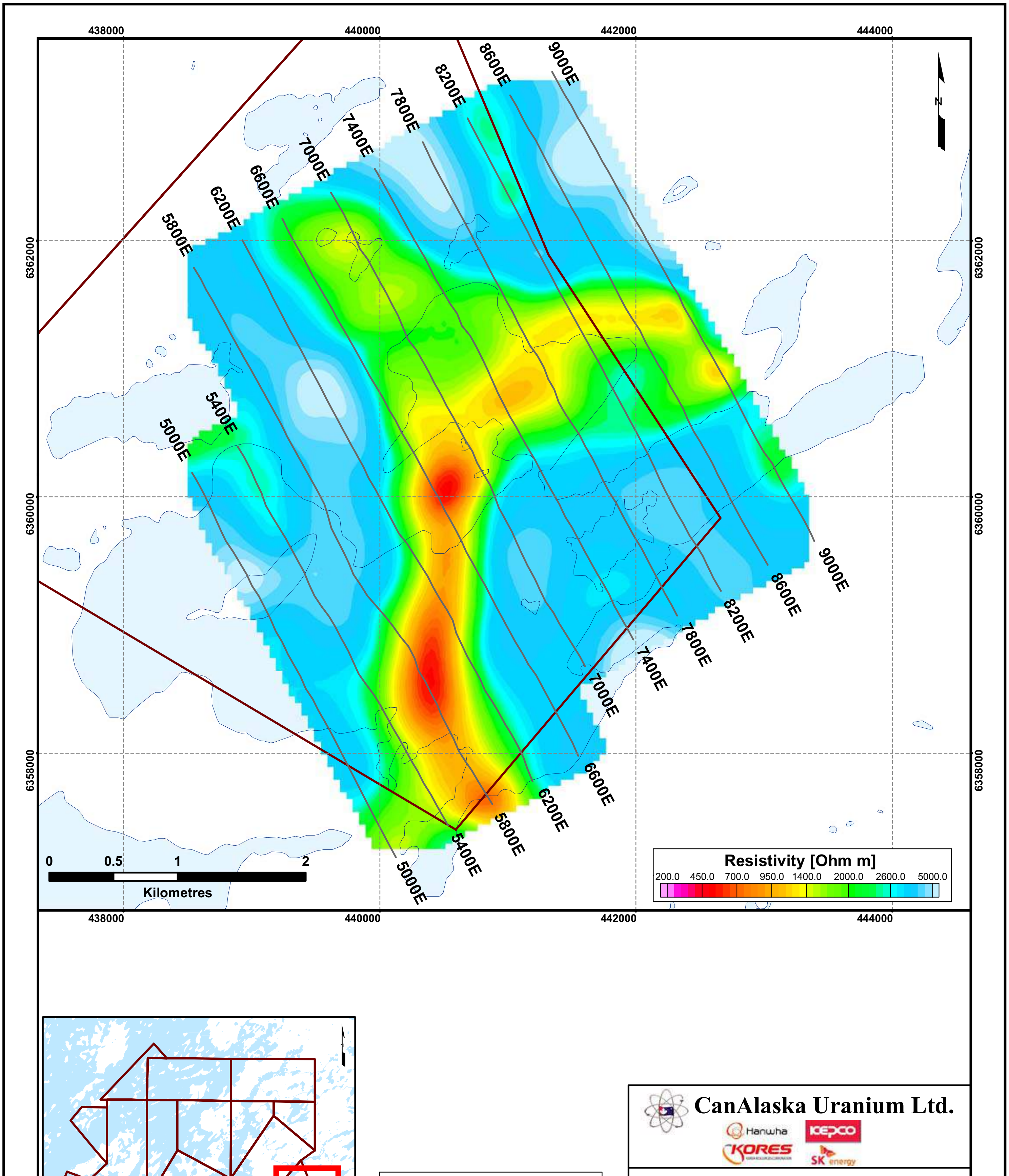
The VTEM anomaly lies on the eastern flank of an irregular magnetic high.

DC/IP lines were oriented perpendicular to the VTDEM conductor, but highly variable resistivity in the near surface in the northern part of the grid, possibly due to clay rich surficial sediments, made it difficult to reliably define deeper resistivity targets. The resistivity data suggest the presence of an easterly trending conductor (Figure 55), which does not correspond to the northwesterly trend of the VTEM conductor

The 2011 TEDM survey tested the main shallow DC/IP anomaly located west of the main VTEM anomaly. No EM basement conductors were mapped. An ambiguous response on the eastern line is probably due to a flat-lying conductor consistent with the DC/IP interpretation. The main Grid 6 VTEM anomaly remains untested by TDEM, but there is no in-sandstone resistivity anomaly on the DC/IP survey.

Given the lack of a clear DC resistivity anomaly attributable to sandstone, the area is currently a secondary priority for follow up.

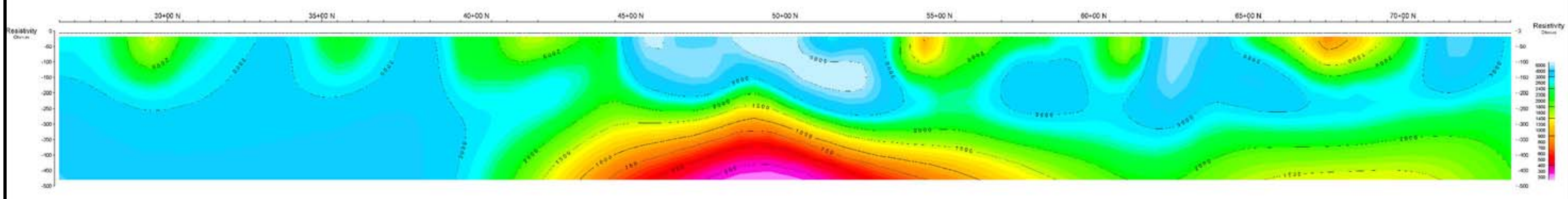
Bathymetric and Pulser seismic surveys (Figures 56 to 59) were conducted on Grids 6 and 7 over northern Binkley Bay and Morris Bay in Cree Lake and southern MacIntyre Lake. These show that the lake sediments are draped over the underlying sandstone surface ((Figure 59). Reflector offsets, suggests numerous faults, including a northeasterly trending fault zone through Binkley Bay inferred to have sinistral offset.



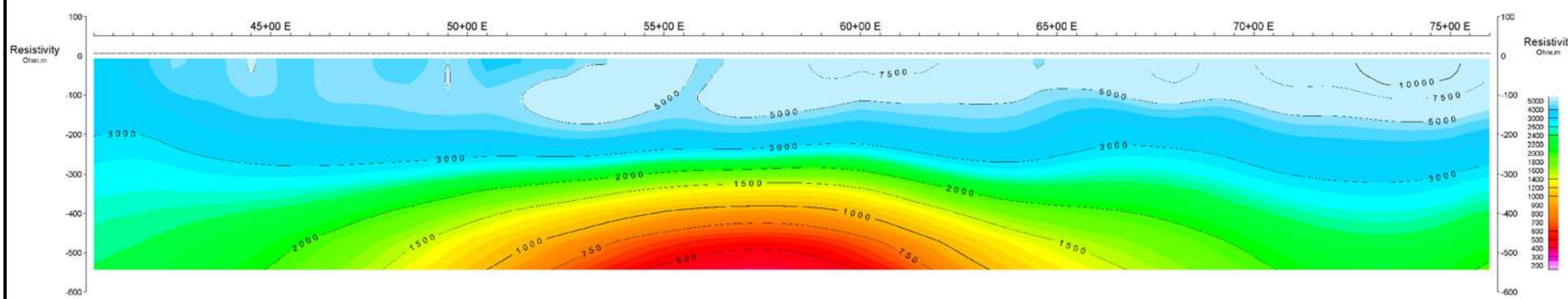
Cree East Project

Grid 5: 3D DC Resistivity Model Slice @ -350 m Depth

UTM NAD 83, Zone 13	NTS: 74G08/09, 74H05/12	Scale: 1: 40 000	Fig No: 52
Date: Feb. 28, 2013	Drawn by: GRB	Report: CRE2013-01	



Grid 5 Line 6600E



Grid 6 Line 7400N

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KORES

SK energy

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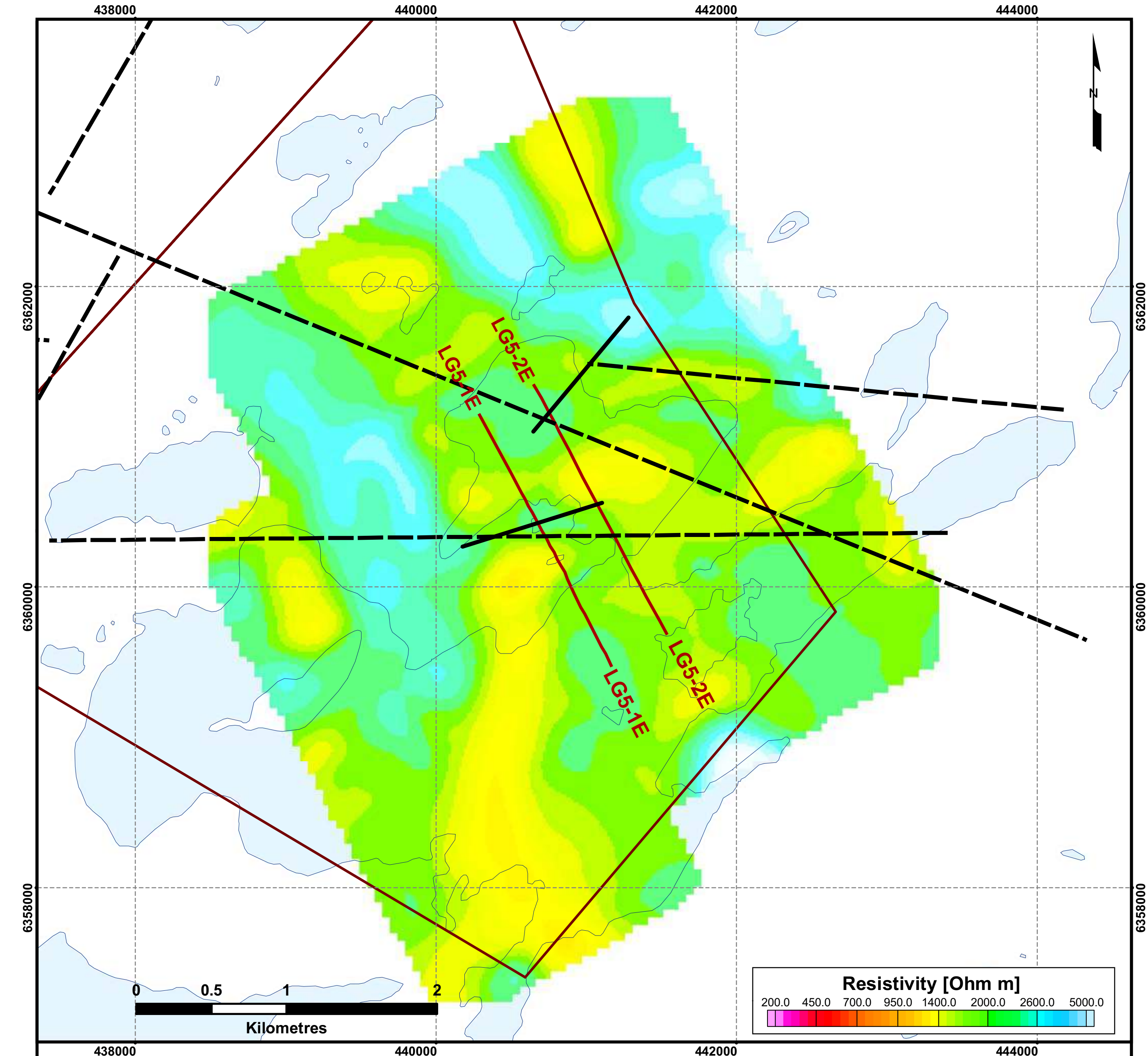
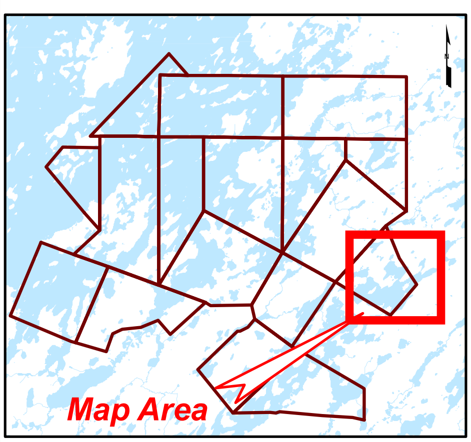
3D DC Resistivity Model Sections

Grid 5 (6600E) & Grid 6 (7400N)

		Scale:	**Fig No:** 53
Date: Feb. 28, 2013	Drawn by: GRB	Report: CRE2013-01	





Legend

- 2011 TEM Lines
- Faults
- TEM Plate Model
- Claims
- Lakes

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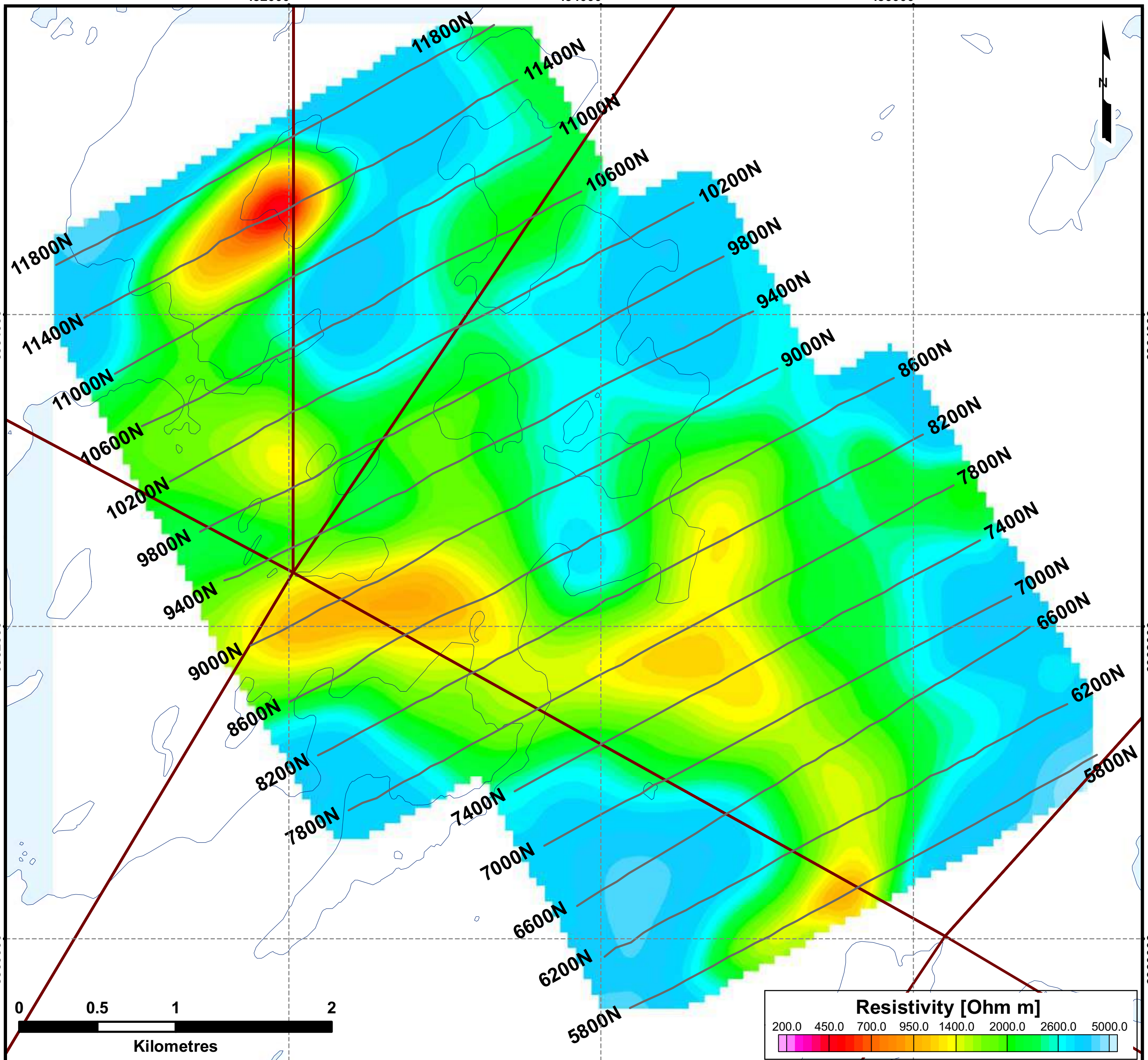
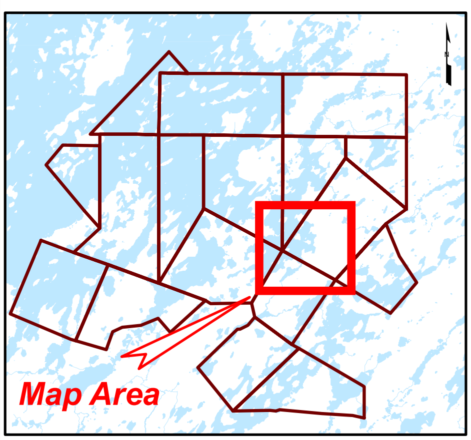
Grid 5: TEM Line Locations on 3D DC Resistivity @ -250 m Depth

UTM NAD 83, Zone 13	NTS: 74G08/09, 74H05/12	Scale: 1: 40 000	Fig No: 54
Date: Feb. 28, 2013	Drawn by: GRB	Report: CRE2013-01	





Legend

DCIP Grid Lines

Claims

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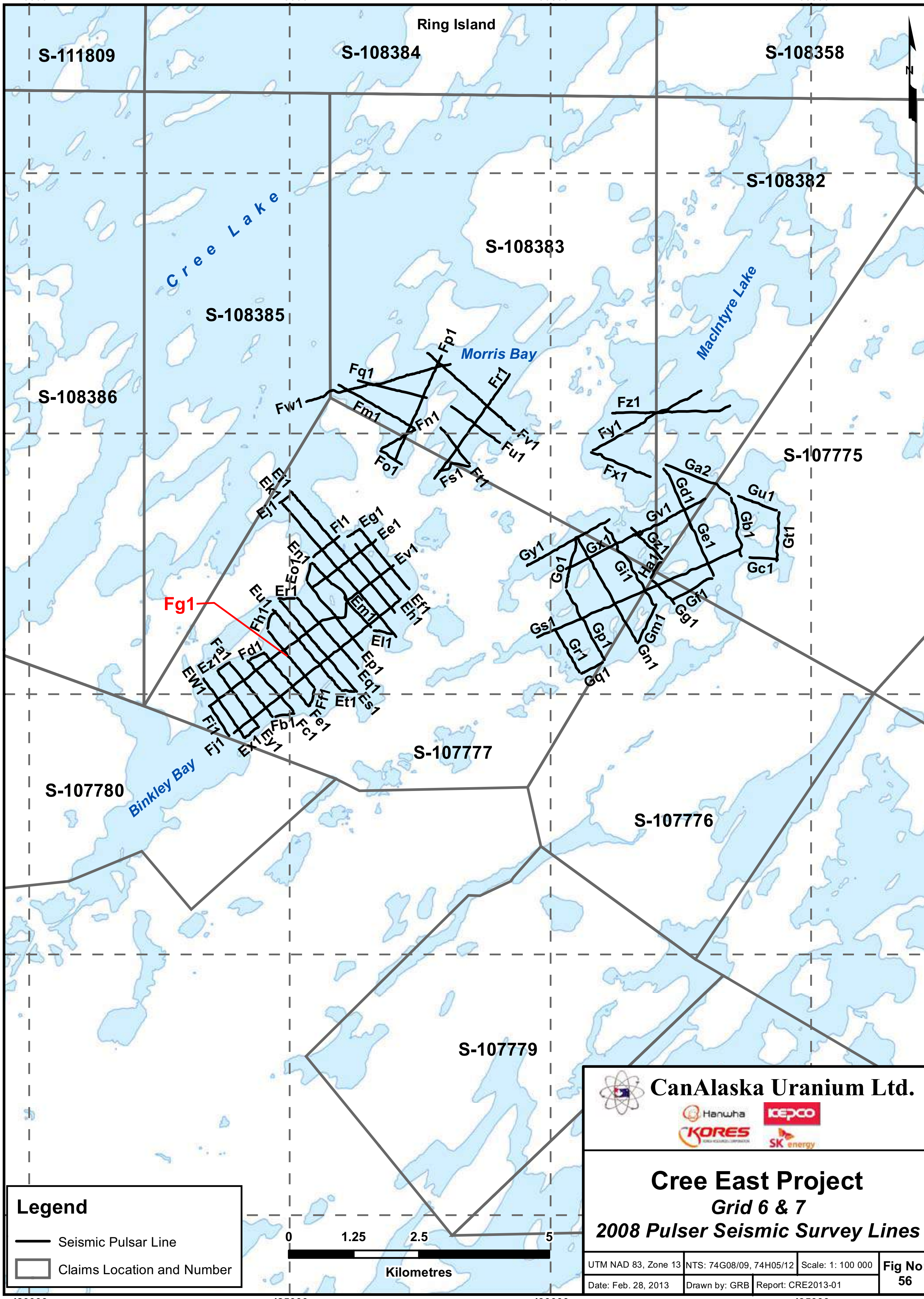
Grid 6: 3D DC Resistivity Model
Slice @ -350 m Depth

UTM NAD 83, Zone 13	NTS: 74G08/09, 74H05/12	Scale: 1: 40 000	Fig No: 55
Date: Feb. 28, 2013	Drawn by: GRB	Report: CRE2013-01	



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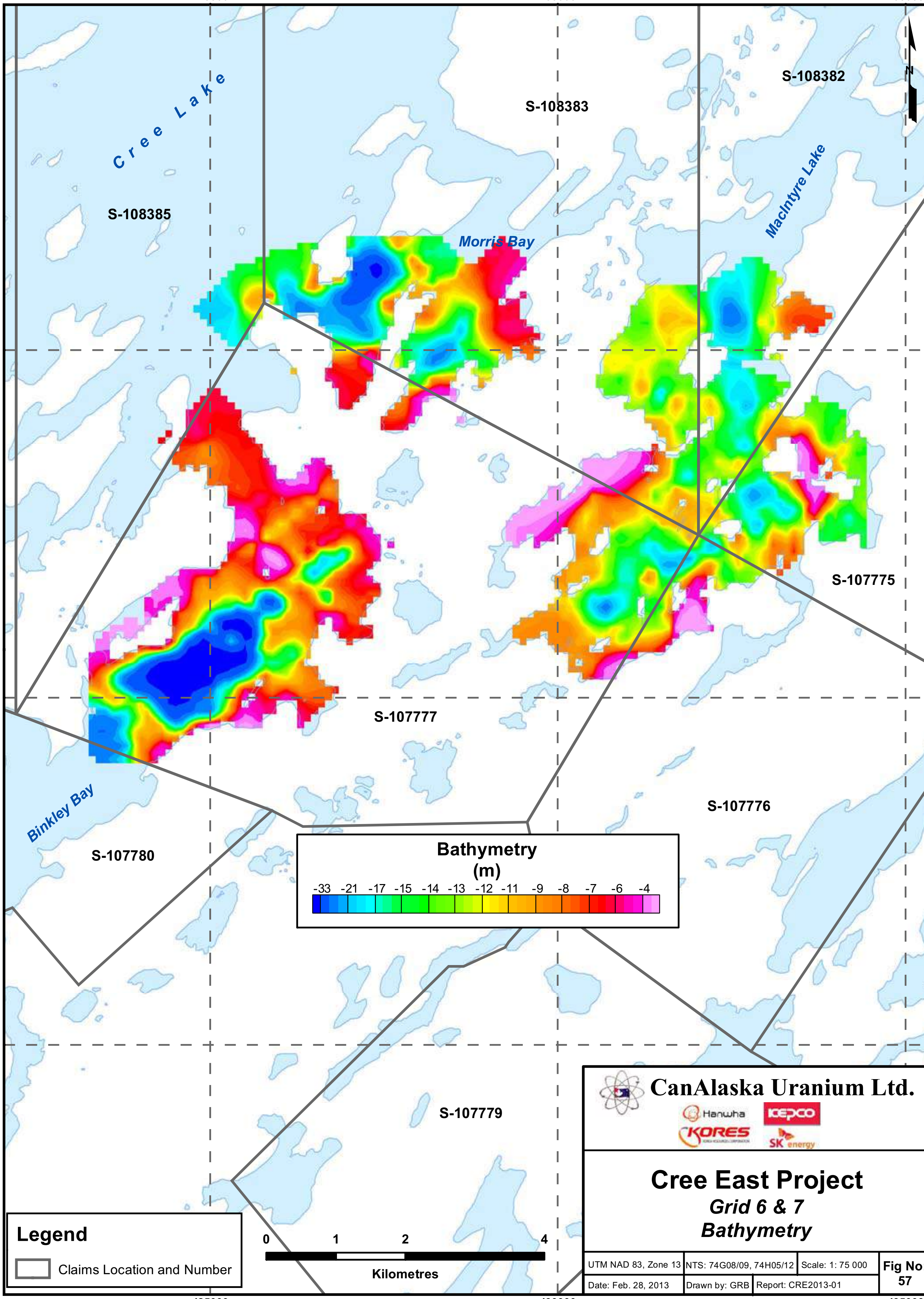
Grid 6 & 7

2008 Pulser Seismic Survey Lines

UTM NAD 83, Zone 13	NTS: 74G08/09, 74H05/12	Scale: 1: 100 000	Fig No: 56
Date: Feb. 28, 2013	Drawn by: GRB	Report: CRE2013-01	



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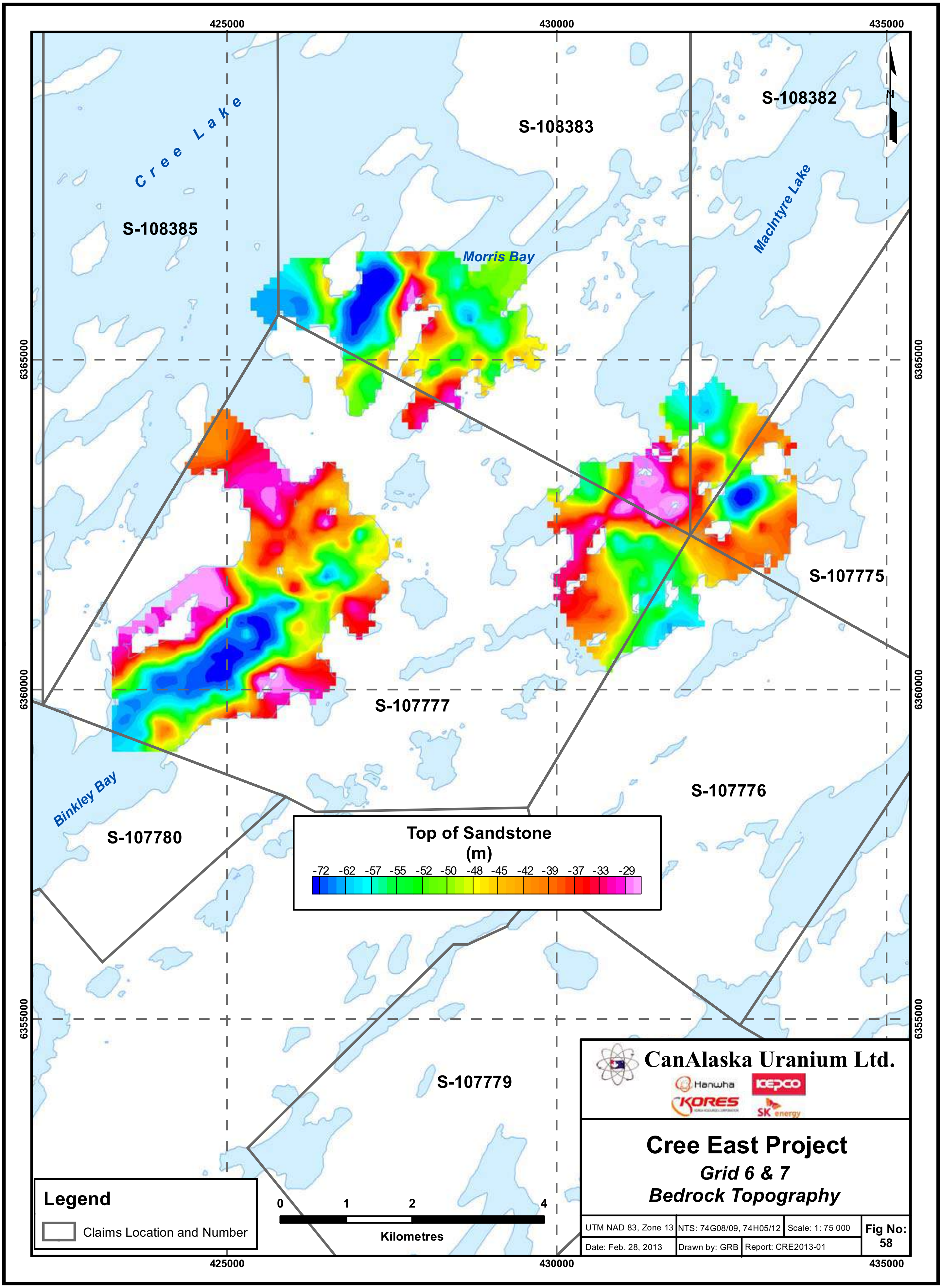
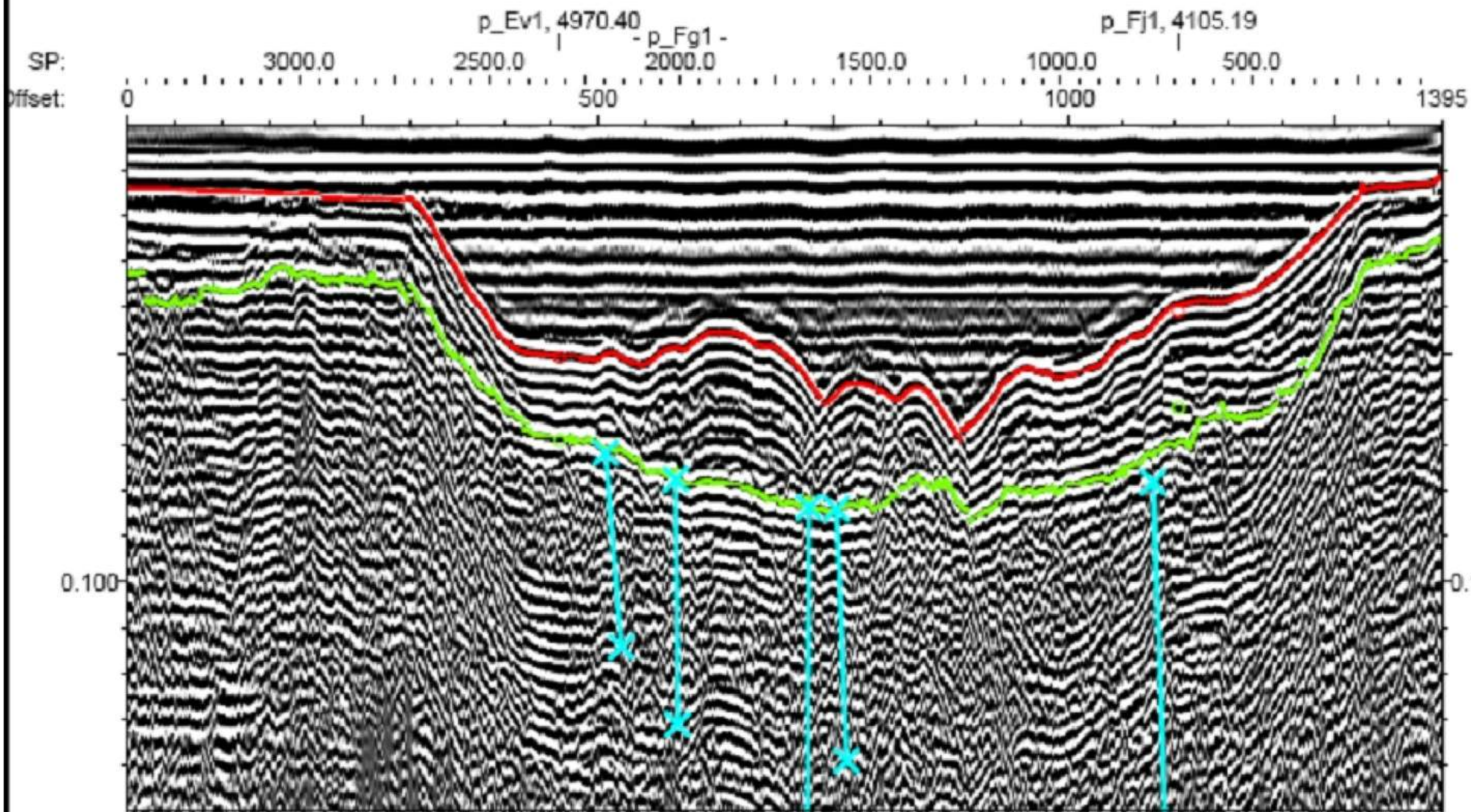
Grid 6 & 7

Bathymetry

UTM NAD 83, Zone 13	NTS: 74G08/09, 74H05/12	Scale: 1: 75 000	Fig No: 57
Date: Feb. 28, 2013	Drawn by: GRB	Report: CRE2013-01	



425000
430000
435000
6365000
6360000
6355000
Cree Lake
S-108385
S-108383
S-108382
MacIntyre Lake
Morris Bay
S-107775
S-107777
S-107776
Binkley Bay
S-107780
S-107779
N
Top of Sandstone
(m)
-72 -62 -57 -55 -52 -50 -48 -45 -42 -39 -37 -33 -29
Legend
Claims Location and Number
0 1 2 4
Kilometres
CanAlaska Uranium Ltd.
Hanwha
KEPCO
KORES
SK energy
Cree East Project
Grid 6 & 7
Bedrock Topography
UTM NAD 83, Zone 13
NTS: 74G08/09, 74H05/12
Scale: 1: 75 000
Fig No: 58
Date: Feb. 28, 2013
Drawn by: GRB
Report: CRE2013-01



Legend

- Bathymetry
- Bedrock
- Interpreted Faults

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Pulser Seismic Profile
Grid 7: Line Fg1

Date: Feb. 28, 2013	Drawn by: GRB	Scale: Report: CRE2013-01	Fig No: 59

9.2.2.6 Grid 7

Grid 7 lies in the south central part of the property over Binkley and Morris bays and southern MacIntyre Lake. It was planned to cover airborne VTEM anomaly C7 (Figure 40), an extensive 'Y'-shaped conductive feature whose stem extends southwesterly between southern Binkley Bay and the Chain of Lakes, whose left fork (VTEM anomaly C7N) extends through northern Binkley Bay and whose right fork (VTEM anomaly C7S) extends into southern MacIntyre Lake before curving sharply south towards northern Perpete Lake to form a hook shape. The stem and right fork of the VTEM anomaly lie along the eastern flank of a narrow northerly trending magnetic high, which drilling suggests is caused by iron-formation.

A more detailed basement pseudo-geology map (Figure 60) was produced from magnetics for Grid 7 than the property-scale one shown in Figure 7.

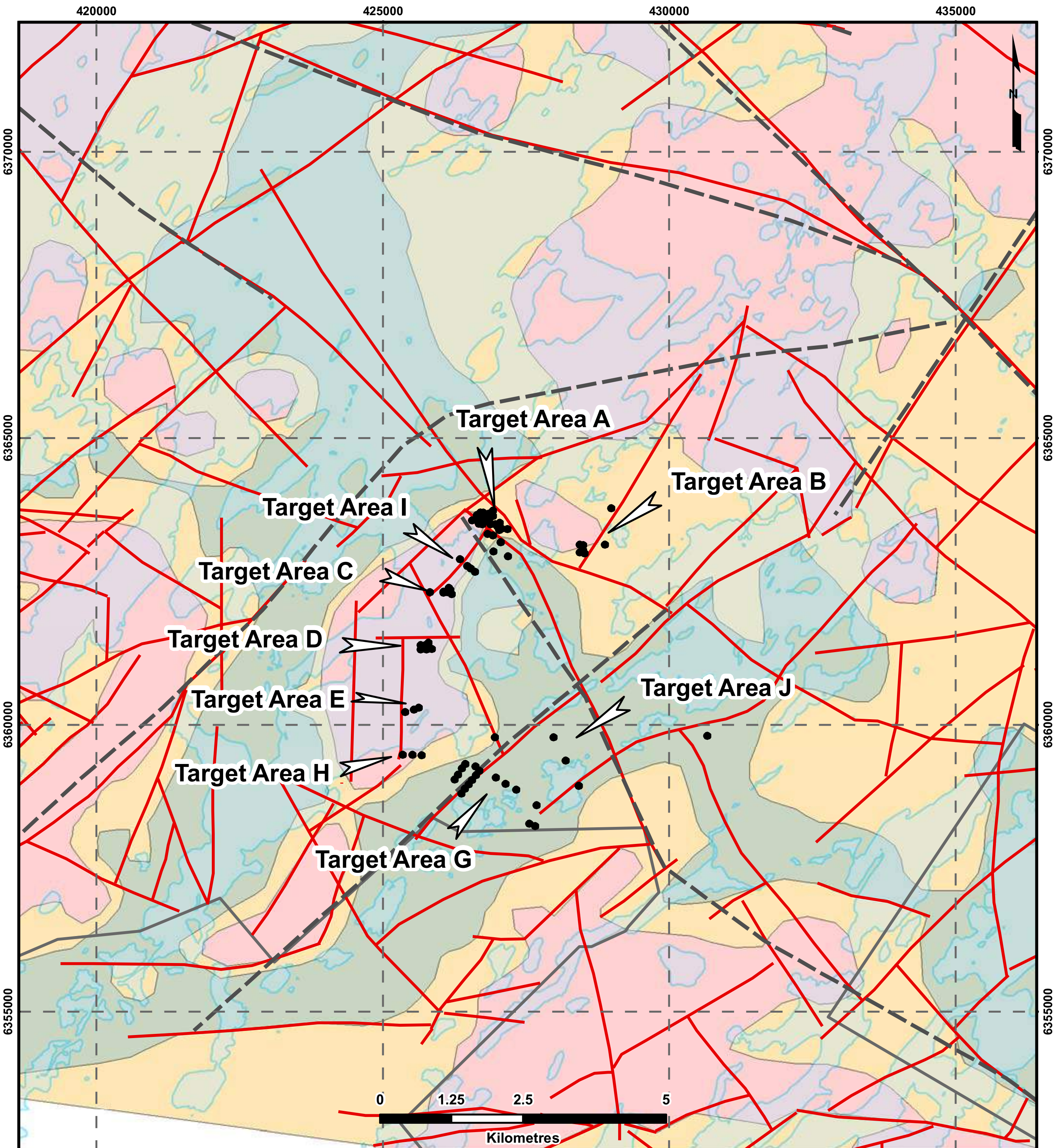
Results of DC-Resistivity surveys on Grid 7 (Figure 61) show a 'Y'-shaped pattern (Figure 62) at the approximated depth of the unconformity remarkably similar to that of the VTEM anomalies. Its left fork is a broad resistivity low trending northerly from the central 'Chain of Lakes' through northern Binkley Bay. This feature merges with a resistivity low trending northeasterly along the western shore of northern Binkley Bay, across the bay and between southern Morris Bay and MacIntyre Lake. The right fork of the "Y" shaped resistivity low extends northeasterly from the 'Chain of Lakes' to form a hook-shaped feature, open to the southwest, between southern MacIntyre Lake and Perpete Lake. Over much of the structure, the resistivity low extends up into the sandstone (Figures 62 and 63).

Ground moving loop TEM surveys in 2011 and 2012 (Figure 64) defined a series of four extensive, steeply dipping, linear basement TEM conductors on Grid 7 (Figures 65 and 66). Three of these conductors are coincident with the axial zones of resistivity lows.

One MLEM conductor, corresponding to the C7N VTEM conductor, extends northerly along the axis of northern Binkley Bay before turning northeasterly to the south of Morris Bay. Plate modeling, as part of the 2011 TEM survey, indicates that this conductor is relatively steep in the south, but dips gently northeast. The first four drill campaigns (winter 2008 to winter 2010) on the Cree East property focused on the C7N conductor and the coincident resistivity low. Drilling confirmed that the conductor is due to graphitic rocks (Figure 66). From south to north, target areas H, E, D, C, I and A lie along it.

The other major MLEM conductor, corresponding roughly to the C7S VTEM conductor, comprises a weak sub-horizontal conductor extending northeasterly through the northern 'Chain of Lakes' which partly overlaps a steeply dipping conductor that forms a horseshoe shape, open to the southwest, south of MacIntyre Lake. This conductor also lies along the axis of a resistivity low. Although CanAlaska has only drilled three holes on this feature (Target Area J) to date, there are a number of historical holes on it. Drilling indicates that both the steep and sub-horizontal conductors are also due to graphitic rocks.

A relatively short (ca. 700 m) MLEM conductor trends sub-parallel to the northeastern part of the C7N conductor, but is offset to the southeast (possibly by a fault?). This conductor also lies along the axis of a resistivity low. Like Area J, this target area was not tested until the six holes of the 2012 drill program were drilled, but the strong alteration and brittle deformation found are very encouraging.



Legend

- Pelite, Graphitic Pelite
- Arkose, CalcSilicate, Semipelite, Amphibolite
- Archean Granitic Gneiss
- Major Lineaments
- Lineaments
- Drill Holes
- Claims Outline

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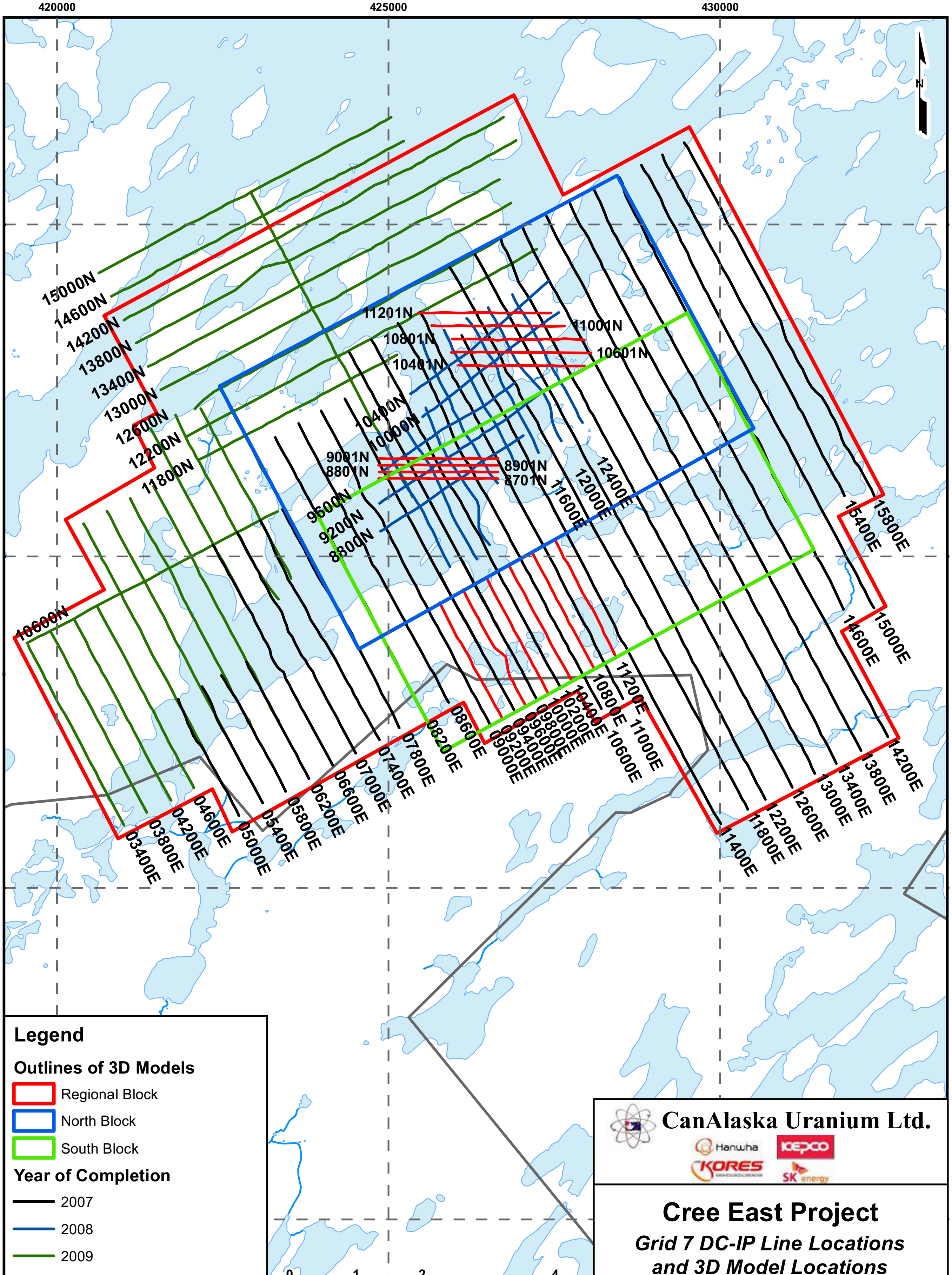
Grid 7 Basement Pseudo-Geology from Magnetics

UTM NAD 83, Zone 13	NTS: 74G08/09, 74H05/12	Scale: 1: 100 000	Fig No: 60
Date: Feb. 28, 2013	Drawn by: GRB	Report: CRE2013-01	



Legend

Outlines of 3D Models

- Regional Block
- North Block
- South Block

Year of Completion

- 2007
- 2008
- 2009
- 2009: High Resolution
- Claims Outline

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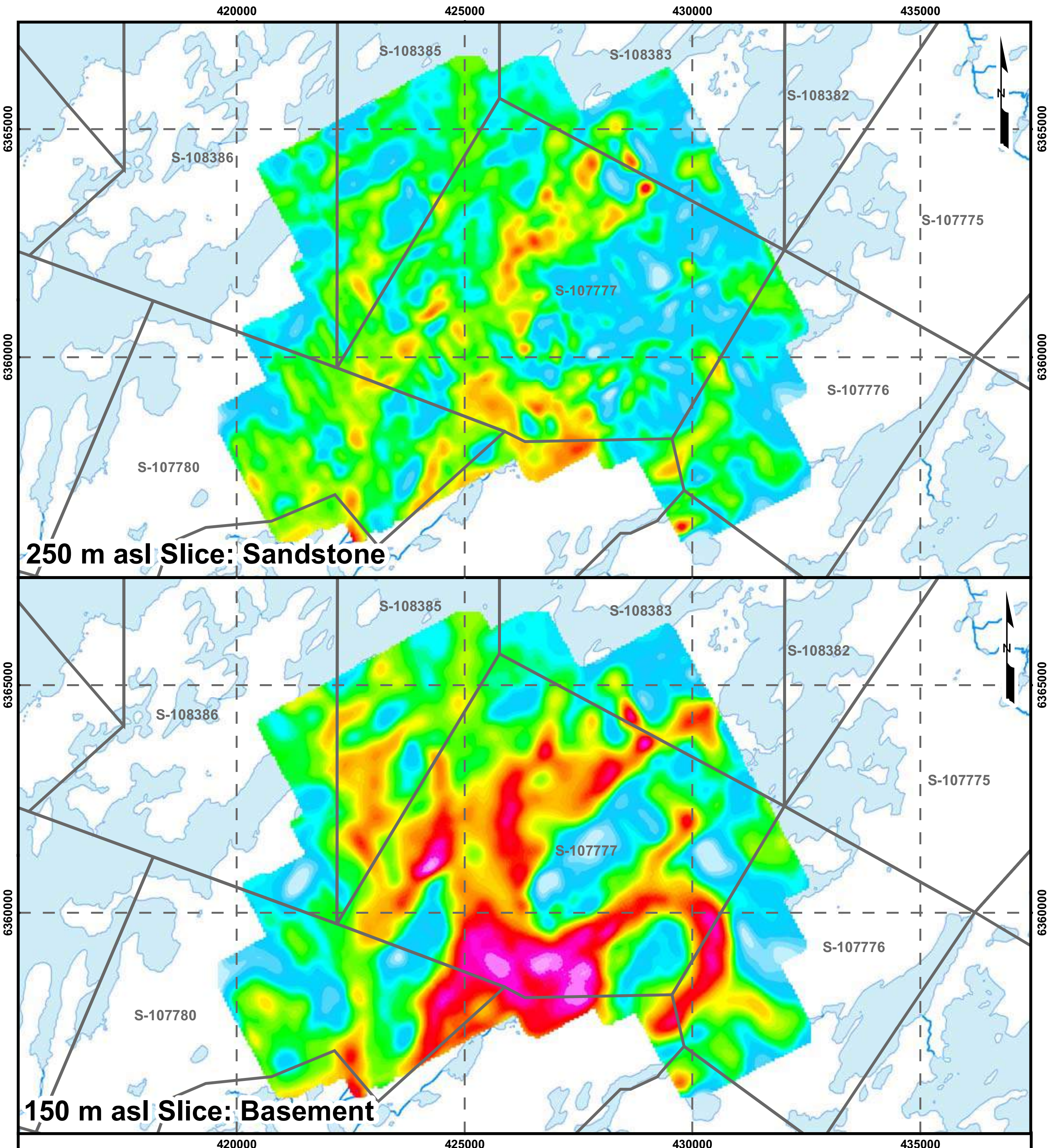
Grid 7 DC-IP Line Locations and 3D Model Locations

UTM NAD 83, Zone 13	NTS: 74G08/09, 74H05/12	Scale: 1: 75 000	Fig No: 61
Date: Feb. 28, 2013	Drawn by: GRB	Report: CRE2013-01	



Resitivity [Ohm m]

200.0 450.0 700.0 950.0 1400.0 2000.0 2600.0 5000.0

Legend

Claims Location and Number

0 1.5 3 6

Kilometres

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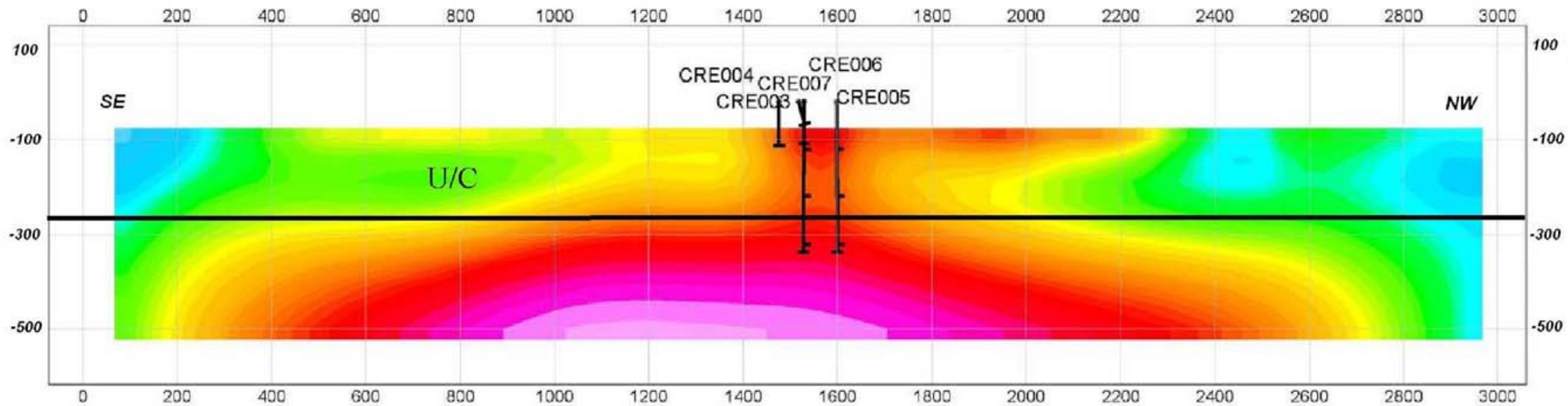
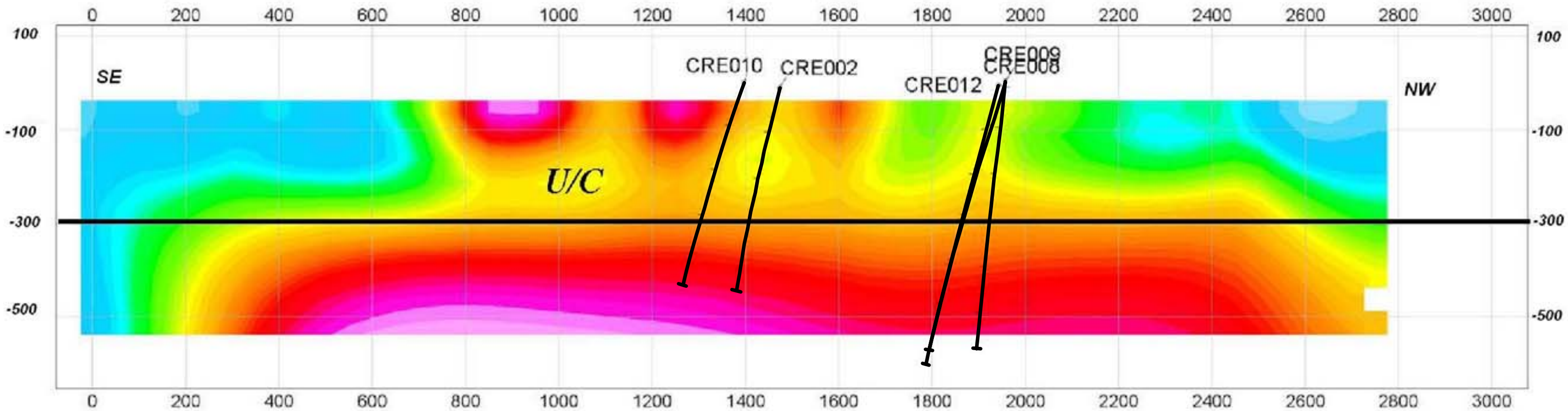
Grid 7 Resistivity Slices
250 m & 150 m asl

UTM NAD 83, Zone 13	NTS: 74G08/09, 74H05/12	Scale: 1: 125 000	Fig No: 62
Date: Feb. 28, 2013	Drawn by: GRB	Report: CRE2013-01	



Grid 7 Line 11000E



Grid 7 Line 12200E

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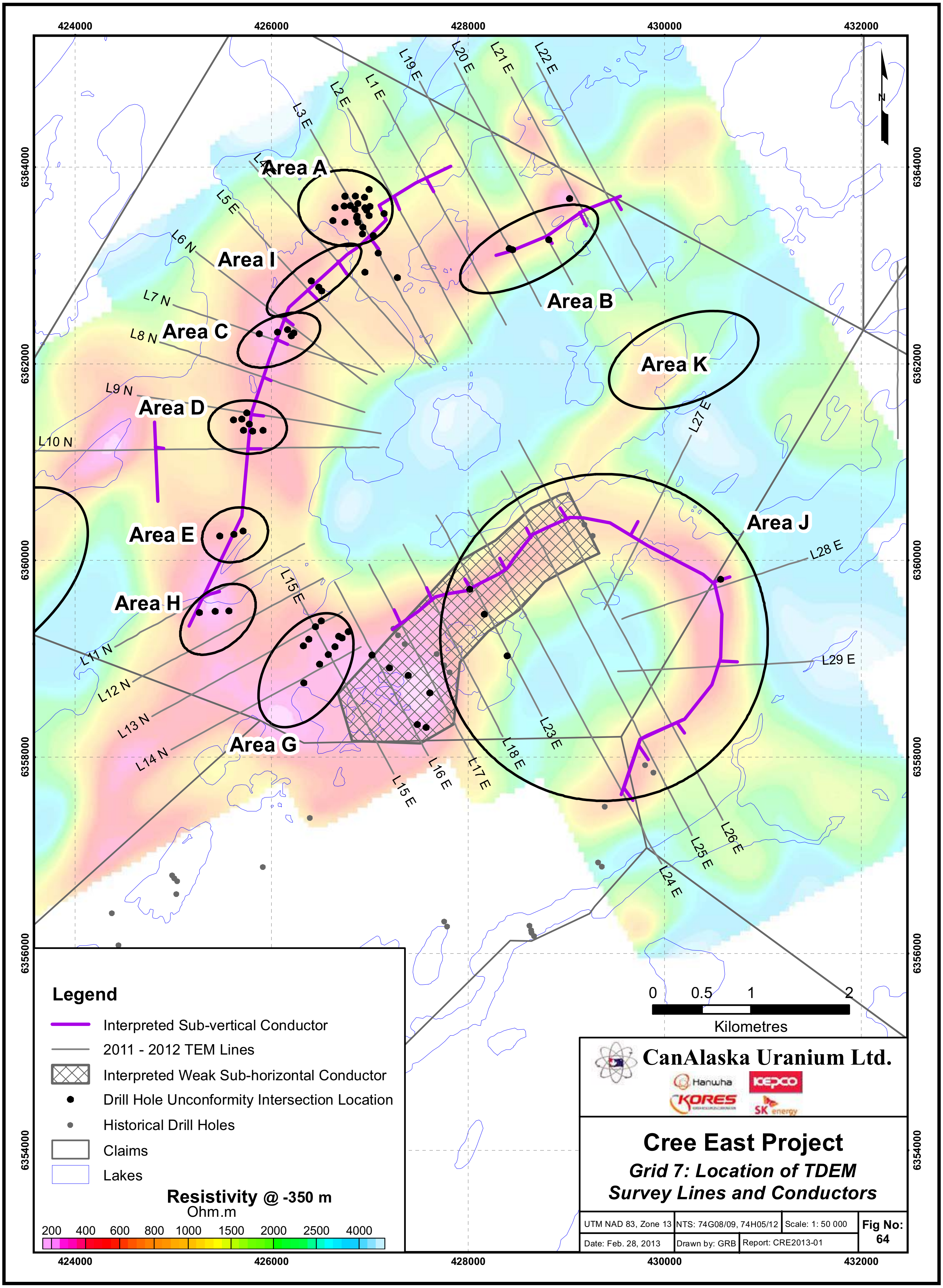
Grid 7 Resistivity Sections
Line 11000E and 12200E

		Scale:	Fig No: 63
Date: Feb. 28, 2013	Drawn by: GRB	Report: CRE2013-01	



424000
426000
428000
430000
432000
6364000
6362000
6360000
6358000
6356000
6354000
Area A
Area B
Area C
Area D
Area E
Area G
Area H
Area I
Area J
Area K
L1 E
L2 E
L3 E
L4
L5 E
L6 N
L7 N
L8 N
L9 N
L10 N
L11 N
L12 N
L13 N
L14 N
L15 E
L16 E
L17 E
L18 E
L19 E
L20 E
L21 E
L22 E
L23 E
L24 E
L25 E
L26 E
L27 E
L28 E
L29 E
N
0
0.5
1
2
Kilometres
Legend
Interpreted Sub-vertical Conductor
2011 - 2012 TEM Lines
Interpreted Weak Sub-horizontal Conductor
Drill Hole Unconformity Intersection Location
Historical Drill Holes
Claims
Lakes
Resistivity @ -350 m
Ohm.m
200
400
600
800
1000
1500
2000
2500
4000
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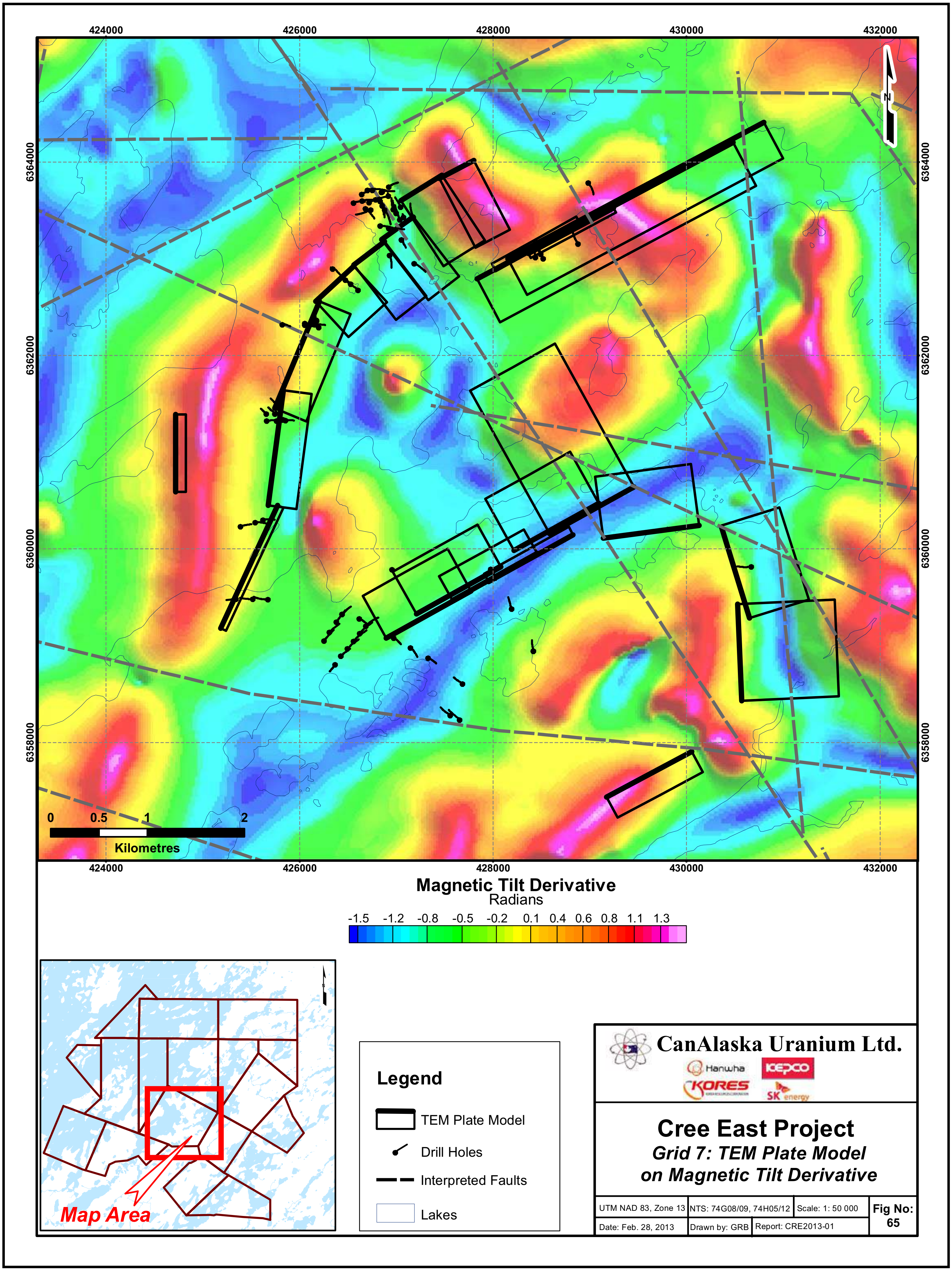
Hanwha
KEPCO
KORES
SK energy
Cree East Project
Grid 7: Location of TDEM Survey Lines and Conductors
UTM NAD 83, Zone 13
NTS: 74G08/09, 74H05/12
Scale: 1: 50 000
Fig No: 64
Date: Feb. 28, 2013
Drawn by: GRB
Report: CRE2013-01



424000
426000
428000
430000
432000
6364000
6362000
6360000
6358000
0
0.5
1
2
Kilometres
Magnetic Tilt Derivative
Radians
-1.5 -1.2 -0.8 -0.5 -0.2 0.1 0.4 0.6 0.8 1.1 1.3
Map Area
Legend
TEM Plate Model
Drill Holes
Interpreted Faults
Lakes
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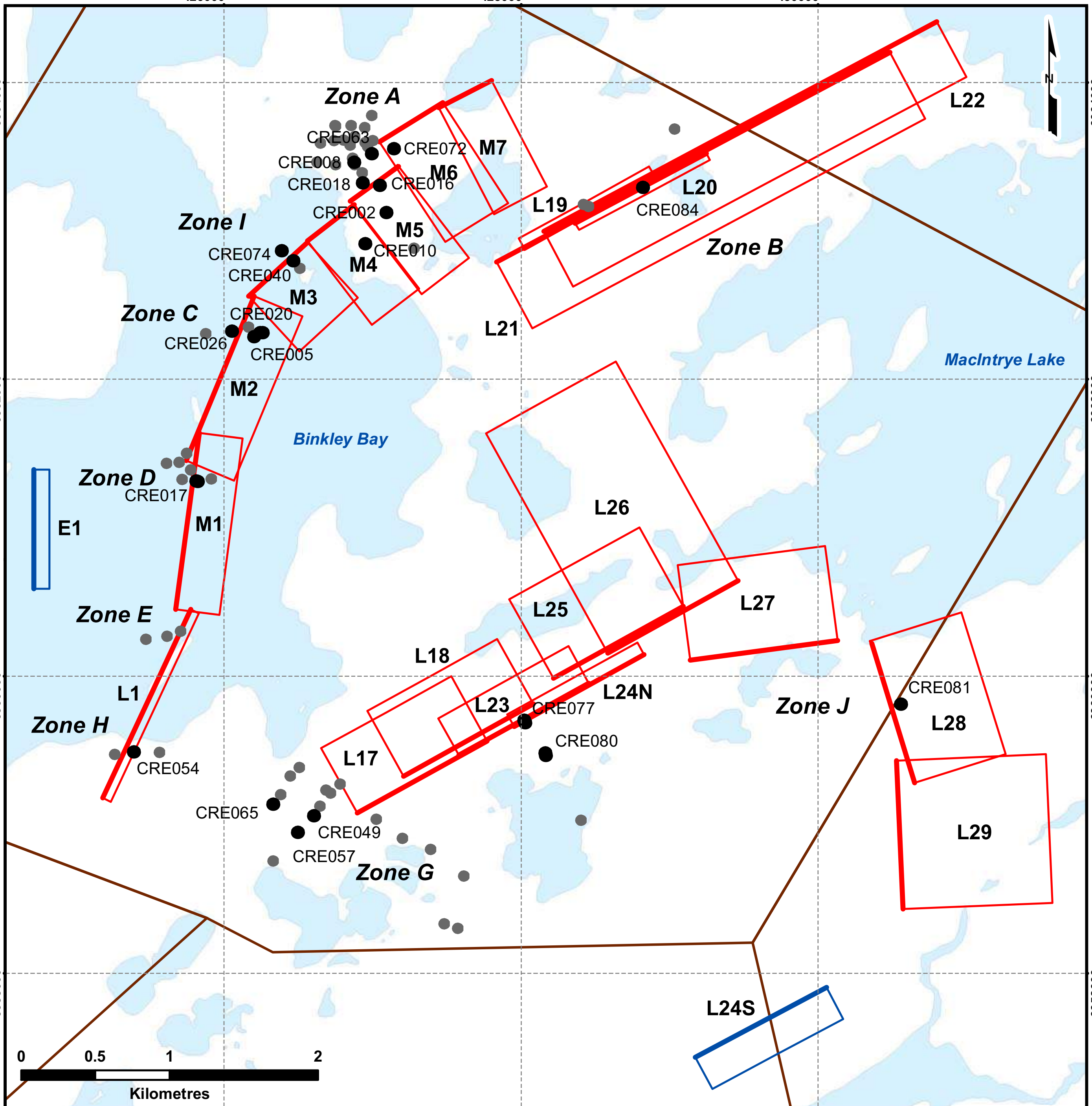
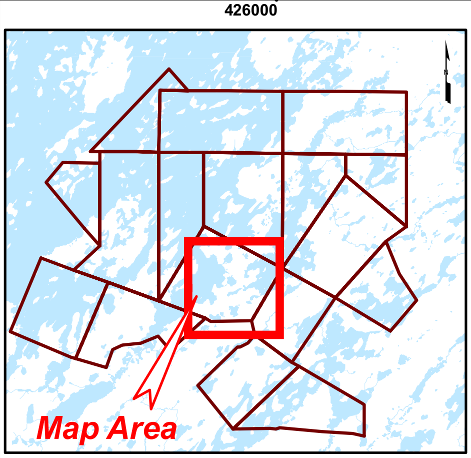
KEPCO
KORES
SK energy
Cree East Project
Grid 7: TEM Plate Model
on Magnetic Tilt Derivative
UTM NAD 83, Zone 13
NTS: 74G08/09, 74H05/12
Scale: 1: 50 000
Fig No:
65
Date: Feb. 28, 2013
Drawn by: GRB
Report: CRE2013-01





Legend

- Main Conductor
- Secondary Conductor
- Graphitic Pelite Intersection
- Unconformity Intersection
- Claims
- Lakes

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Grid 7: TEM Plate Models and Graphitic Pelite Intersections

UTM NAD 83, Zone 13	NTS: 74G08/09, 74H05/12	Scale: 1: 40 000	Fig No: 66
Date: Feb. 28, 2013	Drawn by: GRB	Report: CRE2013-01	

The fourth conductor, identified in the 2011 MLEM survey, is also relatively short. It lies west of Area D and trends northerly, sub-parallel to the main C7N conductor. It sits on the eastern flank of a small resistivity low, but has not been tested.

Two other target areas have been defined on Grid 7. Both are on resistivity lows, but lack associated steeply dipping MLEM conductors. Target Area G, which has been moderately thoroughly drilled (17 holes to date), lies at the junction of the northern and southern forks of the resistivity low pattern. Area K, which lies on a weak resistivity low on the southwestern shore of MacIntyre Lake, has not been drill-tested.

10 DRILLING

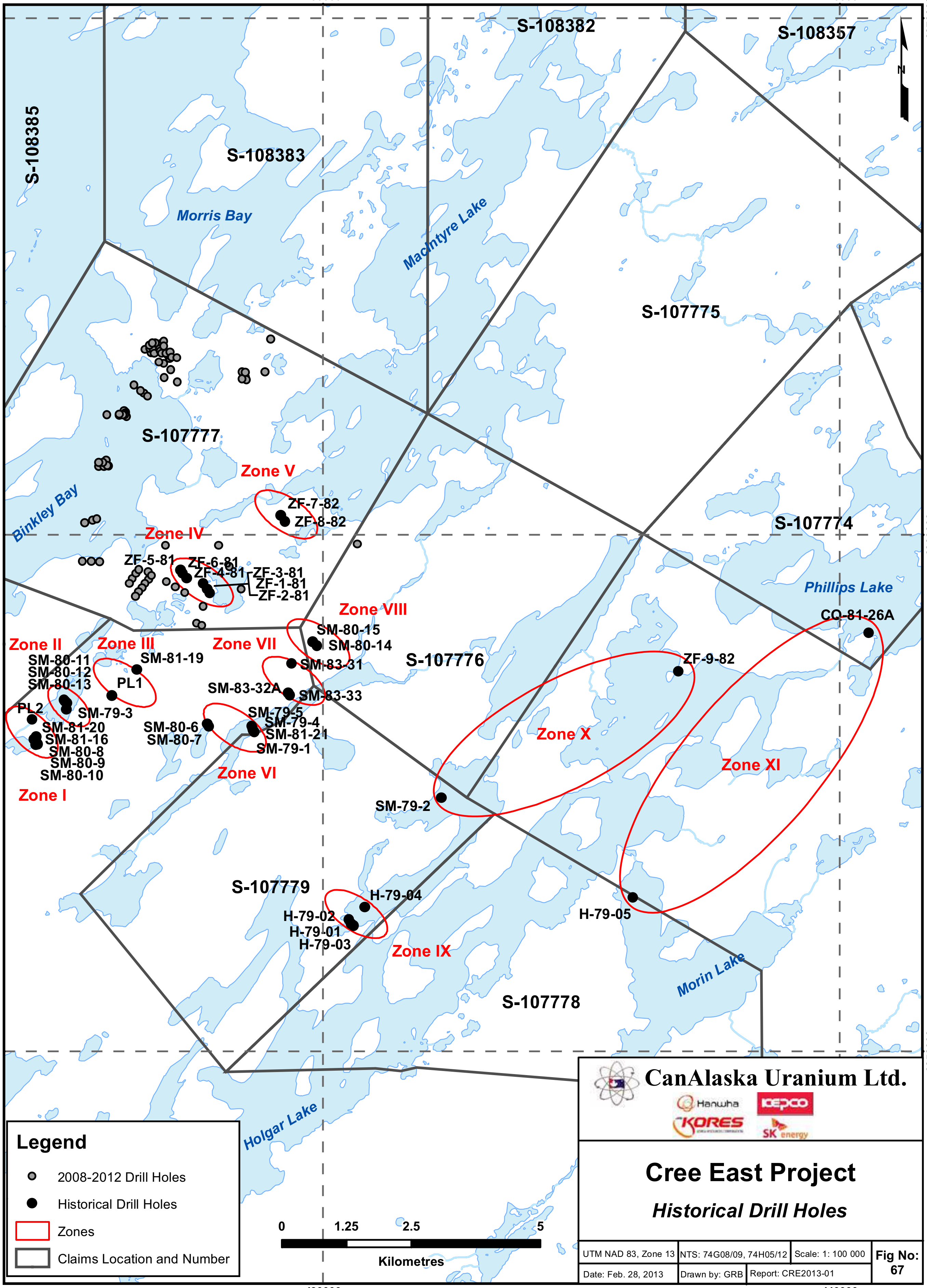
10.1 Historical Drilling (Prior to 2008)

Some 38 historical holes were drilled on 11 target zones in the Cree East area before CanAlaska began work in 2006. Of these, 17 holes on 4 major target zones are on the Cree East claims (Figure 67; Table 10-1). Except for ZF-9-82 on Denison Mines' Ford Lake property, the remaining holes (on target zones I to III, VI and VII) are all on Denison's Perpete Lake property. Zones I to V lie along a northeasterly trending series of small lakes, historically known as the "Chain of Lakes". Zones VI to VIII lie on a subparallel trend along Perpete Lake. Zone IX lies to the south, and zones X and XI to the east. Most of these historical holes were drilled on TDEM or VLEM targets.

Note that historical geochemical and clay alteration data are not directly comparable to current data. In the 1970s and 1980s, chlorite, illite, dravite and kaolinite in the sandstone were interpreted from analytical values for MgO, K2O Al2O3, B, etc. Trace metals, including U, AS, Pb, and Ni were commonly analysed by partial or total acid digestion 'wet chemical' methods.

10.1.1 Zone I (South "Chain of Lakes")

Of six holes drilled in this area, five were drilled by SMDC. SM-80-8, SM-80-9 and SM-80-10 were drilled to test a VLEM conductor, SM-81-16 and SM-81-20 were drilled to test a DEEPEM conductor, and PL2 was drilled by Uranium Power Corporation on a TEM conductor. Unconformity elevation ranges from 242 to 254 m ASL in this zone. Basement lithologies include semi-pelite, pelite, graphitic pelite, thick pegmatite and minor calc-silicate rocks. Graphitic pelite was found in all holes except SM-80-10. A suspected fault zone was intersected in the sandstone in all holes but SM-81-20 and PL2.



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Historical Drill Holes

UTM NAD 83, Zone 13	NTS: 74G08/09, 74H05/12	Scale: 1: 100 000	Fig No: 67
Date: Feb. 28, 2013	Drawn by: GRB	Report: CRE2013-01	

Table 10-1 - Historic Drill Holes in the Cree East Area

Hole	Zone	Easting	Northing	El. (m)	EOH (m)	UC (m ASL)	OB (m)	Sst (m)	Bsmt (m)	Basement Lithology & Structures	U (ppm)
PL2	I	424378	6356415	495	332	241.9	24.6	228.5	78.9	Bi gneiss, gr bi gneiss, calc-silicate	<1.7 in Sst
SM80-8	I	424469	6355966	496	282.2	252.9	24.4	218.7	39.1	Gr bi gneiss, calc-silicate; Sst fault zone	<25 in Bsmt
SM80-9	I	424481	6355945	496	288.3	253.7	21.6	220.7	46	Bi gneiss, amphibolite breccia; Sst fault zones	<17 in Bsmt
SM81-16	I	424412	6356038	496	281.6	245.8	26.8	223.4	31.4	Bi gneiss, gr bi gneiss, granite gneiss	<10 in Bsmt
SM81-20	I	424448	6356091	496	300.8	242.1	25.3	228.6	46.9	Bi gneiss, gr bi gneiss	<214 in Bsmt
SM80-11	II	425044	6356741	495	291.4	241.3	18.3	235.4	37.7	Bi gneiss, gr bi gneiss	<19 in Bsmt
SM80-12	II	425013	6356771	495	285.3	241.7	20.1	233.2	32	Bi gneiss, gr bi gneiss	<9 at UC
SM80-13	II	424992	6356802	495	263.9	244.6	20.4	230	13.5	Meta-arkose, sericite schist; UC fracture zone	<7 at UC
PL1	III	425917	6356886	505	356	236.9	12.3	255.8	87.9	Gr bi gneiss, bi gneiss; Sst fracture zones, Bsmt shear zone	<0.8 in Sst
SM81-19	III	426396	6357383	500	279.5	251	15.9	233.1	30.5	Bi gneiss, amphibolite	No report
ZF81-1	IV	427763	6358941	497	350	217.8	19.6	259.6	70.8	Bi gneiss, gr bi gneiss; Sst & Bsmt fracture zones, Bsmt fault zone	<62 at UC
ZF81-2	IV	427815	6358866	499	320	221.1	16.4	261.5	42.1	Bi gneiss, gr bi gneiss; Sst & Bsmt fracture zones, Bsmt shear zones	<17 at UC
ZF81-3	IV	427687	6359052	500	330	217.8	16.5	265.7	48.3	Bi gneiss, gr bi gneiss; Sst & Bsmt fracture zones	<34 at UC
ZF81-4	IV	427292	6359244	505	355	196.4	20.15	288.45	46.4	Gr bi gneiss; Sst fracture zones	<9 at UC
ZF81-5	IV	427245	6359313	505	344	188.8	20	296.2	27.8	Gr bi gneiss; Sst fracture zone; Bsmt shear zones	<8 at UC
ZF81-6	IV	427361	3359156	505	329	213.9	21.7	269.5	37.9	Gr bi gneiss, gr gt bi gneiss, amphibolite; Bsmt breccia zone	<70 in Bsmt
ZF82-7	V	429188	6360369	489	392	133.6	27.6	327.8	36.6	Gr bi gneiss; Sst fracture zones	<6 at UC
ZF82-8	V	429272	6360256	496	398	138.3	27.7	330	40.3	Gr bi gneiss; Sst & Bsmt fracture zones	<16 at UC
SM79-1	VI	428652	6356216	505	282.5	253.6	10.7	240.7	30.2	Meta-arkose, amphibolite; Bsmt fault zones	<169 at UC

SM79-4	VI	428647	6356242	500	275.5	254.5	8.5	237.0	30	Amphibolite, bi hb gneiss; Sst & Bsmt fracture zones	<98 at UC
SM80-6	VI	427760	6356329	521	291.7	273.9	19.5	227.7	44.5	Bi gneiss, amphibolite	<18 at UC
SM80-7	VI	427793	6356279	518	281.3	278.6	18.3	221.1	41.9	Amphibolite	<13 at UC
SM81-21	VI	428678	6356182	505	302.7	247.8	19.5	237.7	45.5	Bi gneiss, amphibolite, quartzite; Bsmt fault & shear zones	<6 in Bsmt
SM79-5	VII	428631	6356287	500	282.5	252.8	16.8	230.4	35.4	Amphibolite; Bsmt fault zone	<29 at UC
SM83-31	VII	429397	6357499	520	352	214.6	18	287.4	46.6	Gr bi gneiss	<17 at UC
SM83-33	VII	429367	6356891	520	350	221.6	27	271.4	51.6	Amphibolite ; Sst fracture zone, Bsmt fault & fracture zones	<7 at UC
SM80-14	VIII	429891	6357845	530	321.9	233.4	15.2	281.4	25.2	Bi gneiss, amphibolite; Sst fracture zone	<13 at UC
SM80-15	VIII	429808	6357924	530	328.0	231.7	15.5	282.8	29.7	Bi gneiss; Sst fracture zone	<10 at UC
SM83-32A	VII	429328	6356930	520	352	220.8	23	276.2	52.8	Bi gneiss, calc-silicate, gr bi gneiss; Sst fracture zone	<22 at UC
H79-01	IX	430550	6352464	507	209.8	319.5	31.7	155.9	22.3	Meta-arkose	No report
H79-02	IX	430510	6352546	507	209.4	317.7	32	157.3	20.1	Meta-arkose	No report
H79-03	IX	430597	6352430	507	197.2	319.4	28.3	159.3	9.6	Meta-arkose	No report
H79-04	IX	430814	6352780	507	31.7		31.7			Hole lost in OB	No report
SM80-10	IX	424446	6355938	495	273.1	249.6	23.5	221.9	27.6	Meta-arkose; Sst fault zone; Bsmt fracture zone	<32 in Bsmt
SM80-10	X	432299	6354905	509	266.4	249.4	18.3	241.3	6.8	Meta-arkose	No report
ZF82-9	X	436887	6357353	510	361	193.1	30.3	286.6	44.1	Meta-arkose, pelite	<20 in Bsmt
CQ81-26A	XI	440567	6358092	510	422.5	160.1	30	319.9	72.6	Meta-arkose, pelite, gr pelite, granite gneiss	<3 in Sst
H79-05	XI	436005	6352974	509	272.2	246.9	26.5	235.6	10.1	Meta-arkose	No report

The paleo-weathered zone ranges from 7 to 31 m thick, and has been modified in all holes by moderate to strong bleaching, hematization and chloritization. Dravite is locally common in sandstone in SM-80-8 and as trace occurrences in SM-80-9, SM-81-20 and PL2 close to the unconformity. Hematized pelite in SM-81-20 ran 214 ppm U over 0.6 m with elevated copper. Boron is also slightly enriched in sandstone immediately above the unconformity.

10.1.2 Zone II (Central "Chain of Lakes")

SMDC drilled four holes in this area, but SM-79-3, drilled to test a VLF conductor, was lost in sandstone. SM-80-11, SM-80-12 and SM-80-13 were drilled as a fence across a VLEM conductor. Unconformity elevation ranges from 241 to 245 m ASL. The dominant basement lithologies in SM-80-11 and -12 are pelite and graphitic pelite, whereas in SM-80-13 meta-arkose predominates and no graphitc pelite was intersected. The rocks are relatively little fractured. Strong illite and moderate chlorite, along with dravite were reported in all holes. The best uranium interception in this zone was 19 ppm U in the basement of SM-80-11, but elevated uranium is associated with the unconformity in all holes.

10.1.3 Zone III (North "Chain-of-Lakes")

Two holes were drilled in this zone, on Denison's Perpete Lake property. SMDC drilled SM-81-19 to test a coincident VLEM and DEEPEM conductor. Uranium Power Corporation drilled PL1 on a TEM conductor.

The unconformity elevation in SM-81-19 is 251 m ASL, and basement lithologies include biotite gneiss and amphibolite, but no graphitic pelite. The lowermost 10 m of SM-81-19 are strongly fractured, with intense clay alteration. The sandstone includes a 100 m interval of weak chloritic alteration. The predominant clay in this hole is kaolinite, but dravite occurs in lowermost 12 m of sandstone.

In PL1, the unconformity elevation is 237 m ASL and basement lithologies include pelite, graphitic pelite and minor leucosome. Sandstone in PL1 is fractured and moderately bleached and chloritized just above the unconformity. No significant uranium concentrations were found in either hole.

10.1.4 Zone IV (Southeast Binkley Bay)

Zone IV lies in the southern part of claim S-107777, within a kilometer of Binkley Bay and at the northern end of the "Chain of Lakes". AGIP Canada drilled six holes in this area to test coincident INPUT-EM, ground EM, VLF, gravity and magnetotelluric targets.

The unconformity elevation in the eastern series of holes, ZF-1-81 to ZF-3-81, ranges from 218 to 221 m ASL. All three intersected biotite gneiss and graphitic biotite gneiss. ZF-3-81 had up to 50% graphite over 20 m. All three holes had sandstone and basement fracture zones.

The unconformity elevation in the western series of holes, ZF-4-81 to ZF-6-81, ranges from 189 to 214 m ASL. These holes also intersected graphitic biotite gneiss, with graphitic garnet gneiss and amphibolite in ZF-6-81. These holes are much less fractured than the eastern ones, although a basement shear is reported in ZF-5-81 and brecciated amphibolite in ZF-6-81. A 25 m offset on the unconformity over 110 m between ZF-5-81 and ZF-6-81, suggests a fault.

Weak to moderate bleaching, low element concentrations and a normal clay mineral assemblage in the Zone IV sandstones suggest normal diagenetic alteration for the Manitou Falls Formation in this area. Chlorite occurs irregularly throughout the sandstone and is most intense immediately above the unconformity in ZF-5-81 and DDH ZF-6-81.

The most notable uranium intersection was 62 ppm U over 0.5 m at the unconformity in ZF-1-81. Uranium was elevated, from 8 to 34 ppm, at the unconformity in other holes in this zone.

10.1.5 Zone V (South McIntyre Lake)

This zone, described as Northeast Binkley Bay in the 2009 drill report, lies just south of McIntyre Lake. Two holes, ZF-7-82 and ZF-8-82 were drilled here by AGIP Canada. Both targeted coincident INPUT-EM PEM; magnetometer, VLF-EM, gravity and Magneto-telluric targets.

The unconformity elevation ranges from 134 m (ZF-7-82) to 138 m ASL (ZF-8-82). Graphitic biotite gneiss was encountered in basement in both holes. Sandstone fractures were identified in both holes, and basement fracture zones in ZF-8-82.

Moderate chloritization and weak hematization occur in the sandstone of these two holes. ZF-8-82 intersected a shallow conductor caused by 100 m of friable and fractured sandstone (similar to CRE001 and CRE002). Pyrite occurs along fractures in both holes. Boron is weakly enriched in ZF-8-82 immediately above the unconformity (up to 670 ppm). Uranium is enriched at the unconformity; up to 16 ppm in ZF-8-82.

10.1.6 Zone VI (South Perpete Lake)

Zone VI, where SMDC drilled six holes, lies toward the southwestern end of Perpete Lake. SM-80-6 and SM-80-7 were drilled to test a high frequency VLEM conductor. SM-79-1, SM-79-4 and SM-79-5 were drilled as a fence across a coincident VLF and high frequency HLEM conductor. SM-81-21 was drilled on the same fence to test for uranium enrichment to the east of SM-79-I.

Unconformity elevation ranges from 279 m ASL (SM-80-7) to 248 m (SM-81-21). Biotite gneiss and amphibolite (calc-silicate?) are the main basement rocks, with meta-arkose in SM-79-1 and quartzite in SM-81-21. Basement fault and shear zones are reported in SM-79-1, SM-79-5 and SM-82-21 and fractures zones in SM-79-4. Breccia is reported in SM-80-7. Offsets on the unconformity surface between holes are probably due to faulting.

The upper sandstone column is background illite/dickite, but the basal sandstone typically has weak chloritization with weak bleaching, friability and hematization. Dravite is associated with the unconformity in SM-79-1 and SM-81-21.

All cores showed uranium enrichment at the unconformity, with the best results, 169 ppm U in SM-79-1, with elevated V, Cr, Cu and Zn, and 98 ppm U in SM-79-4.

10.1.7 Zone VII (Central Perpete Lake)

Zone VII lies at the eastern end of Denison's Perpete Lake property. SMDC drilled three holes, SM-83-31, SM-83-32A and SM-83-33, to test interpreted fault zones over a magnetic low.

Unconformity elevation ranges from 222 m to 215 m ASL. The basement rocks in SM-83-31 are graphitic biotite gneiss, in SM-83-32A, biotite gneiss, graphitic biotite gneiss and calc-silicate, and in SM-83-33, amphibolite (calc-silicate?). Basement faults are reported in SM-83-33.

The basal sandstone is weakly hematized and shows boron enrichment up to 1200 ppm. Uranium is somewhat elevated at the unconformity in all three holes, up to 22 ppm in SM-83-32A.

10.1.8 Zone VIII (North Perpete Lake)

SMDC drilled two holes, SM-80-14 and SM-80-15, at the north end of Perpete Lake to test a VLEM conductor.

In SM-80-14, the unconformity elevation is 233 m ASL, and the main basement rocks are biotite gneiss and amphibolite (calc-silicate?). In SM-80-15, the unconformity elevation is 232 m, and the main basement lithology is biotite gneiss. Minor fracturing occurs in the sandstone. Chloritic alteration was noted in SM-80-14 and dravite near the unconformity in SM-80-15.

10.1.9 Zone IX (Northwest Holgar Lake)

Zone IX lies on the northwest side of Holgar lake on claim S107779. SMDC drilled four holes here, but one was lost in sandstone.

Four holes were drilled by SMDC in this area: H-79-1 to H-79-4 in western area of Holgar Lake. H-79-4 was lost in overburden. There is little relief on the unconformity, whose elevation ranges from 318 to 319 m ASL. Meta-arkose is the dominant basement rock; no graphitic rocks were found. No structures were described and no alteration or mineralization was reported.

10.1.10 Zone X (West Holgar Lake)

Two isolated holes about 2.5 km apart on the northwest shore of Holgar Lake have been grouped as Zone X. SMDC drilled SM-79-2 on the western shore of Holgar Lake to test a weak coincident HLEM and VLEM conductor and AGIP Canada drilled ZF-9-82 at the north end of Holgar Lake.

The unconformity elevation in SM-79-2 is 249 m, and the main basement rock is meta-arkose. The unconformity elevation in ZF-9-82 is 193 m, and the basement lithologies are meta-arkose and pelite.

No structures are reported in either core. In ZF-9-82, the clay mineral assemblage shows both illite and chlorite anomalies in the sandstone, but the strongest anomalies occur immediately above the unconformity. Pyrite occurs in sandstone fractures. Weak uranium enrichment (< 20 ppm) occurs in the basement..

10.1.11 Zone XI (East Holgar Lake)

Another two isolated holes about 3.5 km apart east and north of Holgar Lake have been grouped into Zone XI. H-79-5, in the northwest arm of Morin Lake, was drilled by SMDC and CQ-81-26A, on the south shore of Phillips Lake, was drilled by Denison Mines.

In H-79-5, unconformity elevation is 247 m ASL, and the main basement rock is meta-arkose. In CQ-81-26A, the unconformity elevation is 160 m ASL, and the main basement rocks are meta-arkose, pelite, graphitic pelite and granite gneiss. No structure, alteration or mineralization appears to have been encountered in these holes.

10.2 CanAlaska Drilling (2008 to 2012)

Between 2008 and 2012, CanAlaska Uranium Ltd. conducted seven drill campaigns on the Cree East property, comprising 91 holes for a total of 34,473.2 m (Figure 11). Of these, 18 holes were abandoned before reaching their target depth, mainly due to difficult ground conditions. Drilling is outlined on a season-by-season basis below and summarized in a table in Appendix 1. . Representative cross sections for each of the main target areas are shown in section 7.4 (Grid 7 Geology).

10.2.1 Winter 2008 Drilling (CRE001 to CRE007)

The initial drill program on the property included 7 holes totalling 1,470.2m (Schimann, 2008) all on Grid 7. Targets were basement VTEM conductors overlain by sandstone resistivity lows. The basement conductors are commonly manifestations of graphitic pelites or fault zones, whereas the IP-Resistivity lows commonly result from alteration and fracturing associated with hydrothermal mineralizing fluids potentially associated with uranium mineralization. Two holes were drilled on land at Target Area A and five on the ice of Binkley Bay at Target Area C. No mineralization was found

Area A: CRE001 and CRE002 were drilled at Target Area A. CRE001 was abandoned in sandstone due to difficult ground conditions. CRE002 penetrated the unconformity to encounter graphitic and pyritic pelite.

Area C: CRE003, CRE004, CRE005, CRE006 and CRE007 were drilled at Target Area C. Because of difficult drilling conditions, only CRE005 and CRE007 were completed to their planned depth. Graphitic and pyritic pelite was encountered in CRE005; locally graphitic mylonitic pelite was found in CRE007. The Read Formation was interpreted to to be absent in CRE005, suggesting it lies on a local paleotopographic high.

Deep regolithic alteration was encountered in the three drill holes that penetrated basement. This testifies to structural preparation of the area. The clay spectrometry shows chlorite and kaolinite in most holes in Area C; with chlorite and phengite in CRE025. Petrographic studies confirm macroscopic observations, describing hydrothermal alteration minerals in both CRE002 and CRE007 down to near the end of the holes. The chemistry is also anomalous, both in the sandstone and in the basement, but not strongly so. No mineralization was encountered.

The zones of fractured and altered sandstone which hampered the drilling, as well as similar zones in the completed drill-holes, are geochemically and mineralogically anomalous and typical of alteration zones observed around unconformity deposits in other areas of the Athabasca Basin.

Drilling confirmed the in-sandstone low-resistivity zones mapped by ground IP-Resistivity and the basement conductors mapped by airborne and ground EM surveys. Stratigraphic offsets observed at target area C indicate pre- to post-Athabasca faulting. This faulting may extend to target area A. Such faulting is commonly associated with Athabasca uranium deposits.

Further drilling was recommended for targets A and C, and the other geophysical targets, as well as additional, more detailed, geophysics to map structures in the sandstones in the vicinity of the defined targets.

10.2.2 Summer 2008 Drilling (CRE008 to CRE12)

Five holes, totaling 2,619.8 m, were drilled in the summer of 2008 (Schimann et al., 2008). No significant mineralization was reported. As in the winter 2008 drilling, drill targets were typically basement conductors overlain by sandstone resistivity lows.

Area A: CRE008, CRE009, CRE010 and CRE012 were drilled at Target Area A, following up CRE002. An isolated hole, CRE011 was drilled south of Morris Bay and 2 km east of Area A. All holes penetrated the unconformity. Graphitic pelite was encountered in all but CRE011 and CRE012, along with associated pelite, semipelite, calcsilicate rock, amphibolite and pegmatite. Moderate to strong sandstone alteration was reported in CRE009 and CRE010. Strong basement alteration and fracturing was found in CRE008, CRE010 and CRE012.

Stratigraphic offsets among the 2008 holes suggest much faulting. Most of the interpreted faults offset the MFb/MFc contact as much as the unconformity, indicating the faults post-date deposition of the MFb member. The dominant faults appear to trend north-northwest, parallel to the axis of the main conductor and resistivity anomaly.

The drill-core showed geochemical enrichment in uranium and other elements both in the basement and in the sandstone in addition to hydrothermal alteration. Boron is distinctly anomalous in the top sandstone of all drill-holes, compared to the results of the regional sandstone boulder sampling in this area.

Although no mineralization was encountered, the structural complexity, abundant alteration and local geochemical enrichments were encouraging. More detailed resistivity surveys were suggested to better define conductive features and understand the relation between the basement-hosted and the sandstone-hosted conductors.

10.2.3 Winter 2009 Drilling (CRE013 to CRE028)

The winter 2009 drill programme included 16 holes, for a total of 6,747 m (Smart et al., 2009). All but CRE022, abandoned in sandstone, penetrated the unconformity. Five holes were drilled in Target Area A, four in Area C, four in Area D and three in Area E.

Area A: CRE013, CRE015, CRE016, CRE018 and CRE028 were drilled on Target Area A ('Fence A & B' in the drill report) to follow up encouraging results in 2008. Graphitic pelite and pelite was encountered in CRE016 and CRE018, whereas the other holes had pelite +/- quartzite, calc-silicate or meta-arkose. Chlorite alteration was noted in the basal sandstones of all but CRE028. Structural observations confirmed the presence of two fault systems characterized by intense basement fracturing, brecciation and alteration. The main one trends north-northwesterly and is downthrown to the east. The other trends east-northeasterly and is downthrown to the north.

Area C: CRE020, CRE022, CRE025 and CRE026 were drilled in Target Area C to test the extent of strong alteration found in 2008 drilling. As noted above, CRE022 was abandoned at 88.4 m in strongly fractured sandstone. Graphitic pelite was reported in CRE020 and CRE026. Other lithologies included pelite, amphibolite, banded iron-formation, quartzite and pegmatite. The basal sandstone is weakly chloritized in all completed holes and CRE025 has significant dravite in the last 40 m of sandstone. Offsets on the unconformity and sandstone contacts are smallest in an easterly direction and greatest in a northerly direction. A significant fault zone must be present, but its orientation is uncertain.

Area D: CRE014, CRE017, CRE019 and CRE027 were drilled on previously untested Target Area D, a northerly trending resistivity low associated with a basement conductor. Graphitic pelite was only found in CRE017. Other lithologies included pelite, semipelite, quartzite, amphibolite and pegmatite. Dravite alteration occurs in the basal sandstone of CRE014. Vuggy silicification was reported in the upper sandstone of CRE027 and in basement in CRE014. CRE014 had a 15 metre zone of intense fracturing in the basement. Stratigraphic offsets suggest that faults cut the area, but their orientation is uncertain. Although none of the holes showed significant hydrothermal alteration, all had geochemical enrichment, particularly high B in CRE027. CRE017 is mineralized in the basal sandstone (1.6 m at 0.01% U3O8 from 255.2 to 256.9m) and also has elevated Ni, As, V and B.

Area E: CRE021, CRE023 and CRE024 were drilled at Target Area E, a previously untested sandstone chargeability anomaly. Graphitic pelite was reported in CRE024. Other basement lithologies included pelite, calcsilicate rocks and pegmatite. Moderate chloritization occurs in the basal sandstone of CRE023. Stratigraphic offsets are relatively minor, suggesting little fault offset.

Most of the holes drilled in 2009 showed some positive features in terms of alteration, structure or geochemical enrichment. None of the drill holes is mineralized, but CRE017 (area D) has a 1.6 metre section of 0.01 % U3O8. In terms of structure, alteration and geochemical enrichment, the most encouraging drill results were obtained from Target Area A. Areas C and D showed good structural features accompanied by alteration and geochemical enrichment. Target Area E showed the fewest encouraging features.

Further exploration work was recommended, including airborne surveys, to better understand the basement geology and guide drill targeting. Extension of the Grid 7 DC-resistivity survey is also recommended. Further drilling should include new targets in grid 7, 6, and 5, making use of the new geophysical surveys and the data from historical drill holes, as well as continuation of the testing of the major structural intersection at Target Area A.

10.2.4 Winter 2010 Drilling (CRE029-CRE043)

The 2010 winter drill program comprised 15 holes for a total of 6,139 m (Smart et al., 2010). Fourteen of the holes were completed to their target depth. Six holes were drilled in Area A, three in Area D, four in Area G, and two holes were drilled in Area I.

Area A: CRE031, CRE032, CRE035, CRE037, CRE038 and CRE041 were drilled in Area A to follow up 2008 and 2009 drill results. CRE031 was abandoned in overburden and the drill moved 6 m to CRE032. No graphitic pelite was intersected. Other basement lithologies were pelite, semipelite, psammite, quartzite, augen gneiss and pegmatite.

CRE032 has a zone of perched uranium enrichment (up to 42 ppm) with associated As and rare earths. CRE035 has strongly fractured and hematised basement from 428 to 444 m, and is mineralized (0.5 m at 0.08% U3O8 from 430.55 to 431.05 m). No major alteration of structures wre reported in other drill holes. Drilling to date suggests that Area A is cut by a north-northwesterly trending fault, cross-cut by a series of east-northeasterly structures. Anomalous uranium enrichment, associated with La, was intersected in CRE037 about 140 m above the unconformity.

Area D: CRE034, CRE036 and CRE039 were drilled in Area D to follow up results of four holes drilled previously. Pelite was reported in all three holes, along with semipelite in CRE033. Only weak alteration was fund in the sandstone. Strong hematite and chlorite alteration occurs in the basement but the mineralization found in CRE017 was not extended.

Area G: CRE029, CRE030, CRE033 and CRE043 were drilled in Area G, a previously untested target area. Graphitic and pyritic pelite was reported in CRE029, CRE030 and CRE043, along with pelite and semipelite also reported in CRE033. No strong alteration was reported. CRE043, located west of the other three holes, intersected the best graphitic interval and is mineralized in the basement (3.1m @ 0.013% U3O8).

Area I: CRE040 and CRE042 were drilled at Area I, a previously untested resistivity low. Pelite and semipelite was reported in the basement. Minor chlorite alteration occurs in the sandstone. The presence of tectonically rotated blocks within the sandstone is of particular significance, as these are typical of faults associated with mineralization in the basin. A mineralized interval 1.5 m above the unconformity in CRE040 ran 0.09% U3O8 over 1.4 m, with anomalous values of Ni, Co, As and V. Area I appears to have many of the features of Area C south of it.

A ground TDEM survey was recommended in Area G to better define basement structure. Follow-up drilling was recommended on Area A to test for mineralization associated with interpreted fault structures, at Area I to test the extent of alteration and mineralization in CRE040, and at Area G to test the extent of alteration and mineralization in CRE043.

10.2.5 Summer 2010 Drilling (CRE044 to CRE069)

The 2010 summer drilling program included 27 holes, for a total of 10,060.5 m (Dasler et al. (2010). All but 4 holes were completed to their target depth. Eight holes were drilled in Area A, fourteen holes in Area G, and three holes in Area H, with a short hole in camp for future water supply.

Area A: At Area A, two new fences were drilled and an additional hole added to an existing fence.

Fence CRE044-CRE046-CRE048 was drilled to define a N70E fault interpreted to offset the unconformity between CRE008 and CRE018. Although pelite, semipelite, marble and calc-silicate were the dominant basement lithologies, CRE048 had significant graphitic pelite. A distinctive clay mineralogy pattern of Mg chlorite/illite at the top and bottom of the sandstone, separated by dickite/illite, previously recognized in CRE008, CRE009, CRE035 and CRE037, was found in CRE044 and CRE046. CRE048 lacked this pattern, but did intersect sudoite alteration from 150 to 186 metres. Basement alteration was strongest in CRE044, which had deep zones of moderate chlorite and weak hematite alteration. CRE044 and CRE046 both intersected fault intervals in the sandstone, including a 31.6 m offset of the unconformity on a southeasterly dipping reverse fault indicated by repetition of basement rock in CRE044. CRE044 also had fault breccia zones in the basement. Sooty pyrite and vuggy quartz was encountered in CRE044, CRE046 and CRE048.

Fence CRE068-CRE067-CRE063-CRE069 was drilled to find the eastern extension of the N70E fault intersected by the CRE044-CRE046-CRE048 fence. Basement lithologies include pelite, semipelite, marble and calcsilicate rocks. Sandstone alteration includes strong bleaching and silicification, and hematization on fractures.

The sandstone clay alteration pattern in this fence is complex but fairly consistent from hole to hole. A dickite/illite mixture occurs in the top third of the sandstone. Below this is a zone of Mg-chlorite and illite (with dravite in CRE063). Below this is typically a zone of sudoite or sudoite/illite, over a strongly illitic zone and kaolinite/Mg-chlorite in CRE067 and CRE068. Kaolinite is predominant in the lower third of the sandstone in all holes, with sudoite above the unconformity in CRE067. Zones of hematite or chlorite alteration in the basement are common in all holes. Sooty pyrite and vuggy quartz was encountered in CRE063 and CRE067. Intense fracturing and fault zones are common in the sandstones in all four holes. All but CRE068 had numerous fault zones in the basement as well. As in earlier drilling at Area A, major offsets were observed on the unconformity between holes. CRE063 had five mineralized intersections, the best of which is 0.05% U3O8 over 0.5 m in graphitic semipelite. CRE067 had two mineralized intersections, the best of which is 0.14% U3O8 over 0.3 m from 448.6 to 448.9 m. Elevated Cu, Pb, Zn, Co, Mn and As are associated with the mineralized intersections.

CRE050 was drilled to extend alteration and mineralization on a fence drilled earlier, but was abandoned at 79.7 m in sandstone due to an approaching forest fire.

Area G: At Area G three new fences were drilled perpendicular to the NW-SE fence drilled in winter 2010.

Fence CRE051-CRE045-CRE047-CRE049-CRE056/57 was drilled to test the extent of alteration and mineralization in a previous hole, CRE043. CRE056 was abandoned at 112 m in sandstone. All the completed holes had pelite and semipelite and the northern three holes had arkose and quartzite. Minor graphitic pelite was found in CRE049 and CRE057. Silicification occurs locally in the sandstone and it is typically moderately bleached above the unconformity. The basement rocks show moderate hematite alteration and weak chlorite alteration. Clay alteration along this fence varies from the north to the south. CRE051 and CRE045 show kaolinite, illite and phengite throughout the basement. In drill hole CRE047 sudoite dominates as the main basement clay assemblage down to 400 m. Following this is mainly illite with sporadic kaolinite and chlorite throughout. Dravite occurs at 438m. Drill hole CRE049 also encountered sudoite down to 395 m. The remainder of the basement is illite, chlorite and kaolinite. The clay assemblage in drill hole CRE057 consists of illite, chlorite, phengite and kaolinite throughout. Sudoite was intersected from 331 to 339 metres. Breccia or fault zones and numerous fractures were found in CRE051, CRE045 and CRE057. Offsets on the unconformity between holes suggest local faulting. CRE047, CRE049 and CRE057 each had several weakly mineralized intersections, all in basement. The best one was 0.03% U3O8 over 0.4 m in CRE057.

Fence CRE061-053-052-065 was drilled 250 m to the west of CRE051-CRE045-CRE047-CRE049-CRE056/57 to test for the extension of alteration and mineralization associated with a coincident resistivity low and basement EM conductor. Like CRE051 and CRE045, the northern holes on the adjacent fence, CRE061 has arkose in the basement. The southern holes have calc-silicate and marble. All have pelite and semipelite. The sandstones have local bleaching, hematization and silicification. The basement rocks have local chlorite and hematite alteration. All holes have multiple fault and fracture zones. No mineralization was intersected on this fence.

Fence CRE060-CRE062-CRE064 was drilled at the southeastern part of Area G to test a resistivity low over a strong basement conductor. The basement lithology in CRE060 and CRE062 is pelite, semipelite and arkose, with local graphitic pelite in CRE060. Minor hematite alteration was reported in CRE060, and chlorite alteration in CRE062. Kaolinite is the dominant basement clay with subordinate chlorite and local illite and sudoite. Minor bleaching and silicification was reported in the sandstones. The sandstone clay assemblage is low in illite. A fault zone was reported in sandstone in CRE064, but except for minor gouge zones in CRE060, no structures were seen in the other holes. No mineralization was reported.

Area H: Fence CRE055-CRE054-CRE058 was drilled on a previously untested sandstone resistivity low over a basement conductor at Area H. Basement lithologies varied from hole to hole. CRE055 has only impure quartzite; CRE054 has pelite, semipelite and graphitic semipelite; CRE058 has Fe-rich pelite and semipelite. With moderate to strong hematite above chlorite alteration, CRE054 has the strongest basement alteration. Sandstone was locally friable, bleached, silicified or hematite altered. The only significant structure encountered was a major fault zone in sandstone in CRE055.

No significant uranium enrichment was reported.

Further drilling was recommended at areas C, D and I. Areas C and I have the strongest alteration, brittle structure and uranium enrichment among the zones drilled to this point. Area I shows strong mineralization in the sandstone above the unconformity with 0.5 m of 0.2% U3O8. Further drilling was recommended in Area A along the eastern flank of the east-northeast trending fault delineated in 2010 and north of CRE013 and CRE038. Further drilling was recommended in Area G to follow up holes CRE043 and CRE047. Area H is low priority. Ground TDEM surveys were recommended for all areas prior to drilling.

10.2.6 Winter 2011 Drilling (CRE071 to CRE076)

As part of CanAlaska's winter 2011 drill program, 6 holes were drilled for a total of 1,414.6 m (Schimann and Duff, 2011). Of these, 3 reached basement. Two holes, CRE075 and CRE076, were abandoned when the drill program was terminated early, following a drill company employee fatality. Two of the completed holes were drilled in Area A and one in Area I. No mineralization was reported in any of the holes.

Area A: Three holes were drilled in Area A, CRE071, CRE072 and CRE073, to test the extent of alteration and mineralization encountered in previous holes. CRE071 was terminated at 90.8 m in sandstone because it had been spotted in the wrong location. CRE072 and CRE073 both encountered pelite and banded iron-formation in the basement. CRE072 also had Fe-rich graphitic pelite, garnet pelite and semipelite. Illite and dickite predominate in the sandstone of both holes, with increased sudoite above the unconformity. Kaolinite and chlorite predominate in the basement of CRE072. Alteration in the basement of CRE073 was reported to be the most intense observed to that time on the property. Phengite is the predominant clay, with minor illite, sudoite and chlorite. Two thick intervals of hematized clay with associated chlorite alteration are likely fault zones. Although no mineralization was found, the two completed holes drilled extended the zone of highly altered sandstone and basement in Area A to the north and east.

Area C: CRE076 was drilled in Area C to test the area between CRE025 and CRE026. As noted above, it was terminated at 36.6 m in sandstone.

Area I: Two holes were drilled in Area I, CRE074 and CRE075, to extend mineralization and alteration found in CRE040 and test geophysical targets. CRE075 was terminated at 75.6 m in sandstone. In addition to graphitic pelite, CRE074 encountered pelite, semipelite and quartzite. The sandstone and basement was little altered, but there was much evidence for faulting in the upper sandstone. Dickite and illite predominate in the sandstone, with some dravite above the unconformity. Kaolinite and chlorite predominate in the basement, with minor illite, phengite and sudoite. Although no mineralization was found, there was enrichment in U, Ni and Cu in the basement.

10.2.7 Winter 2012 Drilling (CRE077 to CRE091)

The winter 2012 drilling program comprised 15 drill holes, for a total of 6,022.1 m (Schimann and Ogilvie-Evans, 2010). Five holes were abandoned before reaching the unconformity. Three holes were drilled at Target Area A, six at Area B, one at Area G, and five at Area J. Individual drill targets were based on previous drilling, DC resistivity and TDEM surveys, including a TDEM survey done immediately prior to the drill program. As outlined below, one hole at Area A was mineralized, but the most encouraging result was discovery of a very strong hydrothermal alteration system, with accompanying mineralization, at Area B.

Area A: Three holes, CRE085, CRE087 and CRE089, were drilled in Area A to extend the zone of alteration and uranium mineralization encountered in previous drill holes. CRE087 was lost at 67 m. CRE085 has pelite, silicate iron-formation and calcsilicate rocks; CRE089 has pelite, semipelite, quartzite, banded iron-formation and marble. Except for a chlorite-altered basal fanglomerate matrix in CRE085, there is little alteration in the sandstone. In both completed holes, dickite and illite predominate in the sandstone with sudoite (with Mg-chlorite in CRE089) above the unconformity. The basement rocks in CRE085 are pervasively hematized. CRE089 has extensive zones of basement hematite and chlorite alteration. Phengite predominates in the basement of CRE085, with minor amounts of the illite, kaolinite/sudoite and Mg-chlorite that predominate in CRE089. CRE085 has weak to moderate basement fracturing and drusy quartz filled breccia in a pegmatite. CRE089 has weakly to moderately fractured sandstone and moderately fractured in basement with a strongly hematized rubble zone below the UC and a breccia zone 24 m below the UC. CRE085 confirmed the alteration intersected in CRE076. Both holes extended the Area A alteration zone further north.

Area B: CRE083, CRE084, CRE086, CRE088, CRE090, and CRE091 were drilled at Target Area B, a previously untested basement conductor associated with a sandstone resistivity low. Although CRE088, CRE090 and CRE091 were lost in sandstone, they had encouraging alteration and structure. CRE086 has only quartzite in the basement, whereas CRE083 and CRE084 have pelite and quartzite and CRE084 also has graphitic pelite. ‘Grey alteration’ (finely disseminated pyrite) was reported in the sandstone of all holes except CRE084 and CRE086. Drusy quartz was found in CRE083, CRE086 and CRE088. Kaolinite and illite are the dominant clays in the sandstone in all holes except CRE084, in which dickite and illite predominate. Sudoite and chlorite increase above the unconformity in CRE083 and CRE084. Kaolinite and illite were also the dominant clays in the basement in the three completed holes. Except for CRE084, which had little evidence of deformation or alteration, fracture and breccia zones and faults are common, especially in the lower sandstone. Tectonically rotated blocks were recognized in CRE088, CRE090 and CRE091. A 60 m unconformity offset between CRE083 and CRE086 suggests a fault along the edge of a competent 'quartzite ridge' (into which CRE086 was drilled), comparable to the setting of the McArthur River and Phoenix deposits. CRE083 has a mineralized intersection grading 0.09% U3O8 over 0.5 m hematized quartzite 30 m below the unconformity. CRE084 has four mineralized intersections, all in the basement. The best one is 0.014% U3O8 over 0.5 m in fractured pelite.

Area G: CRE082 was drilled at Area G to test a possible extension of the alteration and uranium halo found in CRE057. The basement rocks are graphitic pelite, garnet pelite and semipelite. Sandstone and basement rocks are relatively little altered. Dickite/illite predominates in the sandstone and kaolinite, illite and chlorite in the basement. Fracturing is generally weak with local minor fault zones in the basement. No mineralization was intersected.

Area J: Five holes, CRE077, CRE078, CRE079, CRE080, and CRE081, were drilled in Area J, a previously untested target area with a combination of sub-horizontal and sub-vertical EM conductors (defined by the winter 2012 MLTDEM survey) associated with an overlying sandstone resistivity low. CRE078 was abandoned in overburden at 32.9 m due to technical problems and re-drilled as CRE079. CRE077 contains 30-35 m of conglomerate immediately above the unconformity, which might have been shed off a nearby syndepositional fault scarp. CRE077, CRE080 and CRE081 all have graphitic pelite. Other basement lithologies encountered are pelite, garnet pelite, semipelite, calcsilicate rock and banded iron-formation. In all drill holes, the sandstone is dominated by dickite with minor kaolinite. Dickite and dravite are found above the unconformity in all holes, particularly CRE077 and CRE081. Kaolinite is present deep into the basement, except in CRE079, which had strong chlorite alteration and vuggy quartz. All the completed holes had strong fracturing or faulting in the basement, particularly CRE079. CRE080 intersected two mineralized zones, both in basement, but interpreted to be hydrothermal. The best intersection was 0.015% U3O8 over 0.6 m in banded iron-formation just below the unconformity.

The hydrothermal system discovered at Area B in 2012 is the strongest found to date on the Cree East property. It is associated with a major fault offset, apparently along a 'quartzite ridge', as well as locally intense fracturing, faulting and brecciation, anomalous geochemistry, and mineralization in two drill holes. A graphitic conductor was also intersected. In contrast with hydrothermal alteration elsewhere on the property, the hydrothermal system at Area B is entirely reduced, with bleaching and grey alteration associated with sooty and crystalline pyrite. Hydrothermal hematite alteration is absent. Uranium deposits occur at the interface between reduced and oxidized (hematized) domains, but in area B, we have so far only found the reduced portion of the hydrothermal system. Although U is low in the geochemical halo, Pb is relatively abundant, and may be radiogenic Pb derived from a nearby uranium deposit. The alteration patterns and the geochemistry (grey alteration, pyrite, kaolinite, arsenic, etc.) are comparable to Cameco's 2008 Fox Lake discovery. Area B constitutes a high priority target area for a potential uranium deposit. Further drilling is obviously recommended, but more geophysics is required to guide this drilling.

10.2.8 Drill Hole Ranking

Like most exploration companies, CanAlaska uses a drillhole ranking system to help compare drill holes and target areas within projects and to compare exploration projects.

10.2.8.1 CanAlaska's Drill Hole Ranking System

The ranking system is based on sandstone alteration, structure, geochemistry and SWIR results, basement lithology, alteration, geochemistry and structure, the nature of the unconformity, and radioactivity or geochemistry of hydrothermal uranium mineralization (Table 10-2). The maximum possible number of points for a drillhole is 50. Holes with rankings of 20 or higher are considered very good.

Table 10-2 - Criteria for Drill Hole Ranking

Features	**Criteria**	Points
Sandstone (lower 200 m): Max 16 points		
Sandstone Alteration	No hydrothermal alteration	0
	Discontinuous weak hematite, bleaching, limonite and silicification in zones <5 m wide	1
	Continuous zones of moderate hematite, bleaching, silicification and limonite in zones 5 – 10 m wide	2
	Moderate to strong pervasive bleaching, moderate clay, hematite and silicification	3
	Strong pervasive bleaching and clay alteration, strong hematite, strong silicification or desilicification >10 m wide	4
Sandstone Structure	'Broomstick" core, fracturing absent or rare	0
	Local friable core, 1-2 sections over 0.5 – 1.0 m	1
	Friable core common, local brecciation or shearing, fracturing over 2 – 4 m widths	2
	Strongly friable core with sections of lost core and strong fracturing >4 m wide	3
	Abundant lost core (>3 m), strong fracturing or faulting	4
Sandstone Geochemistry	GT: < 10, where GT = U ppm*m	0
	GT: 10-30	1
	GT: 30-100	2
	GT: 100-300	3
	GT: >300	4
Sandstone SWIR	Mainly dickite with minor illite (<50%) and no chlorite, dravite or sudoite	0
	Mainly dickite and illite (>50%) with minor kaolinite and little chlorite, dravite or sudoite (non-continusous readings)	1
	Mainly illite and dickite, with kaolinite, chlorite, dravite and sudoite in multiple continuous readings	2

	Mainly illite with minor dickite and increased chlorite, dravite, sudoite or chlorite <10 m above the unconformity	3
	Mainly illite with minor dickite and increased chlorite, dravite, sudoite or chlorite >10 m above the unconformity	4
Unconformity: Max 5 points		
Unconformity	Well-defined sharp contact	0
	Bleached zone in basement <5 cm	1
	Bleached zone in basement >5 cm below altered sandstone	2
	Strong clay in basement >1 m	3
	n.b., additional 2 points for fault at unconformity	
Basement: Max 14 points		
Basement Lithology	Archean gneisses and granites	0
	Arkose	1
	Semipelite (no graphite), calc-silicate, amphibolite, etc.	2
	Semipelite and pelite with 5 – 20% graphite	3
	Graphite-rich (>20%) rocks >2 m thick	4
Basement Alteration	Normal paleoweathered profile	0
	Weak to moderate hydrothermal alteration locally	1
	Strong hydrothermal alteration (friability and/or clay at level 2 over extended intervals	2
	Broad intervals of intense total clay alteration and strong hydrothermal alteration	3
Basement Geochemistry	GT: < 10, where GT = U ppm*m	0
	GT: 10-100	1
	GT: 100-1000	2
	GT: >1000	3
Basement Structure	Fracturing absent or weak over <2 m widths	0
	Healed faults; hydrothermal veins	1
	Healed shears; locally moderately fractured or friable core	2
	Healed shears; brecciated and broken core; strong fracturing	3
	Extensive clay or graphite fault gouge	4
Radioactivity or Hydrothermal Mineralization: Max 15 points		
Radioactivity or Uranium Geochemistry	<0.01 eGT, where eGT = %eU3O8*m or GT = %U3O8*m	0
	0.01-0.03 eGT	2
	0.03-0.1 eGT	4
	0.1-0.3 eGT	6
	0.3-1.0 eGT	8
	1.0-3.0 eGT	10
	3.0-10.0 eGT	12
	>10.0 eGT	15

10.2.8.2 Drill Hole Ranking Results

The distribution of 2008 – 2012 ranked drill holes is shown in Figure 68. Note that only holes that penetrated basement rocks have been ranked. Details of the criteria by which each hole was ranked are summarized in Table 10-3.

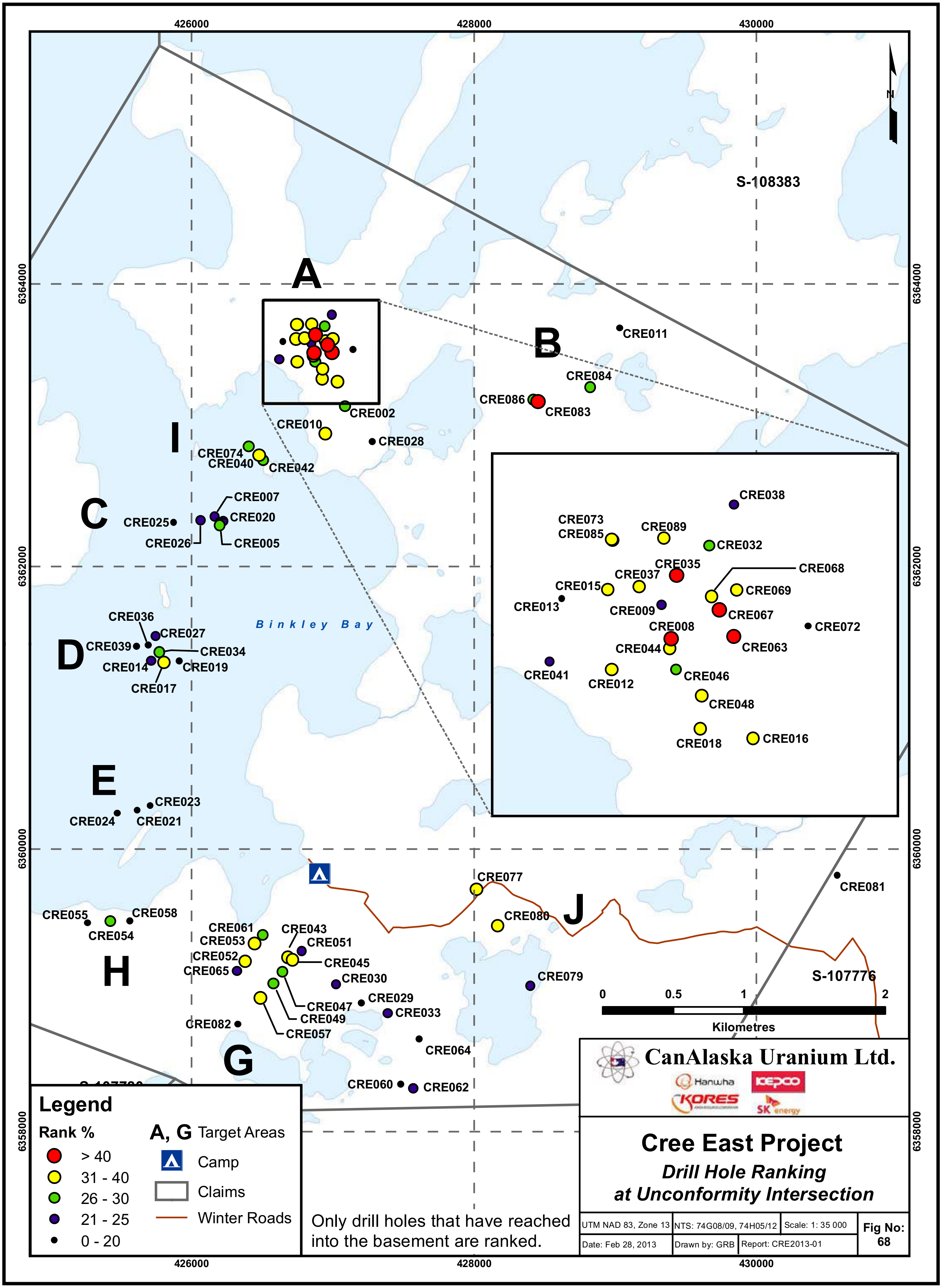
Table 10-3 - Ranking of Cree East Drill Holes

Hole ID	Sandstone				UC	Basement				Hyd. U	Total	
	Alt'n	Struct.	Geochem	SWIR		Lith.	Alt'n	Geochem	Struct.		#	%
Target Area A (Average DDH Rank: 33%)												
CRE002	1	3	1	1	1	3	1	2	0	0	13	26
CRE008	2	2	3	4	2	4	2	2	4	0	25	50
CRE009	1	1	2	4	1	2	1	0	0	0	12	24
CRE010	1	3	4	2	1	4	1	2	0	0	18	36
CRE012*	1	1	3	3	0	2	1	2	2	2	17	34
CRE013	1	1	2	2	0	1	0	0	0	0	7	14
CRE015	2	1	3	4	0	2	2	1	4	0	19	38
CRE016	1	2	2	2	0	4	1	2	2	0	16	32
CRE018*	1	1	2	3	0	4	0	2	2	4	19	38
CRE028	1	3	1	2	0	2	0	0	0	0	9	18
CRE032	1	1	3	1	0	2	2	2	2	0	14	28
CRE035*	1	1	3	4	0	2	1	2	3	4	21	43
CRE037	1	1	3	4	0	2	1	2	2	0	16	32
CRE038	1	1	3	2	0	2	1	0	2	0	12	24
CRE041	1	3	2	2	0	2	1	0	1	0	12	24
CRE044	3	2	2	3	3	2	1	1	3	0	20	40
CRE046	1	2	2	1	0	2	1	2	2	0	13	26
CRE048	2	2	2	2	0	2	0	2	4	0	16	32
CRE063*	2	2	3	3	0	3	2	2	3	4	24	48
CRE067*	1	3	1	4	2	2	2	2	2	4	23	46
CRE068*	2	3	4	4	0	2	1	2	2	0	20	40
CRE069	1	3	3	3	0	2	2	2	2	0	18	36
CRE072	1	1	2	0	0	3	1	2	0	0	10	20
CRE073	2	0	2	3	0	2	3	0	4	0	16	32
CRE085	1	0	3	4	2	2	2	1	2	0	17	34
CRE089	1	1	3	4	1	2	2	1	3	0	18	36
Target Area B (Average DDH Rank: 37%)												
CRE083*	4	4	2	2	2	1	1	2	3	4	25	50
CRE084*	2	1	0	3	0	3	2	2	2	0	15	30
CRE086	3	4	0	4	0	1	1	0	2	0	15	30
Target Area C (Average DDH Rank: 24%)												
CRE005	1	3	2	2	0	3	1	2	1	0	15	30
CRE007	1	3	3	1	0	2	0	1	1	0	12	24
CRE020	0	1	2	1	0	3	1	3	0	0	11	22
CRE025	1	3	3	1	0	0	2	0	0	0	10	20
CRE026	0	2	2	1	0	3	1	2	0	0	11	22
Target Area D (Average DDH Rank: 24%)												
CRE014	2	0	3	2	0	2	1	0	2	0	12	24
CRE017*	1	1	4	1	0	4	1	2	1	2	17	34
CRE019	1	0	2	1	0	2	1	0	1	0	8	16
CRE027	1	1	3	1	0	2	2	0	2	0	12	24
CRE034	0	1	3	2	0	2	2	2	1	0	13	26
CRE036	1	0	3	2	0	2	1	0	1	0	10	20
CRE039	1	1	1	2	0	2	0	0	1	0	8	16
Target Area E (Average DDH Rank: 13%)												
CRE021	1	1	2	1	0	0	0	0	1	0	6	12
CRE023	0	0	2	2	0	0	0	0	1	0	5	10
CRE024	1	0	2	1	0	3	0	1	1	0	9	18
Target Area G (Average DDH Rank: 26%)												
CRE029	1	1	0	2	0	2	1	2	1	0	10	20
CRE030	1	1	2	2	0	2	1	1	1	0	11	22
CRE033	1	1	0	2	1	3	1	2	1	0	12	24
CRE043**	1	2	2	2	2	3	1	3	2	2	20	40
CRE045	2	2	3	2	0	1	2	2	2	0	16	32
CRE047**	1	1	3	1	0	1	2	3	1	0	13	26

CRE049**	1	1	2	1	0	3	2	3	2	0	15	30
CRE051	1	1	2	1	0	2	1	2	1	0	11	22
CRE052	3	3	1	2	2	2	1	0	2	0	16	32
CRE053	2	2	1	1	2	1	2	2	3	0	16	32
CRE057**	2	2	2	2	0	2	2	3	2	0	17	34
CRE060	1	1	0	1	0	2	0	2	1	0	8	16
CRE061	2	2	2	1	0	2	2	2	1	0	14	28
CRE062	1	1	0	2	0	2	2	2	1	0	11	22
CRE064	2	1	0	1	1	2	1	0	1	0	9	18
CRE065	2	1	2	1	0	2	1	1	1	0	11	22
CRE082	2	1	0	1	0	3	2	0	1	0	10	20
Target Area H (Average DDH Rank: 21%)												
CRE054	2	3	0	1	1	4	1	0	2	0	14	28
CRE055	1	3	0	1	0	1	2	0	1	0	9	18
CRE058	1	1	2	1	1	2	1	0	0	0	9	18
Target Area I (Average DDH Rank: 29%)												
CRE040*	1	3	4	2	0	0	0	2	0	6	18	36
CRE042	1	3	2	3	0	1	1	2	0	0	13	26
CRE074	2	3	2	1	0	2	1	2	0	0	13	26
Target Area J (Average DDH Rank: 27%)												
CRE077	2	1	2	2	0	4	1	2	2	0	16	36
CRE079	2	1	0	2	0	2	1	2	1	0	11	22
CRE080*	2	1	1	2	0	3	1	2	2	2	16	32
CRE081	1	1	0	2	0	3	1	0	2	0	10	20
Area 'O' (DDH Rank 12%)												
CRE011	1	0	0	1	0	0	1	2	1	0	8	12

Note holes marked '' have mineralization interpreted to be of hydrothermal origin, whereas holes marked '**' have mineralization interpreted to be of metamorphic origin. CRE011 is a single hole north of Area B, not discussed in the report.*

The target areas with the highest average drill hole rankings are B, J, G and A. Average rank at Area B is 17, based only on 3 holes. The highest ranked hole at Area B is CRE083 (0.09% U3O8 over 0.5 m in pelite). The average rank at Area J, based on 4 holes, is 16.8. The highest ranked hole at Area J is CRE079, although it is not mineralized. The average rank at Area G is 15.5, based on 17 holes. (Note that the high ranking of Area G is partly due to sandstone SWIR, structure and basement geochem ratings; not hydrothermal uranium mineralization.) The highest ranked holes are CRE043 (best mineralized intercept 0.02% U3O8 over 1.6 m in Fe-pelite), CRE049 (best mineralized intercept 0.02% over 2.0 m in semipelite) and CRE057 (best mineralized intercept 0.03% U3O8 over 0.4 m in semipelite). Most of the mineralization found in Area G is interpreted to be of metamorphic origin, however. The average rank at Area A is 15.1, based on 25 holes. The highest ranked holes are CRE008 (not mineralized), CRE063 (best intercept 0.05% over 0.4 m in graphitic pelite) and CRE067 (0.08% U3O8 over 0.75 m in marble).


426000
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Binkley Bay
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CRE079
CRE029
CRE047
CRE033
CRE049
CRE082
CRE057
CRE064
CRE060
CRE062
0 0.5 1 2
Kilometres
Legend
Rank %
> 40
31 - 40
26 - 30
21 - 25
0 - 20
A, G Target Areas
Camp
Claims
Winter Roads
Only drill holes that have reached into the basement are ranked.
CanAlaska Uranium Ltd.
Hanwha
KEPCO
KORES
SK energy
Cree East Project
Drill Hole Ranking at Unconformity Intersection
UTM NAD 83, Zone 13
NTS: 74G08/09, 74H05/12
Scale: 1: 35 000
Fig No: 68
Date: Feb 28, 2013
Drawn by: GRB
Report: CRE2013-01

Areas I, H and C have intermediate average drill hole rankings. The average rank at Area I is 13, based on only 3 holes. The average rank at Area H is 12.7, also based on 3 holes. The average rank at Area C is 12, based on 4 holes. None of these areas have drill holes with rankings above 20, although CRE054 in Area H is close. Hole CRE040 at Area I has a mineralized intercept of 0.09% U3O8 over 1.4 m in sandstone, but is only ranked 13.

Areas D and E have low average drill hole rankings. The average rank at Area D is 8.6, based on 8 holes. The average rank at Area E is 6.7, based on 3 holes. Neither area has any holes ranking over 20, although CRE017 at Area D has 0.01% U3O8 over 1.7 m in sandstone.

10.3 Drill Hole Surveys and Core Handling

The following outline of field and logging procedures is based on those described in more detail in CanAlaska's Drilling Manual.

10.3.1 Drill Hole Field Locations and Surveys

For each drill hole, the planned collar location is spotted by the project geologist using a GPS and marked clearly clearly in the field. One picket is set at the hole location and two each in a cross for the drillers to sight on when setting up the drill. These pickets are set far enough from the collar location for site preparation to be possible without removing them. On an inclined hole two of these four indicate the planned hole's azimuth direction and are clearly identified as FRONT and BACK with flagging, giving also the azimuth and dip angle. Azimuth and dip angle are clearly identified on the collar picket as well.

The geologist checks the drill set-up before starting to drill to be certain that the drill has been spotted at the correct location, the drill tower is in a vertical plane parallel to the hole azimuth and, for inclined holes, that the tower angle is correct for the planned hole angle.

10.3.2 Downhole Core Orientation Surveys

Core from inclined cores is oriented to define the true orientation of structures such as foliations, fractures, or faults.

Depending on the core orientation system (e.g., Reflex Ace Core Orientation system), the drillers use the kit to trace a mark (short line) on the underside of the core oriented with the Ace tool before the core is removed from the core tube. This line corresponds to the underside of the core as it was in the hole before breaking off with the core tube.

When receiving oriented core from the drill, the core is assembled on an angle iron, with each piece fitted together in its original position. The driller's core mark is aligned with the edge of the angle iron so that a continuous line can be drawn with a grease pencil along the whole run. Arrows pointing down hole are marked on each piece of core.

Structure measurements are taken with a simple tool consisting of a PVC tube about 20 cm in length. The tube is cut in half lengthwise, except for the last 1 cm, which is graduated around its circumference from 0° to 360°.

To measure the angle of a planar structure, a piece of core is placed in the tube with the down-hole end toward the end of the tube that is graduated. The tube is held with the down-hole end of the core towards the operator so that the 0° to 360° graduations are read clockwise. The core is rotated so that the point of the through, drawn by the plane cutting the core, points to 0°. Two angles are recorded: the theta angle, the circumferential angle between the axis of the plane of the structure set at 0° and the reference line marked on the core, and the angle to core axis (TCA) read on the cutaway portion of the tube. Both angles are then entered into a spreadsheet, along with with the hole orientation survey data to obtain the true orientation of the structures. The structure orientations can then be determined using a stereographic plotting programme, such as GeoOrient.

10.3.3 Drill Core Handling Procedures

Upon receiving the core at the core shack, all boxes are checked to ensure they are properly numbered and the core is in the right order (not accidentally reversed) and continuous. Each run marker is checked for continuity and appropriate depth.

10.3.4 Core Recovery

Core recovery is calculated by measuring the total length of core in each run (between core markers), after assembling the core so there are no gaps, and dividing the measured length by the distance between the upper and lower core markers. The measured length should not exceed the theoretical length of a run (3.00 metres for a metric core barrel, 3.28 metres for an imperial core barrel). It is not uncommon for a core marker to be misplaced by a few centimetres. The percent core recovery for each run is recorded in the log spreadsheet.

10.3.5 Drill Core Logging

CanAlaska follows a systematic drill hole logging protocol for the documentation of drill core observations modelled on the system used by the Saskatchewan Geological Survey. All data is recorded in logging spreadsheets, from which detailed logs, summary logs and graphic (stacked) logs are produced for each hole. Spreadsheet templates differ for sandstone and crystalline basement. Data recorded is outlined below:

Sandstone core is logged on a metre per metre basis. Observations recorded include maximum grain size in mm, volume of grains over 2 mm, aggregate thickness of beds with particles over 2 mm (i.e., conglomerate), aggregate thickness of beds with particles less than 0.1 mm (i.e., mudstone), colour,

colour darkness, colour pattern, aggregate thickness of clay intraclasts and sedimentary structures such as bedding and cross bedding and their angles to core axis.

Basement core is logged according to lithology, subdivided into major and minor units. Graphite, sulphide and leucosomes concentration are recorded.

The intensity or percentage of the key alteration types, including hematite, chlorite, silicification, sericite, bleaching and clay alteration, is recorded. Depth and type of regolith alteration (hematite or chlorite) in basement portions of each hole is also recorded.

Structural data recorded includes type of structure, density, friability, core recovery and RQD measurements. As noted above, oriented core data is recorded. Where core is not oriented, the angle of planar structures relative to core axis is recorded.

Radioactivity levels are measured on all cores using a SPP-II scintillometer. Average readings every metre, as well as spike values, are recorded.

All holes were probed for radioactivity (in rods) and, where possible, for resistivity (open hole) using a Geovista down hole probe system.

In addition to systematic description of alteration, core was sampled on a run-by-run basis for SWIR (Short Wave Infrared Radiation) analysis of alteration mineralogy, using a TerraSpec TSP 350. SWIR spectra were interpreted using a combination of manual interpretation and TSG Pro computer software. SWIR analyses were also done on fracture fillings and coatings.

Resistivity measurements, using a hand-held resistivity metre, were made on a metre by metre basis directly on core.

Gamma probing is carried out immediately upon completion of the hole within the drill rod string. Resistivity probing, if possible, is done in the holes once the drill string was removed (open-hole). Due to borehole problems, not all holes could be probed. Interpretation of core radiometrics was made on the basis of core assay data, however.

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10.3.6 Geotechnical Logging

The geotechnical logging procedure followed by CanAlaska is outlined below:

RQD is measured as the total length of all core fragments more than 10 cm long divided by the total length of the run, expressed in percent.

Radioactivity is measured in cps using an SPP2, HD2000 or Ludlum 19-10 scintillometer. The instrument used must be indicated in the spreadsheet. Record the average cps per run and any radiometric spikes. Note all the depth and cps of all spikes.

Mark each metre on the core with a carpenter pencil, and mark the depth on the box for the geological description done metre by metre.

Label each box on the front with an embossed aluminium Dymo tag, showing hole number, box number, and depth interval. The label must be stapled carefully with at least three staples to avoid snagging it when handling the boxes.

Label the top of the box with the hole number (example WMA008) and box number on the end; the start depth of the box on upper side/corner and the end depth of the box on lower side/corner. Label the box and markers with a carpenter pencil because permanent markers will evaporate within a year whereas pencil or crayon will last for years.

Fracture count: For each metre, record the number of fractures at low angle to the core axis (<45°) and at high angle (>45°). Low angle fractures do not include breaks parallel to bedding or foliation, unless there is a fill (quartz, clay, hematite, etc.). Use the code "30" for crumbled and fractured zones where you cannot identify all the fractures.

10.3.7 Sampling Methods and Approach

Samples collected include systematic samples, continuous samples, selective samples and petrographic samples. Systematic Samples are taken each metre and combined into composite samples (18 chips in sandstone and per lithology in basement portion of each hole) for geochemical analysis. Continuous Samples, taken over mineralized intervals, are samples of split core in which half the core is taken over a continuous intersection. Selective Samples, generally no less than 10 cm, are taken for a non-routine, but specific purpose, such as geochemical analysis of a particular lithology. Petrographic Samples, taken for petrographic determination of lithology, mineralization or alteration, are the most common selective samples collected.

10.3.7.1 Non-mineralized Sandstone (<500 cps on core)

A systematic composite sample is taken for every 6 runs (ca. 18 m). In altered sections, the spacing may be reduced. Each sample is a composite of 3" (8 cm) long pieces of split core taken approximately every 1.5 metres. In order to preserve the end-of-run breaks, samples are not taken at the end-of-run markers. Only sandstone fragments are sampled; mudstone and conglomerate is avoided. Hole depth is marked on each fragment in the composite sample, and the sample bag is identified with the sample number.

Samples are numbered in a sequential manner starting with project number (e.g., for West McArthur: 05-0001, etc. where 05 is the project number). Sample types and numbers, 'from-to' depths, rock type (sandstone or basement), sampler's name and the depth of each fragment are recorded in the logging spreadsheet.

SWIR analysis is done on individual fragments with the TerraSpec instrument before the SWIR sample is combined into its 18-metre composite geochemical sample. Results from the SWIR analyses are stored in the database and linked to the sample tables by the hole number and sample fragment depth. SWIR analyses are also done on any fracture with a filling and recorded in the same table.

10.3.7.2 Non-mineralized Basement (<500cps on core, 800cps in-rod NGRS probe

Samples are taken in the same manner as for sandstone core, but at an average frequency of one sample for every 3 runs. All chips in a sample must be of the same general lithology. Leucosome and host rock is never mixed, but whichever is most abundant in a lithologic log interval is sampled. Each sample consists of one rock type only. Specific samples are also taken for petrographic or other purposes as needed.

10.3.7.3 Mineralized Sandstone and Basement (>500cps on core)

Mineralized core in sandstone or basement is sampled as continuous samples of split core, over intervals of not more than 50 cm. Sample length is reduced to 25 cm over intervals with radioactive peaks. To determine the appropriate interval for continuous sampling, a scintillometer log of the core is plotted at 5 cm spacing (using a computer spreadsheet) and half-height inflection points of the peak values are taken as the limits of each mineralized interval. Define 50 cm (or shorter) Multiple sample intervals (50 cm or less) are defined as follows:

- If the major peak is narrow (less than 50 cm at half peak height), the first sample is centred on that peak, and samples are taken upward and downward at 50 cm intervals from there until background radiometric levels are reached.
- If the peak is very broad, the first sample is centred on the middle of the peak and samples are taken upward and downward at 50 cm intervals until background radiometric levels are reached.
- If the peak half-heights are less than 1 m apart but more than 50 cm, two samples are taken on either side of the central peak, etc.
- This procedure is repeated for each peak above 500 cps. Where peaks are close together, sample size is reduced below 50 cm so that samples are centered on peaks. All sample intervals are marked directly on the core box.
- The core splitter blade and trays are cleaned between samples to avoid inter-sample contamination
- Mineralized samples are clearly identified on RFA as radioactive and the bag cps is also entered on RFA.
- At least one non-mineralized sample (i.e., background radiation level) is taken at each end of a mineralized section. In cases where there is more than one mineralized section but they are separated by less than 2 metres, intervening non-mineralized section is sampled in the same way as the mineralized sections.

10.3.7.4 Petrographic Samples

Petrographic samples are taken for specific purposes (e.g., to identify alteration, characterise a rock type that is difficult to define macroscopically, etc.). They are typically split core halves 5-8 cm long A piece of lath with the petrographic sample number (example CREE003-856.3) is inserted in the core box to mark the sample location.

The petrographic sample is carefully labelled with the trace of the thin section required clearly marked before shipping it to Vancouver Petrographics for thin section preparation. The sample number, field name and purpose of the thin section are recorded in the log spreadsheet.

10.3.8 Radiometric probing of drill holes

Down-hole probing is carried out with a Geovista Probing unit using a GV500 series winch with a 38 mm natural gamma probe, first inside the drill-rods and then, where possible, in open hole, combining a the same probe with a 38 mm dual-guard focused resistivity probe. The data is collected using the proprietary software Geovista Logger.

10.3.9 Mineralogical and Chemical Analysis

Clay mineralogy determination and chemical analysis is done on the core samples. CanAlaska uses a TerraSpec portable spectrometer to identify the clay alteration. Each of the core samples is scanned. The proportion of each clay species (kaolinite, dickite, illite, chlorite and dravite) is determined using the TSG-Pro software and controlled by visual examination of each spectrum by an trained, experienced geologist. These results are averaged for each sample, expressed as a percentage of total clay and recorded in the database.

Core samples are sent to ACME Laboratories in Vancouver for chemical analyses as described in the next section of this report.

11 SAMPLE PREPARATION, ANALYSES AND SECURITY

11.1 Sample Preparation

Sample preparation and shipment is supervised by CanAlaska's on-site project geologist. Samples are shipped in sealed rice bags and white plastic pails from the field camp. Transwest Air, A&L Transport and Canadian Freightways Ltd. were used as shipping agents to forward the samples to Acme Analytical Laboratories in Vancouver for geochemical analysis.

On arrival at Acme, all the samples are sorted and inspected for appropriateness of the requested analysis. Next, all samples are dried at 60°C. Drill core is jaw crushed to 70% passing 10 mesh (2 mm). Next, a 250 g riffle split is pulverized to 85% passing 200 mesh (75 µm) in a mild-steel ring-and-puck mill. Pulp splits of 0.5 g are then weighed into test tubes, and 15 and 30 g splits are weighed into beakers.

11.2 Analytical procedures

11.2.1 Laboratory

Acme Analytical Laboratories Ltd. (Acme) of 1020 Cordova Street East, Vancouver, British Columbia was contracted to complete analytical assays for the Cree East drilling programme. Acme is an ISO 9001:2000 accredited facility which meets global standards for the quality assurance of its products and services.

Within each sample consignment, a request for analysis prepared by CanAlaska specified the required analytical method for each sample. Among Acme's analytical packages requested by CanAlaska are: Group 1DX, Group 1EX, and Group 2A, described in more detail below. The 1DX1 is a partial digestion used on the sandstone samples and the 1EX is a total digestion multi-element package used on the basement and mineralised samples. The 2A analysis determines boron content by fusion. The other analytical methods used for over-limit determinations were: Group 4A for Mn results over the upper detection limit (Mn>10,000ppm); Group 2A Total Sulfur by Leco (S>10%); Group G6Gr Fire Assay/Gravimetric finish for elevated Au (Au>0.5ppm) and Group 7PF sodium peroxide fusion (B>2,000ppm).

Cut-offs for anomaly and background determination is based on statistical analysis of the frequency distribution for each element and is verified graphically. All of the geochemical data from the systematic samples taken from all the holes drilled to date is used to define the anomalous values for the Cree East property. Populations of this data are separated on the basis of inflection points. For uranium in sandstone, there is an inflection points at 0.8 ppm. Samples above 0.8 ppm are considered to be anomalous. For boron in sandstone, there are inflection points at 20 ppm and 40 ppm. Samples above 40 ppm are considered anomalous.

Due to the wide range of lithologies present, no background values can be established for basement. Each rock type would have to have individual values assigned, in order to have an accurate number.

11.2.2 Procedures and Methods Summary

11.2.2.1 Group 1DX (Aqua Regia Digestion, ICP-MS Finish)

Following sample preparation, a modified Aqua Regia solution of equal parts concentrated ACS grade HCl and HNO_3 and de-mineralized H_2O is added to each sample to leach for one hour in a hot water bath (>95°C). After cooling, the solution is made up to final volume with 5% HCl. The sample weight to solution volume is 1 g per 20 mL.

Solutions are then aspirated into a Perkin Elmer Elan 6000/9000 ICP mass spectrometer and analyzed for 36 elements: Ag, Al, As, Au, B, Ba, Bi, Ca, Cd, Co, Cr, Cu, Fe, Ga, Hg, K, La, Mg, Mn, Mo, Na, Ni, P, Pb, S, Sb, Sc, Se, Tl, Sr, Th, Ti, U, V, W, Zn.

11.2.2.2 Group 1EX (Four-Acid Digestion, ICP-MS finish)

Following sample preparation, a 10 mL aliquot of an acid solution (2:2:1:1 H_2O-HF-$HClO_4$-HNO_3) is added to the aqua regia solution, heated until fuming on a hot plate and taken to dryness. A 4 mL aliquot of 50% HCl is added to the residue and heated using a mixing hot block. After cooling the solutions are transferred to polypropylene test-tubes and made to a 10 mL volume with 5% HCl. Solutions are aspirated into a Perkin Elmer Elan 6000 or 9000 ICP mass spectrometer and analyzed for 41 elements: Ag, Al, As, Au, Ba, Be, Bi, Ca, Cd, Ce, Co, Cr, Cu, Fe, Hf, K, La, Li, Mg, Mn, Mo, Na, Nb, Ni, P, Pb, Rb, S, Sb, Sc, Sn, Sr, Ta, Th, Ti, U, V, W, Y, Zn and Zr.

11.2.2.3 Group2A (Na2O2 Fusion, ICP)

Following sample preparation, a 0.1 g aliquot is weighed into a zirconium crucible and mixed with 1.5 g Na_2O_2 and 0.5 g NaOH. Samples are then heated to 580°C. The fused sample is cooled and transferred to a plastic vial; the fused pellet is dissolved in demineralized water and HCl in a hot water bath. Calibration standards and reagent blanks are added to the sample sequence. Sample solutions are then aspirated into a Jarrel Ash AtomComp 800 or 975 ICP or Spectro Ciros Vision emission spectrometer and analyzed for boron.

12 DATA VERIFICATION

12.1 Sampling Quality and Representativity

As noted in a previous section, systematic samples were collected throughout the core and continuous samples were collected over mineralized or radiometrically anomalous intervals. Systematic samples in sandstone are taken every metre and combined into an 18 m (or shorter) composite sample. In basement, systematic samples are taken every metre and combined by lithological unit (i.e., different lithologies are never mixed) into composite samples up to 8 m long. Continuous samples comprise half of a split core sampled continuously, typically over 0.5 m or less. Selective samples and petrographic samples were also taken.

CanAlaska's quality control protocol includes systematic analyses of laboratory standards, field and lab duplicates, field and lab blanks and lab replicate samples.

In the field, CanAlaska inserts duplicate samples and field blanks into the sample stream after every 20 samples. For each batch of 30-35 samples, Acme Laboratories runs a replicate analysis, a lab duplicate analysis and at least one lab standard for each of the partial digestion, total digestion and boron analyses. The quality control duplicates, replicates and blanks provide a measure of the background noise, accuracy and precision of Acme's work. These QA/QC measures are described in more detail below.

12.2 Standards

12.2.1 Lab Standards

To monitor the accuracy of Acme's assays, certified reference materials purchased from established suppliers or prepared in-house are used. For Group 1DX analyses (partial digestion) between 2008 and 2012, standards DS7, DS8, OREAS45PA and OREAS45CA have been used (Table 12-1). For

Group 1EX analyses (total digestion), standards OREAS45P, OREAS45C, OREAS124 and AMIS0054 were used. For Group2A analyses (boron), standards LKSD-3, C3 and Dolomite-1 were used.

Table 12-1 - Lab Standards and Blanks and Their Performance in CanAlaska Drill Core Analyses (2008-2012)

Standard & Date of Cerificate. of Analysis	Element	Drill Season	Expected Value (ppm)	Tol. (%) or STD (ppm)	Number of Analyses	% within Tolerance or <2STD
Group 1DX Standards						
DS7 2008	U	2008S	4.9	0.4ppm	26	100% (26)
		2009W			25	100% (25)
DS7 1/05/2009	U	2010W	4.9	1ppm	40	95% (38)
		2010S			29	100% (29)
	Ni	2010W	56	8.4ppm	40	100% (40)
		2010S			29	100% (29)
DS8 23/11/2010	U	2011W	2.89	±22%	13	100% (13)
		2012W			31	100% (31)
	Ni	2011W	40.6	±15%	13	100% (13)
		2012W			31	100% (31)
OREAS45PA 4/09/2009	U	2010W	1.3	±30%	40	100% (40)
		2010S			29	100% (29)
		2011W			6	100% (6)
	Ni	2010W	281	±15%	40	95% (38)
		2010S			29	100% (29)
		2011W			6	100% (6)
OREAS45CA No date	U	2012W	1.2	±30%	31	100% (31)
	Ni	2012W	240	±20%	31	100% (31)
	Cu	2012W	494	±15%	31	100% (31)
Blank G1 No date	U	2010W	1.98	0.53ppm	33	94% (31)
		2010S			28	100% (28)
		2011W			9	100% (9)
		2012W			28	100% (28)
	Ni	2010W	4.41	1.17ppm	33	100% (33)
	Ni	2010S	4.3	1.13ppm	28	89% (25)
		2011W			9	100% (9)
		2012W			28	100% (28)
Group 1EX Standards						
OREAS24P	U	2008S	0.071*	0.083*	5	100% (5)

No date						
OREAS24P No date	U	2009W	0.75	0.095	5	60% (3)
OREAS45P No date	U	2008S	2.247*	0.249*	5	100% (5)
OREAS45P No date	U	2009W	2.4	0.2ppm	17	76% (13)
OREAS45P No date	U	2010W	2.4**	0.4ppm**	39	87% (34)
	Ni	2010W	385	±10%	39	100% (39)
OREAS45P 22/04/2010	U	2010S	2.2	±30%	31	90% (28)
		2011W			9	100% (9)
	Ni	2010S	385	±10%	31	100% (31)
		2011W			9	100% (9)
OREAS45C June 2010	Ni	2011W	333	13ppm	44	93% (41)
		2012W			24	96% (23)
	Cu	2011W	629	13ppm	44	73% (32)
		2012W			24	83% (20)
	Pb	2011W	24	1.4ppm	44	91% (40)
		2012W			24	96% (23)
OREAS124 No date	U	2012W	1779	79ppm	20	100% (20)
	Ni	2012W	9.31	0.75ppm	20	95% (19)
AMIS0054 16/09/2009	U	2010W	1427	±15%	37	100% (37)
		2010S			32	100% (32)
		2011W			46	98% (45)
	Ni	2010W	640	±15%	37	97% (36)
		2010S			32	97% (31)
		2011W			46	98% (45)
Blank G1 No date	U	2010W	2.86	0.062ppm	41	98% (40)
	U	2010S	2.86	0.67ppm	22	100% (22)
		2011W			18	100% (18)
	Ni	2010W	4	0.8ppm	41	100% (41)
	Ni	2010S	4.3	0.92ppm	22	82% (18)
		2011W			18	100% (18)
Group 2A Standards						
LKSD-3 No date	B	2008S	25	2.89ppm	12	75% (9)
	B	2009W	25	16.25 - 33.7 ppm	41	95% (39)
		2010W			34	97% (33)
		2010S			27	100% (27)
		2011W			33	91% (30)
		2012W			52	92% (48)
C3		2008S	45	4.5ppm	12	75% (9)

2008		2009W	45	4ppm	41	100% (41)
C3 21/02/2009	B	2010W	42	5ppm	33	94% (31)
		2010S			29	97% (28)
		2011W			33	94% (31)
		2012W			50	90% (45)
Dolomite-1 No date	B	2008S	25	NA	2	100% (2)
	B	2009W	22.34	0.5ppm	14	100% (14)

Detection limits by ICP-MS for the elements listed in Table 12-1 is 0.1 ppm. The detection limit for B is 3 ppm. In 2008, the expected values for standards OREAS45P and OREAS24P (indicated by '*' in Table 12-1) were based on CanAlaska's internal statistics because ACME had no assigned expected value and standard deviation for U with these standards. In 2010, CanAlaska used its own expected value for the standard OREAS24P (indicated by '**' in Table 12-1) and found all standard analyses to be within tolerance for U. CanAlaska subsequently suggested that Acme should re-evaluate their certificate of analysis for this standard. This likely explains the change in the expected U value for the standard on Acme's 22 April 2010 certificate of analysis. Although 1DX standard DS7 and blank G1 were systematically included in geochemical analyses of samples from the winter 2008 drill program, the first CanAlaska drill campaign on the property, details of standards and their performance were not reported.

DS7 and DS8 are Acme's in-house reference standards for 1DX analysis. OREAS45PA, OREAS45CA, OREAS45P, OREAS45C and OREAS124 are standards provided by Ore Research and Exploration Pty Ltd. OREAS124 is a sandstone-hosted uranium ore. AMIS0054 is a standard provided by African Mineral Standards. It is a uraniferous phosphatic sandstone from Bakouma, Central Africa Republic. LKSD-3 is a composite lake sediment standard, with material from lakes in Ontario and Quebec, from Canmet Labs. C3 is likely also an in-house reference standard.

As indicated in the right-hand column of Table 12-1, most of the analyses of standards run with samples from each drill season were within their expected tolerance. For uranium by 1DX (partial digestion), in particular, 95% or more of the analyses were within expected tolerance. Except for four sets of analyses of standards for uranium by 1EX (total digestion) discussed below, more than 95% of the analyses of 1EX standards were within expected tolerance.

In the 2009 winter drill program (Smart et al., 2009), only 60% of analytical values for U in OREAS24P were within two standard deviations of the expected value, but the number of analyses (5) was relatively small. All fell within three standard deviations.

Also in the 2009 winter drill program (Smart et al., 2009), only 76% of analytical values for U in OREAS45P fell within two standard deviations of the expected value, but all fell within two and a half standard deviations.

In the 2010 winter drill program (Smart et al., 2010), 87% of analytical values for U in OREAS45P were within two standard deviations of the expected value using the expected mean and standard deviation in Acme's pre-2010 Certificate of Analysis (2.4 +/- 0.4 ppm U). Using CanAlaska's own internal statistics (2.19 +/- 0.31 ppm U) for OREAS45P, however, all analyses were within tolerance limits. This suggested that Acme should re-evaluate their certified data. Acme did so, with the revised values (OREAS45P Certificate of Analysis, 22 April 2010) close to those found by CanAlaska.

In the 2010 summer program (Dasler et al., 2010), 90% of analytical values for U in OREAS45P appear to be within the tolerance limits of Acme's Certificate of Analysis (2.2 ppm +/- 30%; 22 April 2010). Inspection of the analytical plot (Figure 3 of Appendix V in Dasler et al., 2010), shows, however, that the same expected value and tolerance used in the 2010 winter program were used. If the revised values given in Acme's Certificate of Analysis in the report had been used, 97% of the values would plot within the tolerance limits.

As indicated in Table 12-1, the ranges of values from analyses of Ni and B standards were, with few exceptions, well within tolerance limits; hence they are not discussed here.

12.2.2 External Standards

Except for the standards analysed by Acme, as described above, as part of their analytical procedures, no other standards were run. Whereas most of the mineralization found to date on the Cree East property has been low grade, there has been no need for the increased confidence in data quality that would be provided by running external standards.

Once potentially economic mineralization has been discovered, of course, it would be advisable to run external standards as part of the analytical procedures. External standards are certified reference materials that are commercially available, such as the CANMET BL series standards, produced from ores containing natural radioactive minerals. These can be obtained from the CCRMP Sales Office at CANMET Mining and Mineral Sciences Laboratories in Ottawa.

12.3 Sample Blanks

12.3.1 Lab Blanks

In order to monitor the quality of Acme's sample preparation procedures, a preparation blank (G1) is inserted into each batch of samples analyzed by Acme Lab. CanAlaska tracked the average values for uranium and nickel obtained for the G1 blank in both partial (Group 1DX) and total (Group 1EX) digestion analyses (Table 12-1). G1 is not a certified standard; hence, high reproducibility is not expected. As indicated in Table 12-1, however, repeated analyses of uranium and nickel in the G1 blank reported from the 2010, 2011 and 2012 drill programs are typically within 2 standard deviations of the expected values.

12.3.2 Field Blanks

Following the winter 2010 drill campaign, a barren, non-mineralized sandstone sample was inserted by CanAlaska into the sample sequence after every 20 samples. For this purpose, CanAlaska used non-mineralized sandstone from holes CRE029 and CRE030, drilled in winter 2010. Such field blanks are an additional control to monitor potential cross-over contamination from high grade to corresponding low grade samples during the assay procedure. Higher than expected analytical results for the blank would indicate that the material was contaminated during the sample preparation procedure. Although included in the analytical process, field blanks were not reported in the winter 2010 drill report. The winter 2011 and 2011 reports both stated that field blank analyses were quite consistent and there was no apparent evidence for contamination or sample switches.

12.4 Duplicates

12.4.1 Lab Duplicates

To estimate the sub-sampling variance and accuracy of Acme's preparation procedures, reject duplicates are used. A sample is crushed, pulverized and split into two portions. Two subsamples (the original and duplicate) are taken from each portion of the split. The analyses of both sub-samples are then compared as part of the quality control process. Although lab duplicates are reported to have been run as part of the analyses of core from the 2008 winter drill program, no data were included in that season's drill report.

As shown in Figures 69 and 70, all lab duplicate analyses for uranium from the 2008 – 2012 drill seasons and for nickel from the 2010 – 2012 drill seasons are within 10% of each other, and most are much closer. Graphs of results for duplicate analyses of nickel were not included in drill reports before the 2010 summer drill program; hence they are not shown in Figure 70.

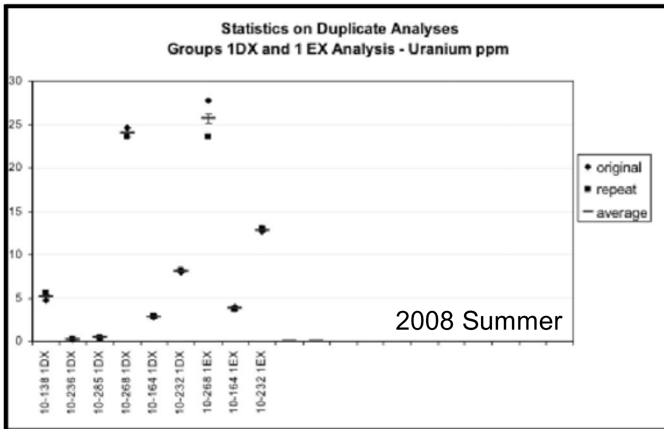
As shown in Figure 71, most lab duplicate analyses for boron from the 2008 – 2012 drill seasons are within 10% of each other. Only one sample, 10-366 from the 2009 winter drill season, has more than a 20% difference. This presumably reflects uneven distribution of boron minerals (e.g., dravite) in the sample.

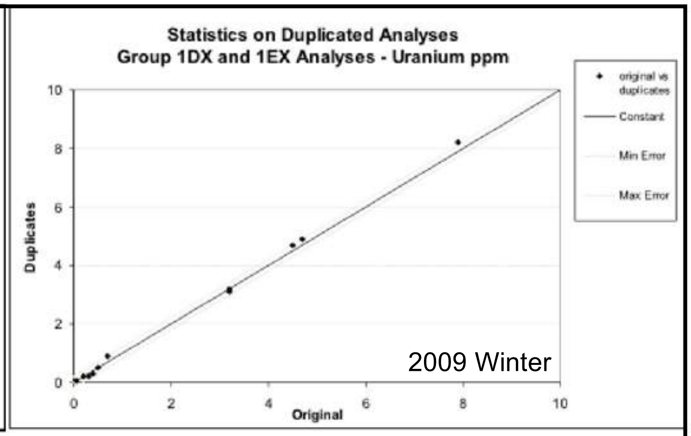
Although lab duplicates were run, results were not reported in the winter 2008 drill report.

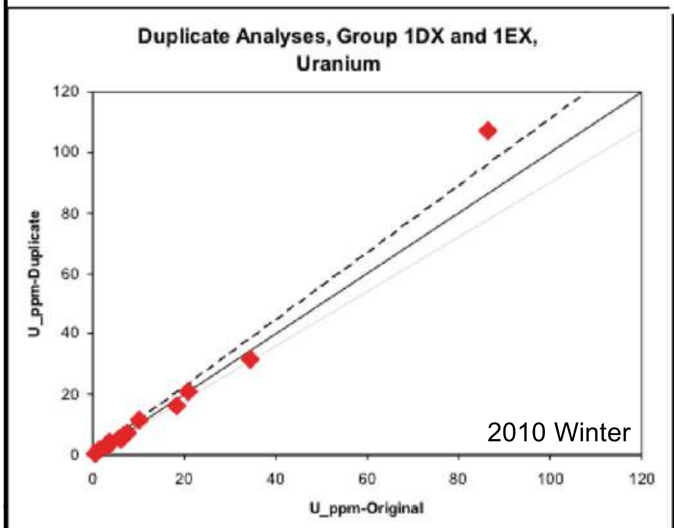
12.4.2 Field Duplicates

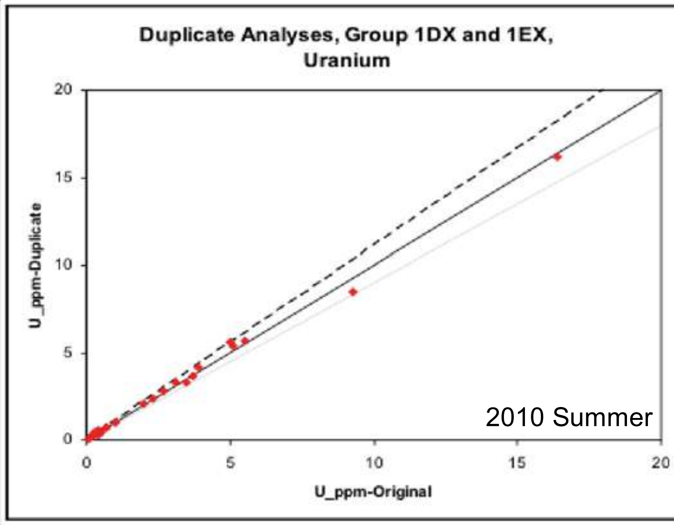
To monitor the sample batches for the potential sample mix-ups and to estimate the sub- sampling variance as a function of both laboratory error and sample homogeneity, field duplicate samples are inserted by CanAlaska into the sample stream and submitted to Acme utilizing a separate sample number. The degree of reproducibility of field duplicates determines the natural sensitivity of the material to sample variations. Very poor reproducibility may indicate a sample mix-up.

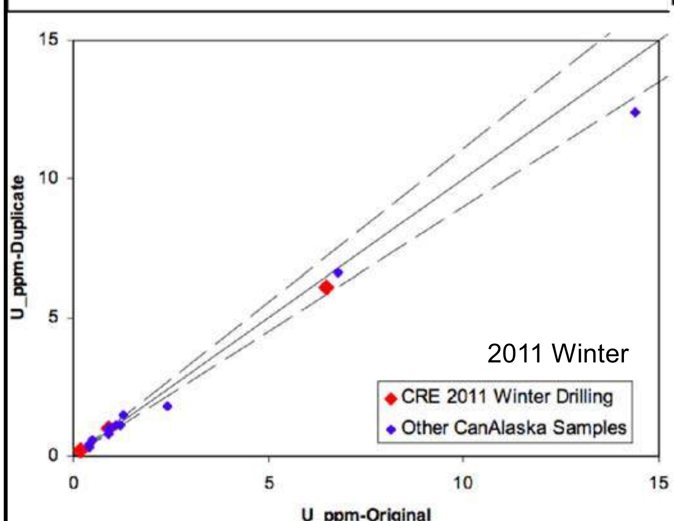
Field duplicates were analysed as part of the summer 2010 drill program, but field duplicate results were only included in drill reports for 2011 and 2012 (Figure 72). A wider dispersion of the field duplicate results compared to laboratory duplicate assays is to be expected given the greater inhomogeneity of the material sampled (i.e. rock vs pulp). However, as indicated in Figure 72, the duplicate results are in relatively good agreement overall, with most data points within 10% of the mean trend line.

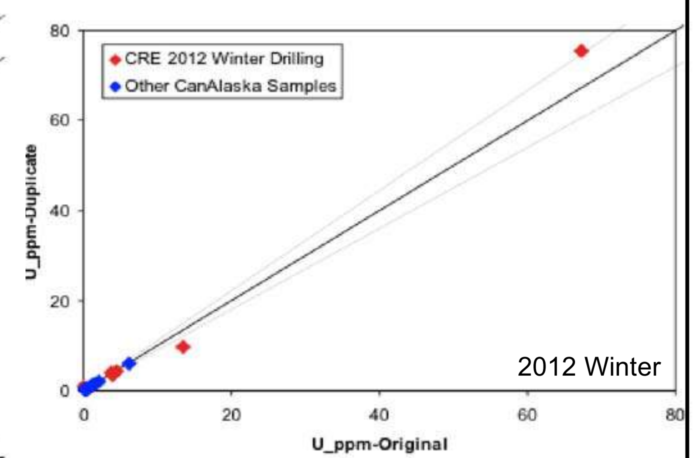












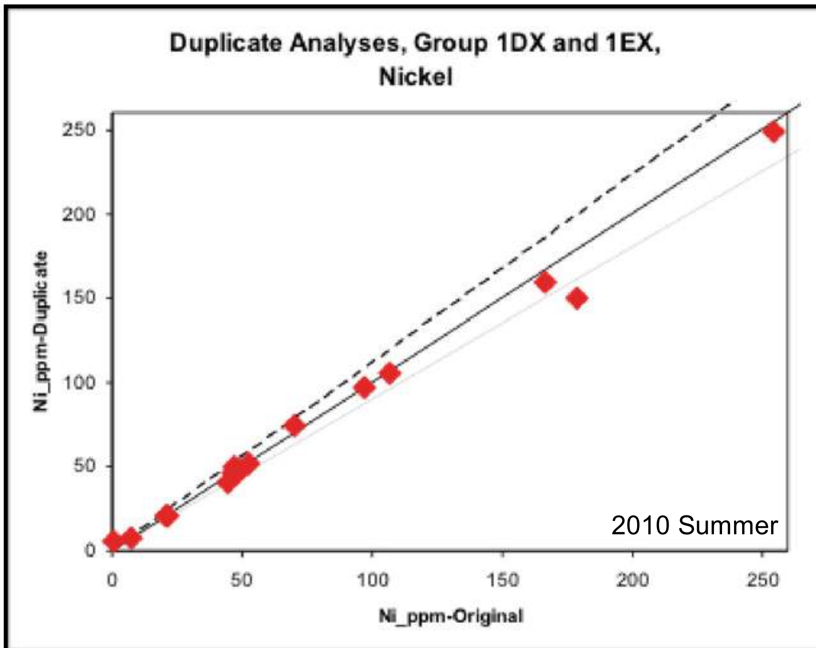
CanAlaska Uranium Ltd.

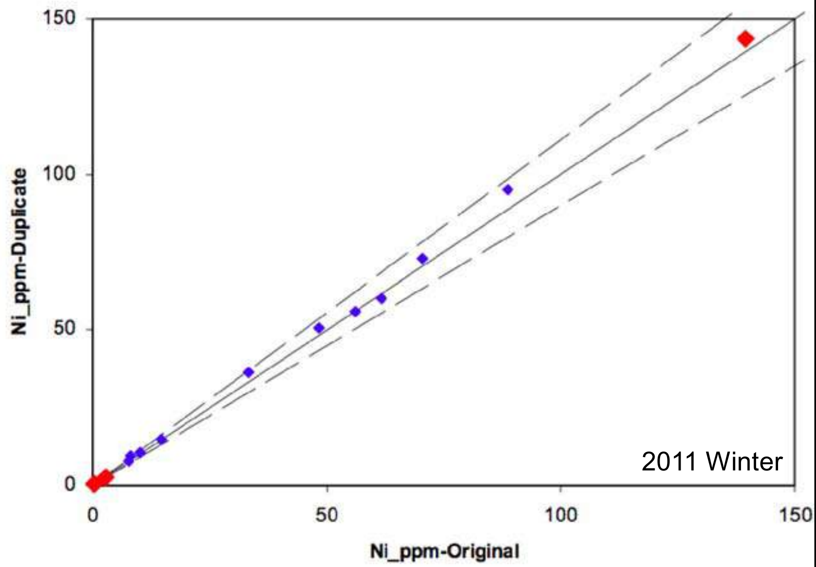
Hanwha KEPCO KORES SK energy

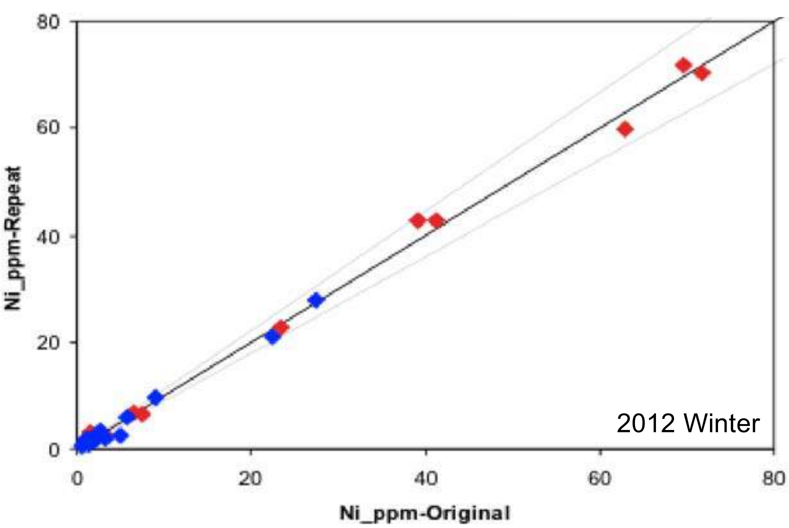
Cree East Project

Lab Duplicate Analyses Uranium (2008 - 2012)

		Scale:	Fig No: 69
Date: Feb. 28, 2013	Drawn by: GRB	Report: CRE2013-01	







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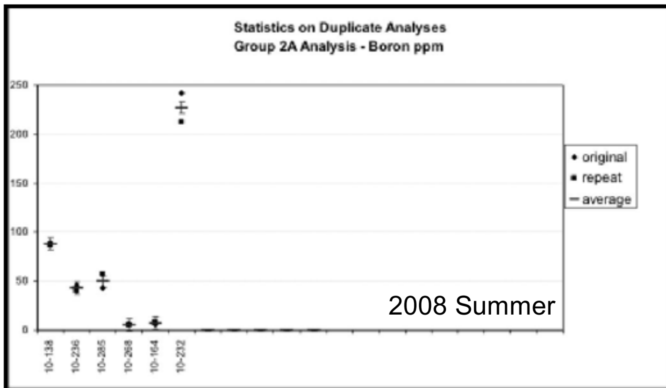
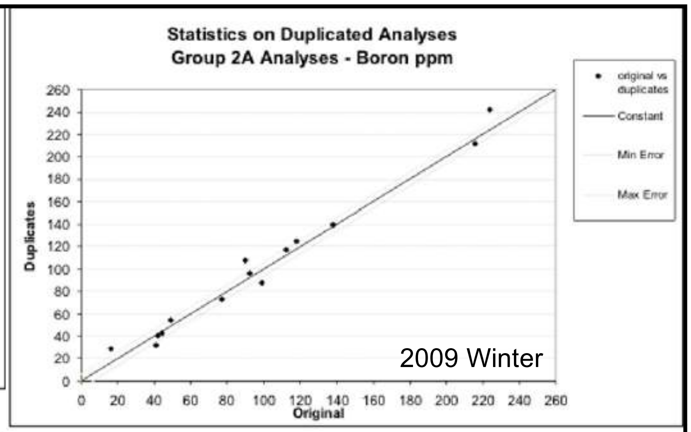
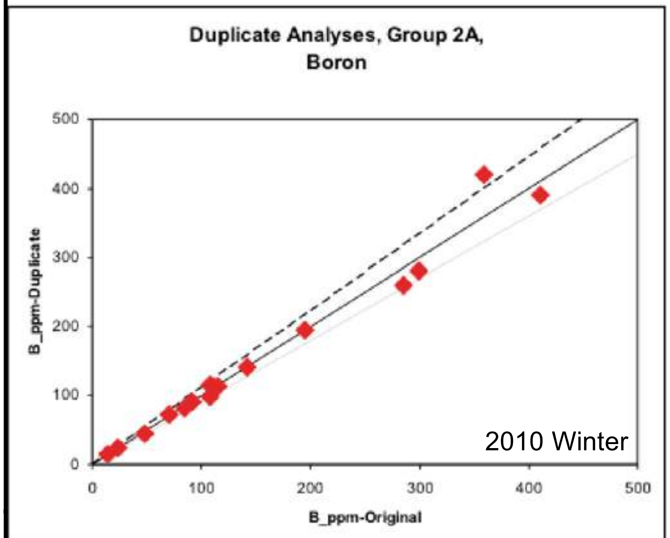
Cree East Project

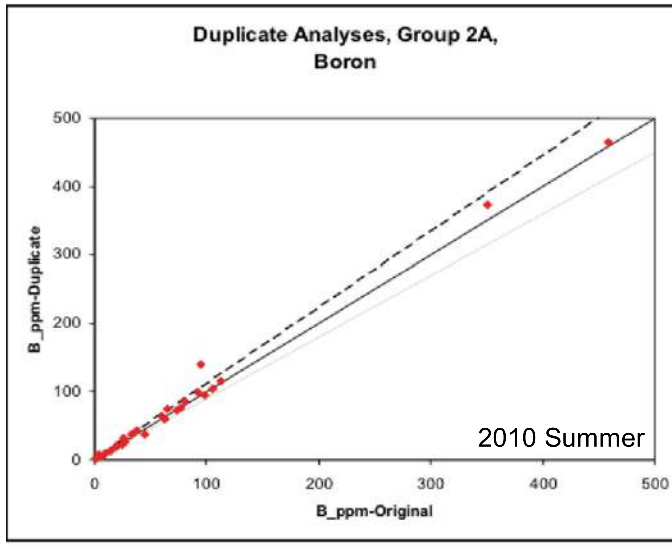
Lab Duplicate Analyses
Nickel (2010 - 2012)

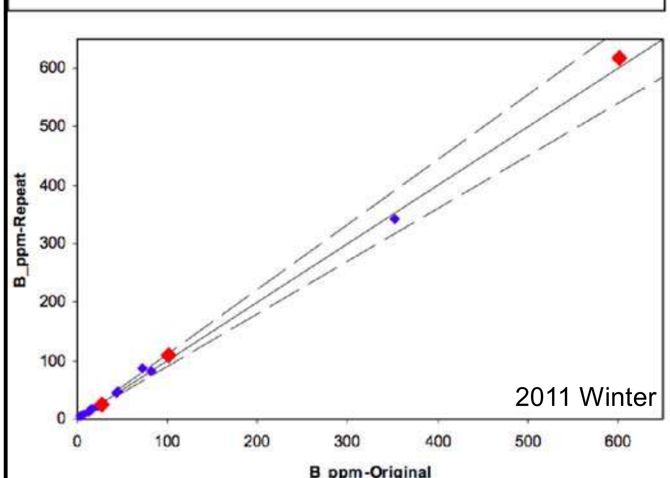
		Scale:	Fig No: 70
Date: Feb. 28, 2013	Drawn by: GRB	Report: CRE2013-01	

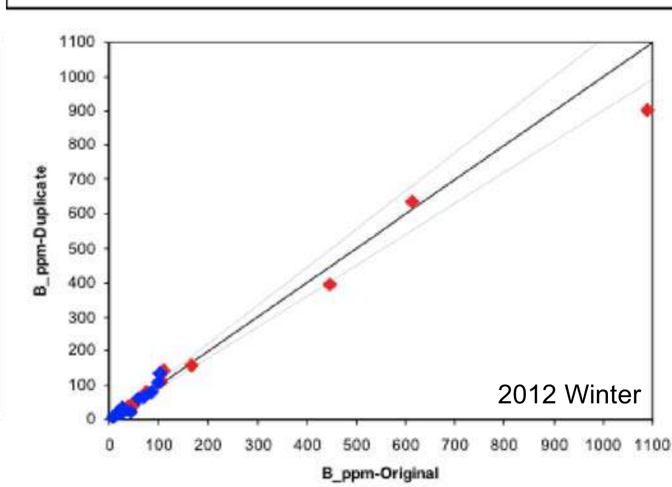












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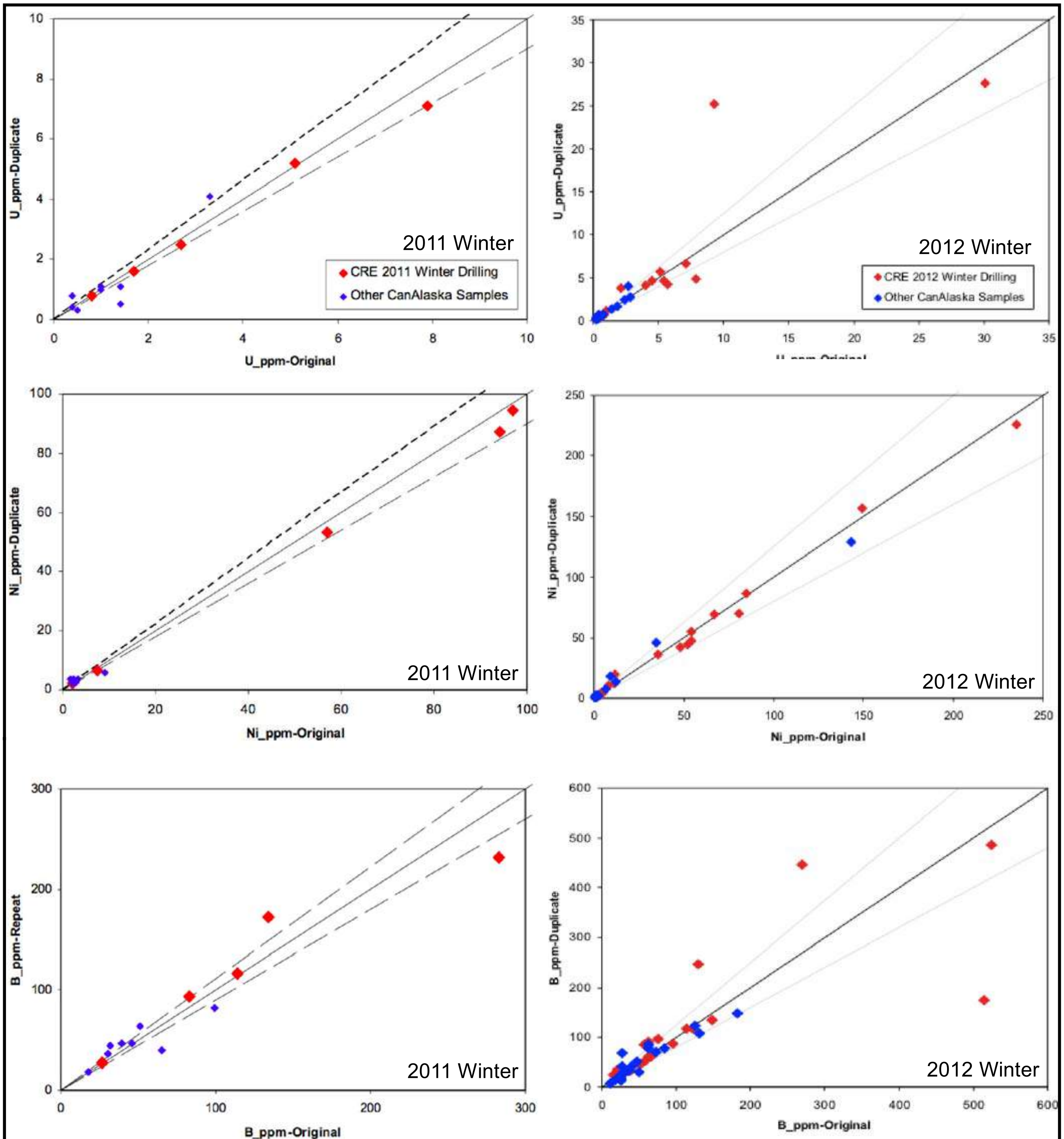
Hanwha KEPCO KORES SK energy

Cree East Project

Lab Duplicate Analyses
Boron (2008 - 2012)

		Scale:	Fig No: 71
Date: Feb. 28, 2013	Drawn by: GRB	Report: CRE2013-01	



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Cree East Project

Field Duplicate Analyses
Uranium, Nickel & Boron (2011 - 2012)

		Scale:	Fig No: 72
Date: Feb. 28, 2013	Drawn by: GRB	Report: CRE2013-01	

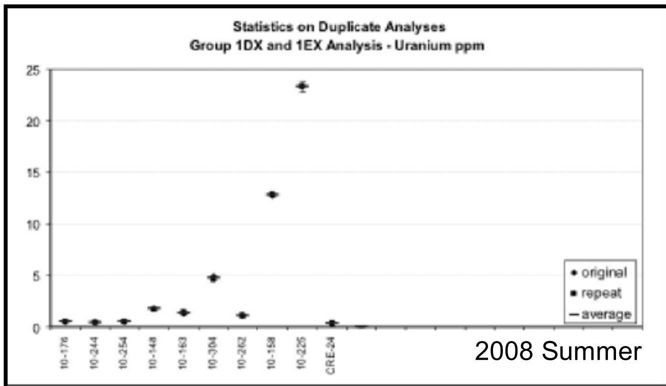
12.5 Replicates

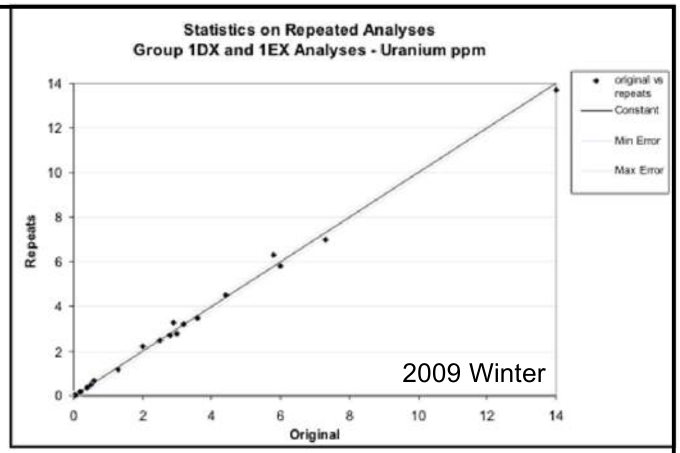
On arrival at the lab, a sample is crushed, pulverized and split into two portions. Two samples are taken from one portion of the split. The second sample is a replicate or "repeat". Analyses of the original and replicate samples are compared as a control measure for precision and accuracy in analytical procedures.

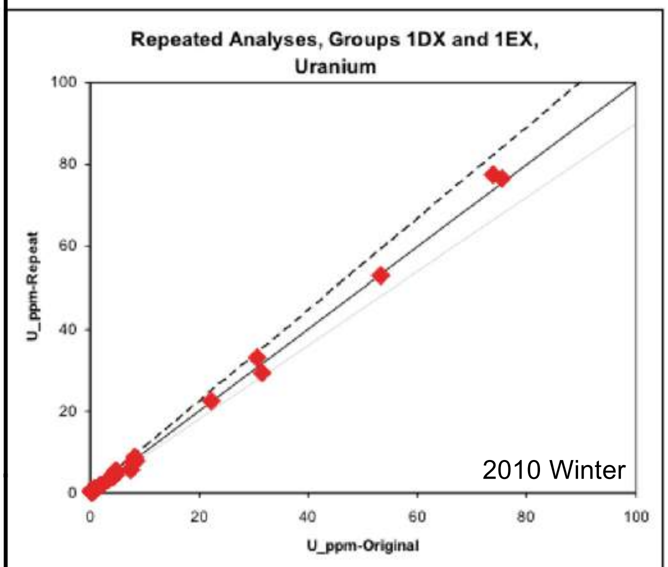
Although replicates are reported to have been run as part of the 2008 winter drill program, no results were included in that drill report. Results of replicate analyses for uranium, nickel and boron for succeeding drill campaigns are shown in Figures 73 to 75. All the uranium and nickel analyses fall within 10% of one another; most are with a few percent. Most of the boron analyses also fall also within 10% of one another. The high level of reproducibility shown indicates that the analyses done from 2008 to 2012 have high accuracy and precision.

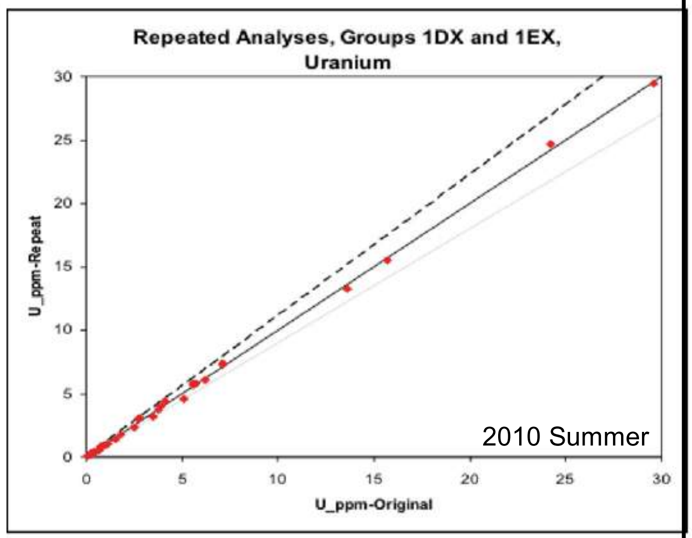
12.6 Comparison of Analytical Methods

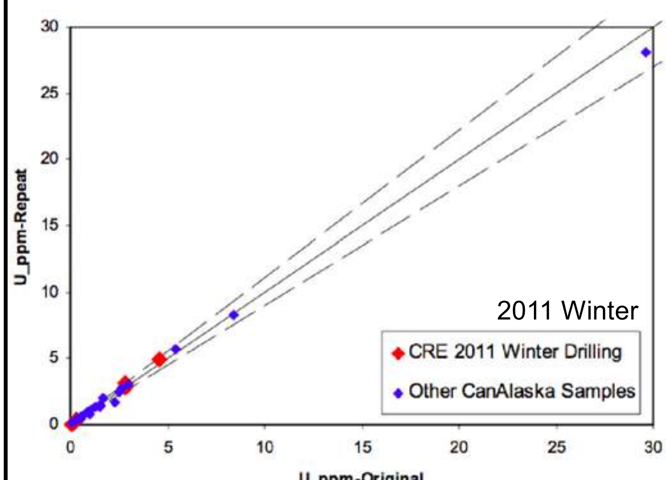
As described elsewhere in this report, systematic sandstone samples were analysed by Acme Laboratories' 1DX analytical package (partial digestion; ICP-MS), whereas systematic basement samples and continuous samples of any lithology were analysed by Acme's 1EX analytical package (total digestion; ICP-MS). The partial acid digestion (aqua regia) used in the 1DX analytical package should selectively detect elements adsorbed onto the surfaces of minerals or in the outermost parts of those minerals, whereas the total digestion (multi acid), 1EX analytical package should detect all elements whether adsorbed or within mineral grains. A combined plot of basement and sandstone data from 13 cores (CRE001, CRE002, CRE004, CRE005, CRE006, CRE007, CRE008, CRE009, CRE010, CRE011, CRE012, CRE024, CRE041) for which samples were analysed by both methods, is shown in Figure 76. If all the uranium present in the samples were removed by partial digestion, the data points should all plot along the bisectrix of the graph, indicated by the black line. The further samples plot above this line, the greater the proportion of their uranium content must be within mineral grains, rather than on or near their surfaces. With increasing grade, the departure from the bisectrix decreases, indicating that a greater proportion of uranium in high-grade samples resulted from post-depositional uranium enrichment, whereas low grade samples contain more autochthonous uranium. The cluster of sandstone data points centered about a trend line (not shown) slightly higher than that of the basement samples suggests more autochthonous uranium in sandstone than basement mineral grains.

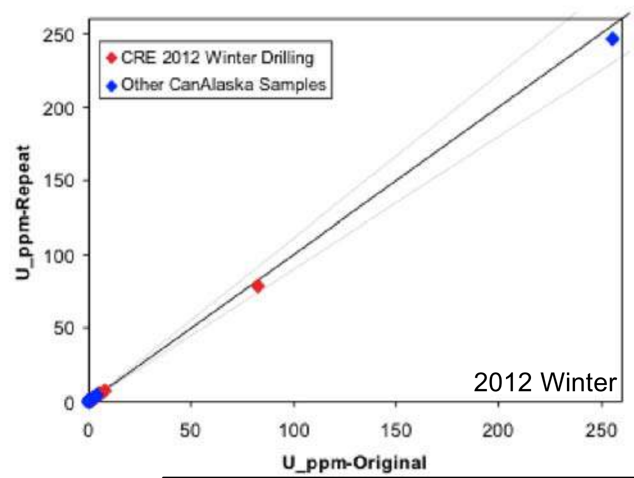












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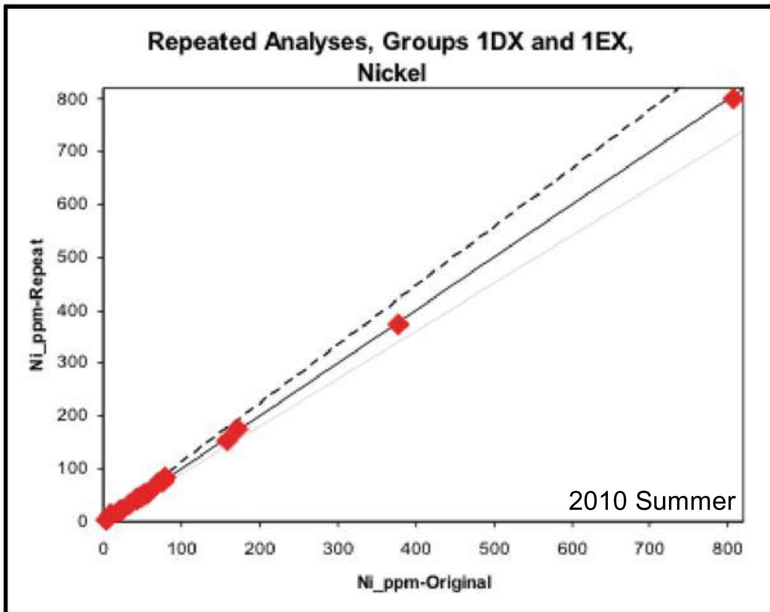
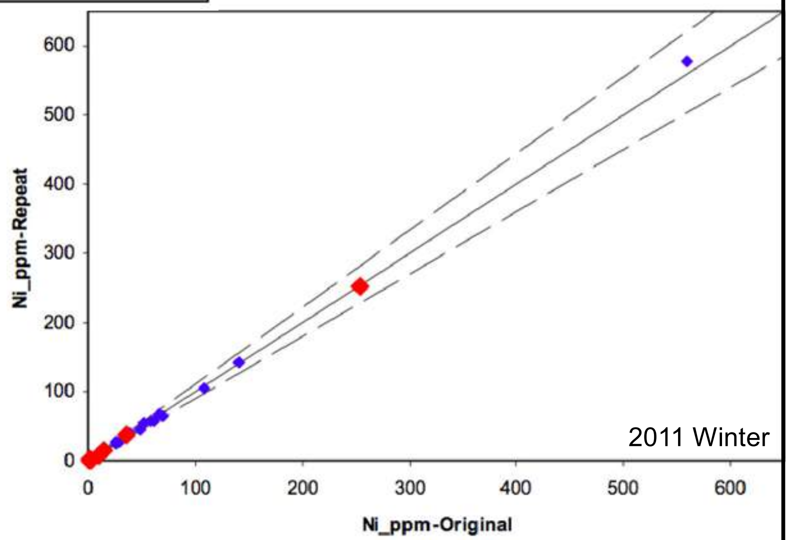
Hanwha KEPCO KORES SK energy

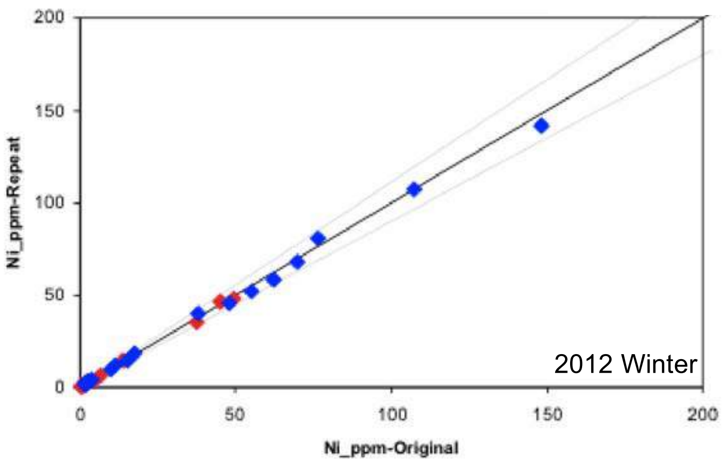
Cree East Project

Replicate Analyses Uranium (2008 - 2012)

		Scale:	Fig No: 73
Date: Feb. 28, 2013	Drawn by: GRB	Report: CRE2013-01	







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Hanwha KEPCO KORES SK energy

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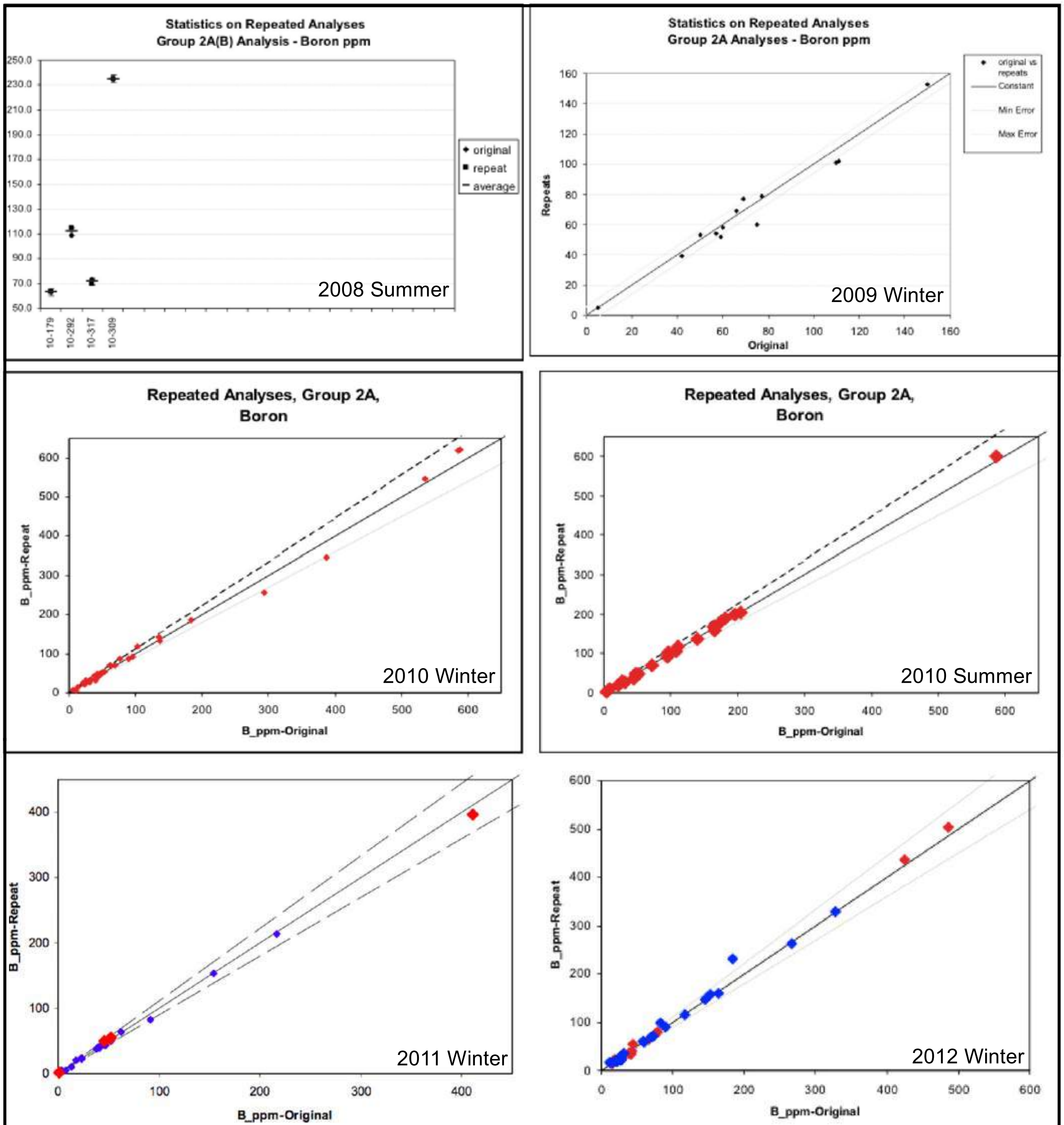
Replicate Analyses
Nickel (2010 - 2012)

		Scale:	Fig No: 74
Date: Feb. 28, 2013	Drawn by: GRB	Report: CRE2013-01	



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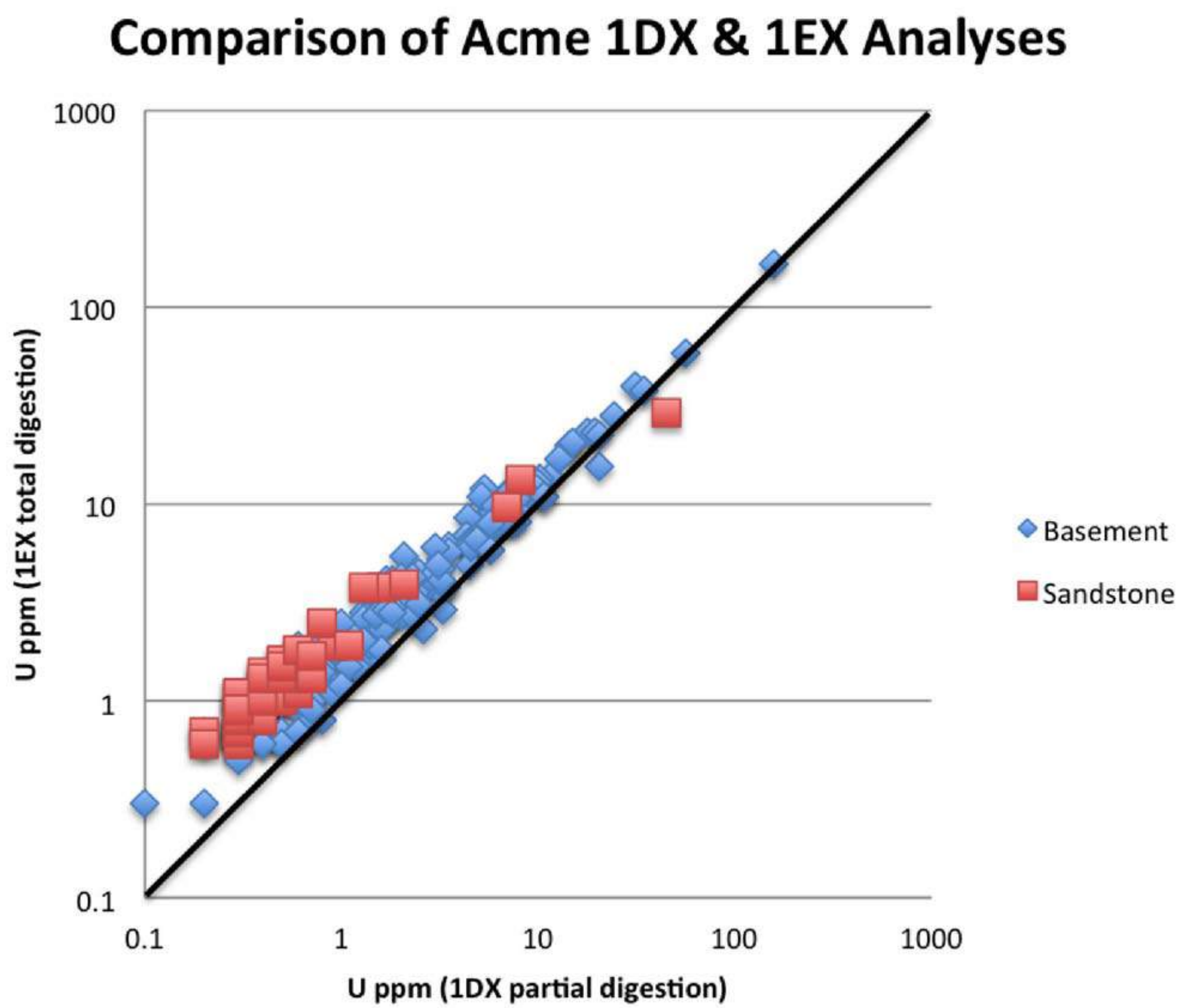
Cree East Project

Replicate Analyses
Boron (2008 - 2012)

		Scale:	**Fig No:**
Date: Feb. 28, 2013	Drawn by: GRB	Report: CRE2013-01	**75**



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Hanwha KEPCO KORES SK energy

Cree East Project

Comparison of 1DX & 1EX Analysis Basement and Sandstone Samples

		Scale:	Fig No: 76
Date: Feb. 28, 2013	Drawn by: GRB	Report: CRE2013-01	

12.7 External Laboratory Check Analyses

As part of the geochemical analyses for the 2010 winter drill program, a number of samples analysed by Acme were re-submitted to SRC for re-analysis (Smart et al., 2010). SRC's ICP4 analytical packages with aqua regia and multi-acid digestion are respectively similar to Acme's 1DX (partial digestion) and 1EX (total digestion). Acme's analysis is by ICP-MS, whereas SRC's analysis is by ICP-OES. Hence, the ICP-MS analyses done by Acme (detection limit 0.1 ppm) have a higher precision, than the ICP-OES analyses (detection limit 2 ppm) done at SRC.

Overall uranium results produced by both analytical laboratories compare relatively well (Figure 77). The broader scatter in the results at lower uranium values (U<20ppm) might be caused by the difference in analytical techniques and detection limits used by the laboratories.

Results for nickel and boron from the two labs are also in good agreement (Figures 78 and 79).

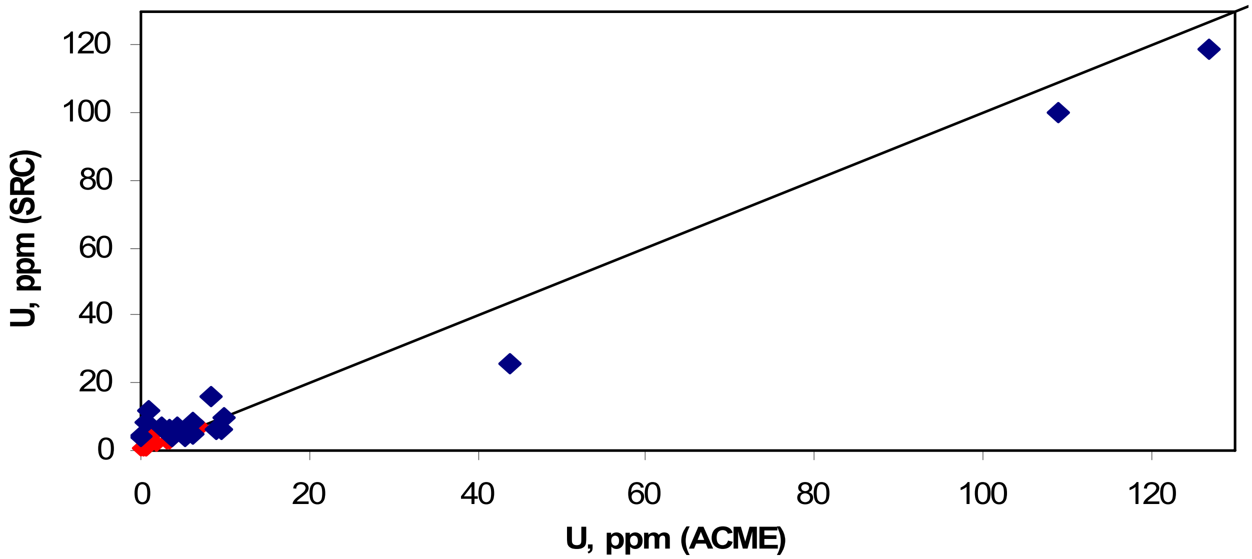
These comparative analyses confirm the quality of the Acme analyses.

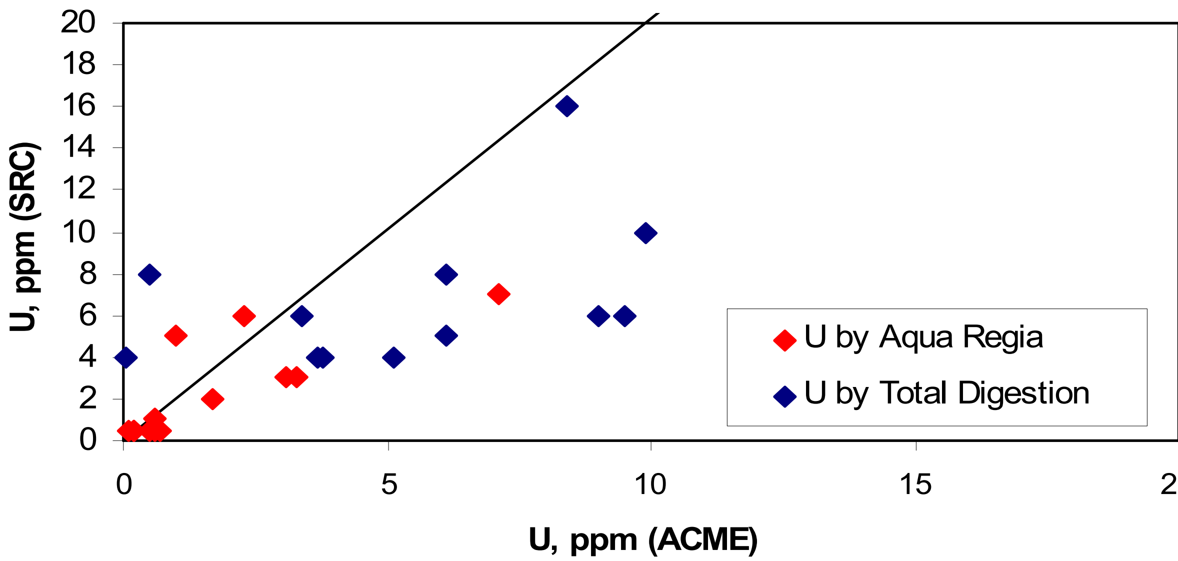
NOTE: On Canalaska's West McArthur project a comparison of SRC and Acme partial digestion analyses with a larger number of samples showed that SRC's partial digestion method (HNO3) produced about 30% more uranium than Acme's partial digestion (aqua regia). This applies to uranium in the 0.1-5 ppm range (Karl Schimann, personal communication, January 2013).

12.8 Scintillometer Readings of Samples

As part of the logging procedure, radiometrics are measured at 1 m intervals with a hand-held scintillometer and values recorded in the log. Radiometric spike values are also recorded. The purpose of these measurements is to: 1) detect broad trends, 2) locate mineralization for sampling and 3) locate radiometric spikes to fit the downhole probe logs to the core. Comparison of the lab assay data with the radiometric spike data provided a useful rough check on the quality of the analytical results, since gamma readings correspond to uranium and thorium abundances. Note that the scintillometer measurements are not used in the reporting of results or interpretation.

Of 137 radiometric spike measurements reported from the 91 holes drilled to date, 97 spikes are in basement rocks for which analyses of total dissolved uranium (Acme Package 1EX) were done (Figure 80). Other spikes are in sandstone, but corresponding uranium analyses by partial digestion (Acme Package 1DX) are generally much lower. Hence, only basement analyses are considered here. Overall, the data points in Figure 80 are quite scattered, but they do confirm that the level of gamma radiation correlates well with increased uranium grade. Factors which affect the scatter include operator error, "eyeball" averaging of scintillometer readings, proximity to higher grade material (e.g. whether the measured core was consistently held away from the core box), etc.



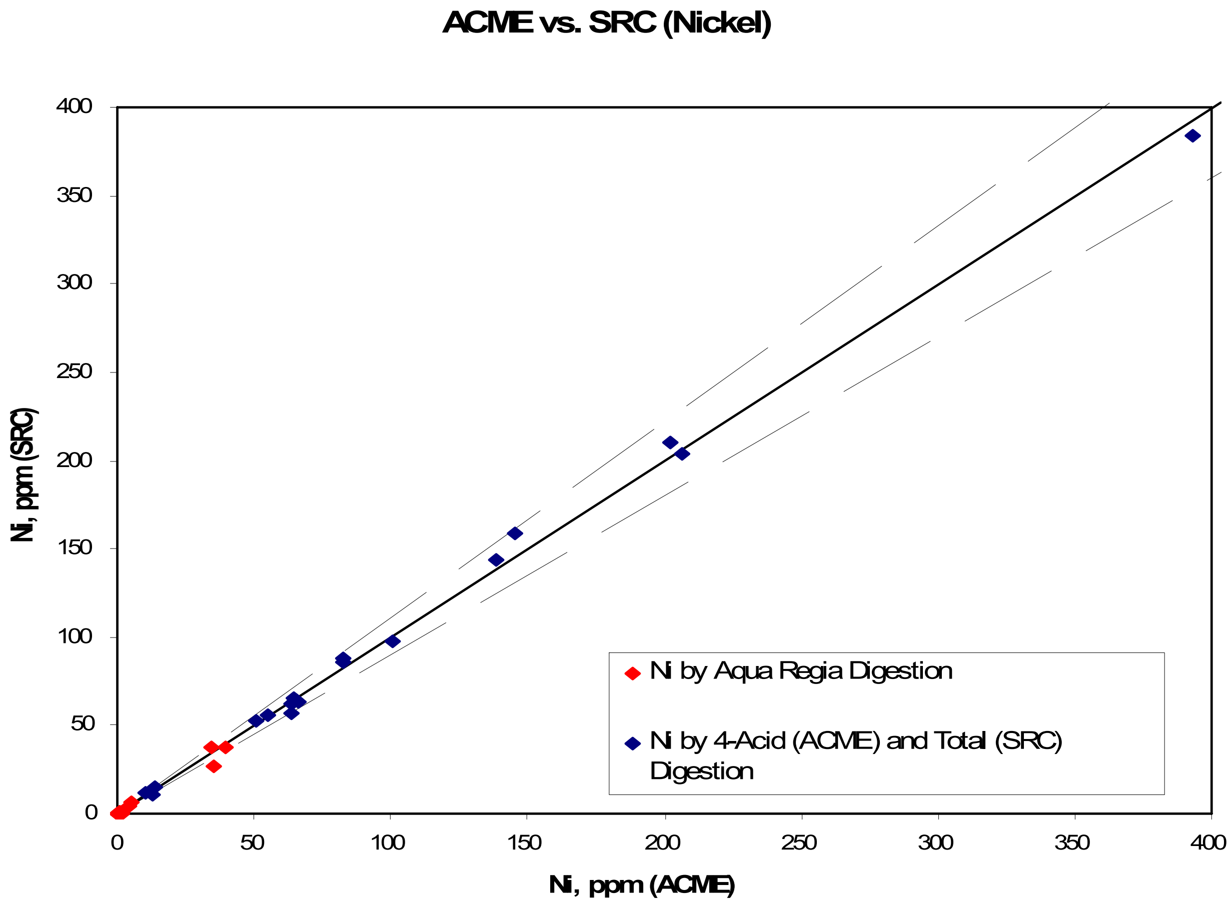


CanAlaska Uranium Ltd.

Cree East Project

Comparing Uranium Data Obtained by Acme (1DX & 1EX) & SRC Labs (ICP4)

		Scale:	**Fig No:** 77
Date: Feb. 28, 2013	Drawn by: GRB	Report: CRE2013-01	

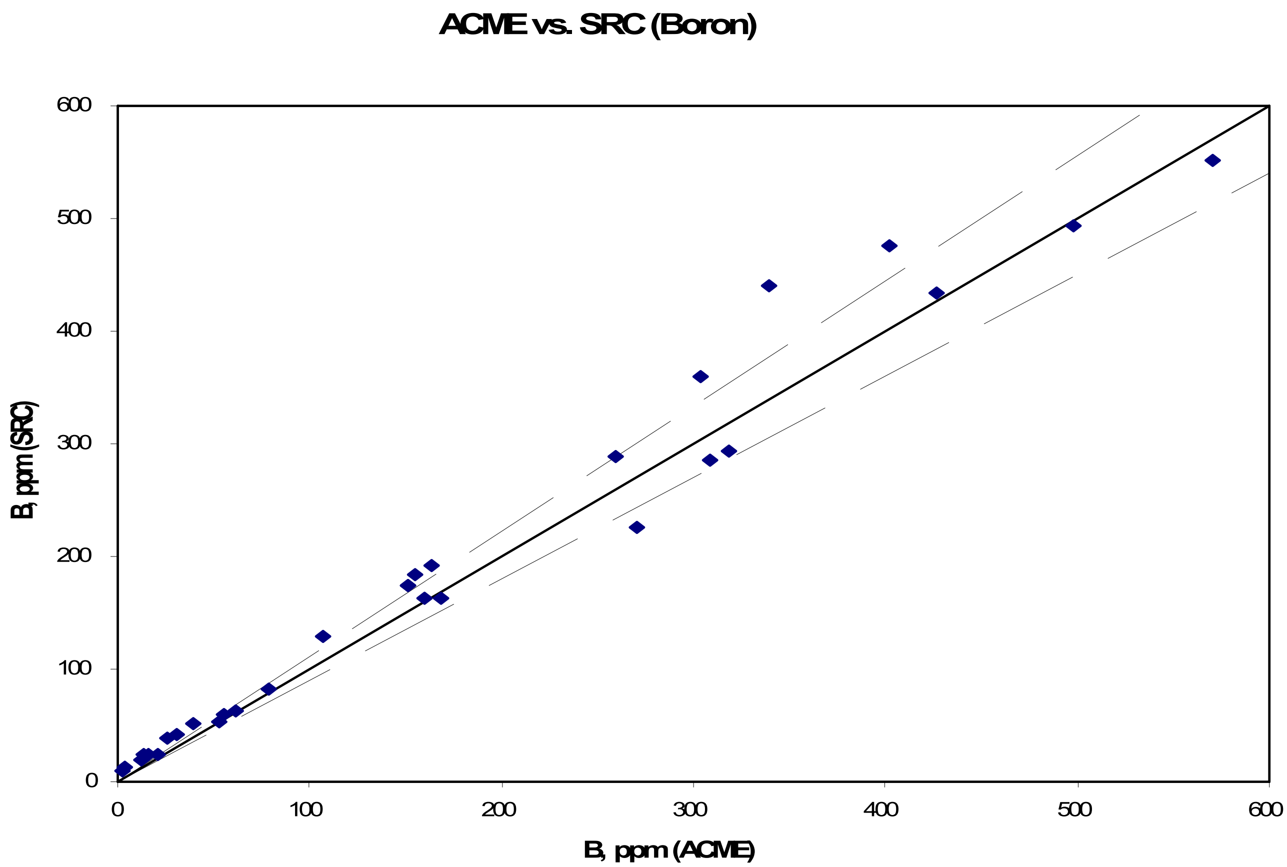


CanAlaska Uranium Ltd.

Cree East Project

Comparing Nickel Data Obtained by Acme (1DX & 1EX) & SRC Labs (ICP4)

		Scale:	Fig No: 78
Date: Feb. 28, 2013	Drawn by: GRB	Report: CRE2013-01	



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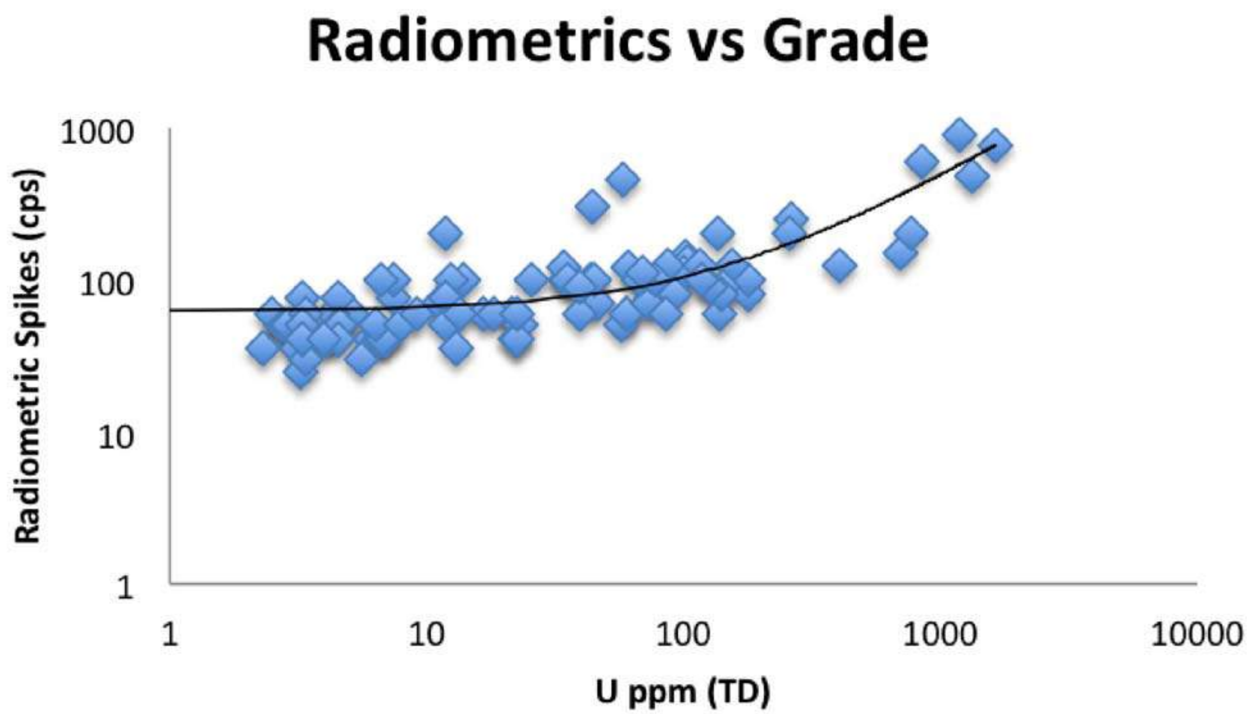
Hanwha KEPCO KORES SK energy

Cree East Project

Comparing Boron Data Obtained by Acme & SRC Labs (Na2O2 Fusion)

		Scale:	Fig No: 79
Date: Feb. 28, 2013	Drawn by: GRB	Report: CRE2013-01	



CanAlaska Uranium Ltd.

Hanwha KEPCO KORES SK energy

Cree East Project

Peak Scintillometer Data Vs Uranium Grade (Acme 1EX Total Digestion)

		Scale:		**Fig No: 80**
Date: Feb. 28, 2013	Drawn by: GRB	Report: CRE2013-01		

12.9 Authors' Opinion on Sampling, Preparation, Security and Procedures

In the opinion of the authors, the procedures followed during sampling, shipping sample security, analytical procedures, validation by different techniques and a rigorous QA/QC procedure are consistent with industry standard practices.

13 MINERAL PROCESSING AND METALLURGICAL TESTING

Not applicable.

14 MINERAL RESOURCE ESTIMATES

Not applicable.

15 MINERAL RESERVE ESTIMATES

Not applicable.

16 MINING METHODS

Not applicable.

17 RECOVERY METHODS

Not applicable.

18 PROJECT INFRASTRUCTURE

Not applicable.

19 MARKET STUDIES AND CONTRACTS

Not applicable.

20 ENVIRONMENTAL STUDIES, PERMITTING AND COMMUNITY IMPACT

Whereas no potentially economic discovery has yet made on this property, no environmental studies have been undertaken. Permitting requirements, outlined below, are the standard ones required for mineral exploration in northern Saskatchewan.

20.1 Permitting

Mineral exploration in Saskatchewan is regulated mainly by the Ministry of Environment and the Ministry of Energy and Resources.

Land tenure is regulated by the Ministry of Energy and Resources. Approval of a mineral claim gives the holder the exclusive rights to prospect on that claim. To extract minerals commercially, however, that claim must be converted to lease. Neither a mineral claim nor a mineral lease grants surface rights. As of 1 December 2012, Saskatchewan has gone to “paper staking” under a new act, The Mineral Tenure Registry Regulations. Established claims in good standing (legacy dispositions), such as those described in this report, are automatically registered under the new system. Continued tenure is dependent on filing regular statements of exploration expenditures with assessment reports justifying the claimed expenditures. Requirements for assessment reports and relevant forms can be found at the Ministry of Energy and Resources website (www.economy.gov.sk.ca).

The Ministry of Environment requires permits for all surface activities related to mineral exploration, including development of access trails and roads. A list of permits required by CanAlaska for recent exploration programmes is shown in Table 13-1. The “Mineral Exploration Guidelines for Saskatchewan 2012” developed by the Saskatchewan Mineral Exploration and Government Advisory Committee (SMEGAC) and posted at both the Energy and Resources and the Saskatchewan Mining Association (www.saskmining.ca) websites outlines best management practices, regulatory requirements and required forms for the following activities:

- Grassroots exploration
- Forest clearing (e.g., camp or trail clearing)
- Temporary work camps
- Hazardous substances and waste dangerous goods
- Fire prevention and control
- Access
- Water Crossings
- Exploration trenching and hydraulic stripping
- Drilling on land
- Drilling on ice
- Core storage

- Worksite restoration
- First Nation and Metis Community Engagement

Note that permits must be approved in advance of activities, so it is important to apply for these in a timely manner.

Table 20-1 - Cree East Project Permits from Recent Exploration Programmes

Permit	Cost	Validity	Purpose
Temporary Camp Permit	$330.00	1 year	Temporary exploration camp > 500 man-days
Miscellaneous Use Permit	$115.50	1 year	Storage of camp material, lumber or fuel drums on site
Temporary Water Rights License		1 year	Camp well
Surface Exploration Permit			Approval for drill sites, access trails, etc.
Forest Products Permit	$52.50	4 months	Permission to clear trails, campsite, drillsites
Aquatic Habitat Protection Permit			

Although permitting is not involved, exploration work camps must also conform to the requirements of Saskatchewan's Occupational Health and Safety regulations. Depending on the location and size of the camp, there are specific requirements for required first aid equipment and levels of first aid training (http://www.lrws.gov.sk.ca/first-aid-sk-workplaces). Each camp should have an emergency response plan, including contact numbers, posted. All workers must have adequate safety training for the work in which they are engaged and must have required Personal Protective Equipment. Copies of the provincial Occupational Health and Safety regulations, company safety manuals and other relevant safety information must be available and accessible to camp workers. Mining exploration camps are commonly inspected by Ministry of Environment and Labour (Mine Safety) officers.

Approval for work may also be required from the Heritage Conservation Branch of the Ministry of Tourism. Activities (e.g., drill sites or trails) within 250 m of significant water bodies, such as Cree Lake, may require a Heritage Resource Impact Assessment.

20.2 Community Impact

Since beginning work on the Cree East property in 2005, CanAlaska (CVV) has made efforts to communicate with and develop develop strong working relationships with northern communities.

With several trips into the communities, and meetings with the local community leaders, the management team of CanAlaska established many standards for community involvement that can be followed for many years to come. One such commitment to the communities was that CanAlaska would provide clear information prior to all drill programs or work in the area. This transparency allowed community members and council members to question all work before it was to be carried out by CVV. CanAlaska followed all required 'Duty to Consult' protocols and also provided further informational meetings for the community members, as well as Chief and Council.

Much of the work force used on the CanAlaska CREE Lake property was developed through hiring programs in the local communities. Using local workers for road construction, camp mobilization and de-mobilization, geo-technical programs etc., CanAlaska has provided direct benefits to communities from having CanAlaska working in the area. These work opportunities also helped local community members to learn new job skills and abilities and provide the background for some to move on to other industry positions. The impact of CanAlaska working in the area was positive throughout all drill and geophysical programs. CanAlaska continues to provide valuable work experience to benefit all community members.

As noted above, a guideline for Best Management Practice on First Nations and Metis Community Engagement, developed by the Saskatchewan Mineral Exploration Government Advisory Committee (SMEGAC), is posted at the Saskatchewan Mining Association website (www.saskmining.ca). The Saskatchewan government's "Duty to Consult" policy is outlined in "First Nation and Metis Consultation Policy Framework, June 2010), posted at the Energy and Resources website.

21 CAPITAL AND OPERATING COSTS

Not applicable.

22 ECONOMIC ANALYSIS

Not applicable.

23 ADJACENT PROPERTIES

Except for open ground formerly held by Ditem Exploration Ltd. to the north and northwest, the Cree Lake East property is surrounded by claim blocks held by other companies (Figure 81).

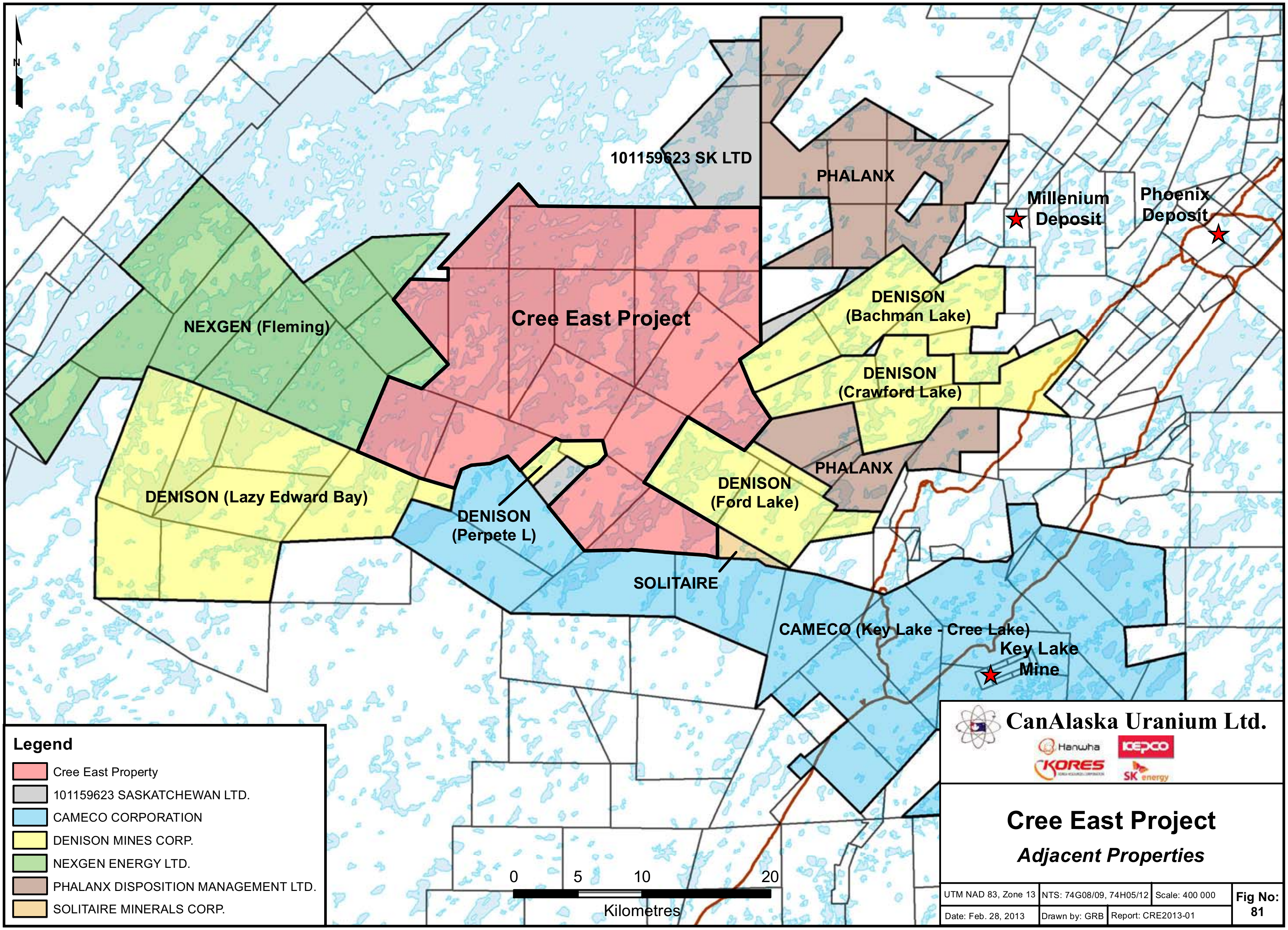

101159623 SK LTD
PHALANX
Millenium Deposit
Phoenix Deposit
DENISON (Bachman Lake)
NEXGEN (Fleming)
Cree East Project
DENISON (Crawford Lake)
PHALANX
DENISON (Lazy Edward Bay)
DENISON (Ford Lake)
DENISON (Perpete L)
SOLITAIRE
CAMECO (Key Lake - Cree Lake)
Key Lake Mine
N
Legend
Cree East Property
101159623 SASKATCHEWAN LTD.
CAMECO CORPORATION
DENISON MINES CORP.
NEXGEN ENERGY LTD.
PHALANX DISPOSITION MANAGEMENT LTD.
SOLITAIRE MINERALS CORP.
0 5 10 20
Kilometres
CanAlaska Uranium Ltd.
Hanwha
KEPCO
KORES
SK energy
Cree East Project
Adjacent Properties
UTM NAD 83, Zone 13
NTS: 74G08/09, 74H05/12
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Fig No: 81
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23.1 Nexgen Energy Ltd (Fleming Project)

The Fleming Project comprises a large claim block in southern Cree Lake adjoining CanAlaska's claims S-108386, S-108387 and S-107757. The claim block was staked in 2005 by Dejour Enterprises Ltd., who transferred ownership to Titan Uranium Inc. in 2006. Titan sold their interest in the property to Mega Uranium Ltd. in February 2012, just prior to Titan's merger with Energy Fuels Inc. (Mega Uranium Ltd. news release, 4 Jan 2012). Mega Uranium, in turn, sold their interest, along with most of their other Canadian uranium projects, to Nexgen Energy Ltd. (Mega Uranium news release, 9 August 2012).

Dejour carried out boulder sampling and a MegaTEM survey in 2005 and an airborne VTEM survey in 2006. These surveys outlined a broad north-northeasterly trending conductor between Auriat and Keeping islands. In 2007, Patterson Geophysics carried out ground TDEM surveys over potential targets for Titan Uranium. In 2008, 7 widely scattered holes (1689 m) were drilled to test the most attractive conductive targets (Table 14-1). Four holes reached basement; three were lost in sandstone. No mineralization was intersected, although elevated uranium (<1.83 ppm U) were reported from sandstone above the unconformity.

Table 23-1 - Summary of 2008 Fleming Project Drill Holes

DDH FLM08	Northing	Easting	Elev. (m)	Angle	OB (m)	UC (m)	EOH (m)	Remarks
-01	6368598	395543	496	-85	29.0	344.8	366.1	Illite/sudoite in sandstone; 1200cps at 359m
-02	6365490	393475	495	-90	43	lost	178.0	
-02A				-85	58.2	271.1	340.5	Illite in sandstone with sudoite in lower part
-03	6365305	397709	492	-90	31.0	269.4	325.2	Kaolinite/illite in sandstone with sudoite above UC
-04	6362226	401198	499	-90	50.6	lost	52.1	
-04A				-85	53.6	lost	55.0	
-05	6364016	410241	499	-90	41.8	271.2		Kaolinite/illite in sandstone with sudoite near base

In 2009, a fixed loop TDEM survey was done over areas northeast and southeast of Auriat Island (Koch and Ryan, 2009). This confirmed and better defined conductors previously identified. Follow-up TDEM and DC resistivity surveys, as well as drilling, were recommended, but it is not known whether this was carried out.

23.2 Denison Mines Corp.

Denison Mines holds several claim blocks that adjoin the Cree East property, Lazy Edward Bay to the southwest, Perpete Lake to the south, and the Ford Lake, Crawford Lake and Bachman Lake claim blocks to the east.

23.2.1 Lazy Edward Bay Project

The 39,305 hectare Lazy Edward Bay property lies along the south shore of Cree Lake and covers the southern margin of the Athabasca Basin, approximately 75 kilometres west-northwest of Key Lake. It adjoins the Fleming property to the north and CanAlaska's claim S-107757 and S-107780 to the northeast. Denison Mines Corp. acquired a 54% interest in the property from JNR Resources Inc., but JNR remained project operator. Recently, however, JNR Resources was acquired by Denison Mines Corp. (The Saskatoon Star Phoenix, 15 Nov 2012; Denison Mines news release 14 November 2012), and now has 100% ownership of the property.

Sporadic work was done over the area between 1969 and 1989, including prospecting, geophysical and geochemical surveys and diamond drilling. Several major conductive trends were outlined, some of which are untested and others poorly tested. In 1978, SMDC discovered several several diabase boulders south of the Basin margin that ran up to 0.395% U3O8 (Saskatchewan Mineral Deposit Index showing 2062). The source of these boulders has not been identified, but encouraging geology and geochemistry was reported by SMDC in a number of widely-spaced drill holes.

In 1999, JNR Resources, in partnership with Kennecott Canada, acquired the property. JNR completed an airborne GEOTEM survey in 2000, followed by ground geophysics and diamond drilling in 2001, which focused on several prospective targets identified from historical work and the GEOTEM survey.

In 2001, another airborne GEOTEM survey was done, followed by ground magnetics, moving loop TDEM and gravity surveys on 7 separate grids. Eight holes (1565 m) were drilled on four grids on the western part of the property, with the best geochemical results obtained over a 2 km strike length of the Horse Conductor (Table 14-2). Previous operators had identified elevated radioactivity and prospective geochemistry in this area. Elevated to anomalous levels of pathfinder elements such as Ni, Pb, Cu, V, Co and B occur in the basement rocks of these holes, and one hole, LEB01-01, returned Zn values up to 0.62% from brecciated graphitic, pyrite-rich pelite. The clay geochemistry along the Horse Conductor is typically mixed kaolinite/illite, a signature commonly associated with uranium mineralization in the Key Lake area.

Table 23-2 - Summary of Lazy Edward Bay Project Drill Holes

DDH	Northing	Easting	Angle	UC (m)	EOH (m)	Sandstone clay alteration & probe gamma peaks
LEB01-01	6329700	396700	-90	145.7	200	Kaolinite/illite; peak 301cps at 141.2m

LEB01-02	6344200	392800	-90	225.2	278	Dickite/illite; peak 535cps at 222m
LEB01-03	6339100	391350	-90	99.1	183	Kaolinite/illite and dickite/illite; peak 189cps at 98.5m; <1.2ppm U in basal sandstone
LEB01-04	6338400	391425	-90	87.8	165	Kaolinite/illite; local dickite; peak 207cps at 85.8m
LEB01-05	6332500	391615	-90	171.2	193	Kaolinite/illite; peak 156cps at 184.7m; intersected diabase dyke
LEB01-06	6328925	396650	-90	106	165	Kaolinite/illite; peak 307cps at 120.3m
LEB01-07	6338400	391390	-90	90	186	Kaolinite/dickite/illite; peak 244cps at 87.1m
LEB01-08	6329700	136665	-90	145.1	195	Kaolinite/illite; peak 222cps at 141.7m
LEB02-09	6353800	416390	-90	54.6	95	Illite/kaolinite; hole not probed
LRB02-10	6354086	405977	-90	69.5	77	Chlorite & illite/kaolinite/dickite; hole not probed
LEB08-01	6355990	404263	-90	114.9	200	Illite/chlorite/kaolinite in basal 30m & dickite above; not probed
LEB08-02	6356553	404894	-90	96.9	164	Illite/chlorite/kaolinite in basal 20m & dickite above
LEB08-03	6356214	404290	-90	91.9	218	Illite/chlorite/kaolinite in basal 20m & dickite above
LEB08-04	6354826	403488	-90	81.5	95	Kaolinite with faulting and quartz dissolution
LEB08-05	6354827	403531	-65		51	Lost in sandstone
LEB08-06	6355044	402881	-90	177.3	239	Illite with chlorite in upper 10m and basal 15m
LEB08-07	6353717	403167	-90	160.1	293	Chlorite/illite/ in basal 25m & chlorite/illite/kaolinite above
LEB08-08	6353212	402383	-90	137.6	278	chlorite/illite/kaolinite in basal 25m and upper 30m

In 2002, a further two holes (172 m) were drilled on GeoTEM anomalies (suspected to be potential kimberlite bodies) on the eastern side of the property (Table 14-2). No mineralization was found, but anomalous Ni, B and U was reported (Billard, 2002).

In 2005, Geotech flew a helicopter-borne TDEM survey on the Lazy Edward Bay property (Zhu, 2005).

In 2006, five TDEM lines were done by Patterson Geophysics (Bradley, 2006). Four conductors identified match with historical conductors.

In 2007, an airborne DIGHEM survey was flown over the property by Fugro (Bradley, 2007). Approximately 8 km of potential basement conductor were identified for follow-up investigations.

The 2008-09 winter exploration program consisted of diamond drilling and ground geophysics. Eight more holes (1538 m) were drilled on the eastern part of the property (Table 14-2), with one hole lost in structurally disrupted and faulted sandstone. Although no mineralization was found, anomalous pathfinder elements were reported in several holes, as well as brittle fracturing and/or ductile shearing. The geophysical program consisted of ground EM and magnetometer surveys in the southwestern portion of the property. Well-defined drill targets were identified on three of the four grids surveyed.

An airborne gradient magnetic survey flown in 2010 was the first unified magnetic survey completed over the property. In addition to generating several new targets, the integration of these results with earlier ground and airborne geophysical surveys further defined and upgraded existing targets.

In 2011, JNR carried out an airborne 3-D full tensor gravity gradient survey. Several zones of interest lie along extensive corridors of well-defined, structurally-disrupted basement conductors over two to six kilometres in strike length.

23.2.2 Perpete Lake

Denison Mine's Perpete Lake property comprises two claims between southern Binkley Bay and Perpete Lake. These claims adjoin CanAlaska's claims S-107780, S-107777, S-107776, and S-107779, including zones G and J on Grid 7.

In 1977, Denison Mines Ltd. completed an airborne INPUT and magnetic survey over an adjacent property, which also covered the immediate showing area (Chen, 1977).

In 1978, E.M. Dillman completed an INPUT and magnetic survey on adjacent claims which covered the immediate showing area (AF 74G08-0012) and Swiss Aluminum Mining Company of Canada Ltd. (SAMCAN) completed an airborne EM, magnetic, and radiometric survey over CBS 4841 (Johnson and Lewis, 1978; Misner, 1979).

In 1979, SMDC completed an airborne INPUT and magnetic survey over the property (DeCarle, 1979). A joint venture partnership involving Key Lake Explorations Limited, SAMCAN, Musto Mines and SMDC completed follow up ground EM and magnetic surveys (Boniwell, 1979) and drilled a series of holes on the Perpete Lake grid (Sharpely, 1979). Anomalous U and Ni was reported from three holes drilled about 2.8 km northeast of the southwestern end of Perpete Lake. In SM79-1, 0.015% U3O8 over 1.0 m was found at the unconformity at 251.39 m. In SM79-4, 0.007% U3O8 over 4.0 m, was intersected just below the unconformity at 245.5 m. In SM79-5, 0.002% U3O8 over 4.0 m was cut just below the unconformity at 247.2 m. Mineralization is associated with hematite-stained, clay-altered regolith. This cluster of mineralized holes comprises Saskatchewan Mineral Deposits Index showing 2486.

In 1980, further EM and magnetometer surveys (Boniwell, 1980) were done on the Perpete Lake grids and six holes, SM80-8 to -13, were drilled in the 'Chain-of-Lakes' area (Sharpely, 1980). Another two holes were drilled on the west side of Perpete Lake (just off the Perpete claims). No significant mineralization was encountered in any of these holes, however.

In 1981, three more holes, SM81-16, -19 and -20 were drilled in the 'Chain-of-Lakes' area, and another hole, SM81-21, was drilled at Perpete Lake by Key Lake Explorations (von Hessart, 1981). No significant mineralization was reported and the best radiometric peak was 325cps in pegmatite in

SM81-20. Hole SM81-21 is of interest because it is strongly bleached throughout, has intense chlorite alteration in the basal sandstone and intersected a major, apparently subhorizontal fault zone in the basement.

In 1981, a joint venture partnership including SMDC, Minatco Ltd., Key Lake Explorations Ltd. and Agip Canada Ltd., with SMDC as operator, took the property over from Key Lake Explorations Ltd.. In the course of reconnaissance prospecting and sampling (Chapman, 1981) they located a well-rounded, white quartz-feldspar-biotite pegmatite boulder with yellow uranium staining approximately 1.5 km west of drill hole SM79-1 which returned 2600 ppm U and 1800 ppm Pb.

In 1982, SMDC completed two regional gradiometer/magnetic surveys which covered the immediate showing area (Questor, 1982; Rogers, 1982). In the same year, SMDC conducted ground VLF-EM, magnetic and gravity surveys over the Perpete Lake grid (Bingham, 1982). SMDC also completed further general prospecting and re-logged the core from the 1979 mineralized drill holes (Chapman and Macdonald, 1982).

In 1983, SMDC completed further DEEPEM and magnetic surveys over the Perpete Lake grid (Matthews, 1983) and drilled four holes, SM83-31, SM83-32, SM83-32A and SM83-33 northeast of the original Perpete Lake showing (Curry and Chapman, 1983). No significant uranium values were reported.

In 1995, Nordland Exploration completed a boulder sample survey over the area and re-sampled drill holes SM80-7, -8, 13, and SM81-21 (Lehnert-Thiel, 1995). No significant uranium values were reported.

In 2005, Geotech Ltd. carried out a helicopter VTEM survey over the Perpete Lake property for International Uranium Corp. (Petrie and Zhou, 2006). 488 km were flown on NW-SE flight lines with a nominal spacing of 100 m. A broad AdTau conductive body coincident with a northeast-trending magnetic low lies over the northeast corner of the claim block and extends northward onto the adjoining Canalaska claims. No conductor is associated with the area of 1979 anomalous drill results which lies northeast of a strong magnetic high. Three target areas where identified along the conductor, but recommended drilling was not carried out.

23.2.3 Ford Lake

The Ford Lake claims lie east of the Cree East property, adjoining claims S-107778, S-107776 and S-107774. The property was staked in 2004 by Denison Mines Corp., who hold 100% ownership. In 2005, Denison carried out a regional Airborne GEOTEM survey (Fugro, 2005), which revealed an irregular broad conductive feature trending southeasterly from MacIntyre Lake and between Phillips and Morin lakes and underlying much of the Ford Lake property. The airborne survey was followed in 2008 by an HLEM survey over part of the Ford Lake grid (Burry and Petrie, 2009). In 2009 a fixed loop TDEM survey was done over the balance of the Ford Lake grid as well as the newly established Holgar and Morin lakes grids.

These EM surveys confirmed the presence of a series of northwesterly trending conductors. The property is interpreted to be underlain by a broad northwesterly trending sedimentary belt flanked to the northeast and southwest by granite gneiss domes and containing several minor granite gneiss bodies. Most conductors lie along the margins of the inferred domes. Further TDEM surveys and a resistivity survey were recommended. It is not known whether follow-up work has been carried out.

23.2.4 Crawford Lake

Denison's Crawford Lake property extends east from CanAlaska's claim S-107774. In 1996, Norland Exploration Ltd carried out a ground TDEM survey as a follow-up to a series of airborne surveys over the area since the early 1980s. Two strong conductive trends, F-2 & F-3, were identified parallel to a strong easterly trending magnetic anomaly. Follow-up drilling failed to explain the interpreted conductor axes.

The Crawford Lake property, 75% owned by Phelps Dodge, was optioned by International Uranium Corp. (now Denison Mines Corp.) in 2005. In the same year, Fugro Airborne Surveys Ltd. flew a regional MEGATEM II survey that included the Crawford Lake property. Although the line orientation for this survey was not optimal for the interpreted strike direction of the conductor axis, the results confirmed a weakly defined easterly trending conductive trend.

In 2006, Geotech Ltd. carried out a VTEM survey for International Uranium Corp. on the Crawford Lake property (Petrie, 2006). The weak conductive trend along the previously identified F-2/F-3 horizon was confirmed, but discrete conductors could not be distinguished.

In 2007, three holes (1.048 m) were drilled on the Crawford and Brown Lake properties. These holes were a follow-up to a 1979 drill intersection of 1.42% U3O8 over 1.0 m. No mineralization was found, but alteration and structure were reported to be encouraging (Denison Mines news release, 4 Oct. 2007).

23.2.5 Bachman Lake

Denison's Bachman Lake property lies northwest of their Crawford Lake claim block and adjoins CanAlaska's claims S-107775 and S-108357.

In 2006, a regional boulder sampling campaign covered the Bachman Lake property (McDougall and Wasyliuk, 2006).

In 2005, Fugro Airborne Surveys carried out a MEGATEM survey over the Bachmann Lake property (Fugro, 2005). Four major conductive features, broadly coincident with magnetic lows, were identified. The pattern of the conductive bodies suggests a dominantly northeasterly trending series of elliptical granite gneiss bodies separated by keels of more conductive metasedimentary rock.

It is not known whether any follow-up work has been done on the Bachman Lake property.

23.3 Cameco (Key Lake – Cree Lake)

Cameco Corp. holds a large block of claims along the Athabasca Basin margin from eastern Cree Lake to the Key Lake area. They adjoin the southeastern part of the Cree Lake property, specifically claims S-107780, S-1077790, and S-107778. No recent work on these claims is known.

23.4 Phalanx Disposition Management Ltd.

Phalanx Disposition Management, which appears to be new to the Athabasca Basin, holds claim blocks and isolated claims to the east of the Cree East property. No information is available on their exploration activities.

23.5 101159623 SK Ltd. (Scattered claims)

A Saskatchewan numbered company, 101159623 SK Ltd., holds a number of claims in eastern Athabasca Basin, including three that adjoin the Cree East property. Most are small isolated claims. No information is available on any recent exploration activities, but the small size and scattered nature of the claims make it unlikely that any significant work has been done on them.

Claim S-111906 lies between Denison's Perpete Lake claims and CanAlaska's claim S-107779. Historical drill holes, SM80-6 and -7 (Sharpely, 1980) lie in its northeastern corner.

Claim S-111905 lies northeast of CanAlaska's claim S-108358. Other than regional airborne surveys, little has been done in this area.

Claim S111907 is a very small wedge-shaped claim adjoining CanAlaska's claim S-108357 to the east and Denison's Bachman Lake property to the north. At only 49 ha and with no apparent attractive features, it is unlikely to have had any work done on it.

24 OTHER RELEVANT DATA AND INFORMATION

No other significant information concerning the Cree East Project is considered relevant to the report at this time. Future reviews will address the economic, environmental and cultural aspects of potential future project developments.

25 INTERPRETATION AND CONCLUSIONS

Uranium deposits in eastern Athabasca Basin are commonly associated with structural lows on the unconformity surface and fault zones (particularly reverse faults) with breccias and rotated fault blocks. Graphitic pelites are common in associated basement rocks, although mineralization may be distal from these. In addition to anomalous clay assemblages, other alteration associated with mineralization includes bleaching, 'hydrothermal hematization', 'grey pyritic alteration', sandstone friability due to desilicification and drusy quartz in vugs and fractures. Uranium and associated pathfinder elements, such as Co, Cu, Ni, As, etc., are commonly elevated at the unconformity and extend well up into the sandstone near faults or zones of fracturing and friability. All of these features have been recognized on the Cree East property.

25.1 Summary and Discussion

Seven major conductive features were identified on the Cree East property in a 2006 airborne VTEM survey, and grids were established over six of these. An AMT survey over grids 1, 2 and 3, on the northwestern part of the property, revealed a broad northeasterly trending resistivity feature. IP-Resistivity surveys over grids 5, 6 and 7 on the central and eastern parts of the property, revealed a complex of resistivity structures. On Grid 7, resistivity features in the sandstone are broadly coincident with VTEM conductors in the basement. Further ground IP-Resistivity surveys and a helicopter-borne VTEM survey were done on Grid 7 and a series of ground moving loop TDEM surveys were done on all the grids to better define conductors. The results of exploration on Grid 7 and the other grids are summarized and discussed below.

25.1.1 Summary of Exploration on Grid 7

In a series of seven drill campaigns between 2008 and 2012, 91 (34,473 m) holes have been drilled, all on Grid 7. Of these, 18 were abandoned before reaching their target depth, mainly due to difficult ground conditions.

Area A, with 28 drill holes to date, is the most intensively explored target area on the property. Relief of 82 m on the unconformity surface and variable thickness of the lower sandstone units indicates paleotopographic relief and probable syndepositional fault movement. Both northwesterly and northeasterly trending faults have been recognized. The latter appears to have had reverse movement. Clay alteration is complex, with predominant illite. At 33%, the average ranking of Area A drill holes is high, with three holes ranking higher than 45%. The best-mineralized intersections are 0.01% U3O8 over 1.5 m in sandstone above the unconformity in CRE063, 0.05% U3O8 over 0.4 m of graphitic pelite in CRE063 and 0.08% U3O8 over 0.75 m of marble in CRE067. With encouraging structural geology, alteration and mineralization, Area A remains a high priority for further work.

Area B, between Binkley Bay and MacIntyre Lake and about 1.5 km east of Area A, was not tested until the 2012 drill campaign, when 6 holes were drilled. Relief on the unconformity of 52 m and thickness variation of the sandstone units suggest paleotopographic relief and syndepositional fault subsidence. As at the McArthur River and Phoenix deposits, a basement 'quartzite ridge' has been identified, separated by a fault from pelitic rocks downthrown to the east. As at McArthur River, kaolinite alteration is extensive in the sandstone. Drusy quartz and 'grey alteration' are common in the lower sandstone. At 37%, the average rank of the three holes that reached basement is the best of any target area on the property. The best-mineralized intersection is 0.09% U3O8 over 0.5 m in hematite-altered quartzite in CRE083, but elevated uranium occurs in the Read sandstone. With so many encouraging features and only three holes penetrating the unconformity, Area B is a high priority target area.

Area C, in Binkley Bay 750 m south of Area I and 1 km north of Area D, has 10 drill holes on it. Relief on the unconformity is slight, 14 m. Except for the interpreted absence of the Read Formation in CRE005, which suggests local pre- or syndepositional uplift, there is little variation in thickness of the sandstone units. A fault is interpreted to extend northeasterly from Area C through areas I and A. Away from the fault, background illite/dickite clay alteration overlies basal sudoite and dravite, whereas close to the fault, kaolinite predominates in the lower sandstone. Although no mineralization has been reported, kaolinite enrichment and slightly elevated sandstone uranium extending upward in the sandstone over the fault suggest hydrothermal fluid activity. The average rank of the 4 holes that reached basement at Area C is 24%, moderate compared to areas A, B, I, J and G. Area C remains a moderate priority target area.

Area D, in Binkley Bay midway between areas C and E, has 7 drill holes on it. Relief on the unconformity of 47 m, and thickness variation in the lower sandstones indicate paleotopographic relief and probable syndepositional fault subsidence. A northeast-trending fault, downthrown to the southeast, has been recognized. The sandstone clay alteration is normal, with illite/dickite above basal dravite and sudoite. The average rank of Area D drill holes is 24%, which is moderate compared to most other target areas. In spite of the lack of sandstone alteration, a mineralized intersection 0.01% U3O8 over 1.7 m in sandstone about 4 m above the unconformity in CRE017 suggests this target area has some potential and remains a moderate priority.

Area E, in Binkley Bay midway between areas D and H, has a 3-hole drill fence. Unconformity relief of 5 m and slight thickness variation in the sandstone units suggest little local paleotopographic relief or fault movement. No faults were recognized in drilling. Clay alteration in the sandstone is normal, with illite/dickite above dickite and basal sudoite or kaolinite locally. The average rank of Area E drill holes is 13%, the lowest of any target areas tested. No mineralization was found. Without encouraging structure, alteration or mineralization, Area E is a low priority.

Area G, on the eastern shore of Binkley Bay between target areas H and J, is the second most intensively explored target area on the property with 17 holes drilled on it. Unconformity relief of 54 m and variation in thickness of the sandstone units suggests both paleotopographic relief and syndepositional faulting. An east-northeast-trending fault, downthrown to the north, cuts the area. The sandstone clay alteration is normal, with dickite and illite, commonly over basal sudoite. The average ranking of Area G drill holes is 26%, which ranks it just below areas B, A, I and J. Four holes in the western part of Area G intersected uranium in the basement. The best intersection is 0.03% U3O8 in semipelite and pegmatite in CRE057. Most of the basement mineralization in Area G is interpreted to be of metamorphic origin, however. In spite of encouraging structural geology and high uranium in the basement at Area G, alteration and mineralization indicative of a hydrothermal system have not been found. Hence, Area G is a low priority target.

Area H, on the east shore of Binkley Bay about 1 km south of Area E, has a 3-hole drill fence. Unconformity relief is 26 m and the overlying sandstone units vary in thickness, suggesting paleotopographic relief and/or syndepositional fault subsidence. A northerly trending fault, downthrown to the east has been recognized. Clay alteration is normal, with illite/dickite above basal sudoite and dravite. The average drill hole rank at Area H is 21%, which is moderate compared to other target areas. No mineralization has been found. Although structural geology is favourable, lack of mineralization or anomalous alteration suggests that no hydrothermal system was active here. Hence Area H is a low priority target.

Area I, midway between areas A and C, also has a 3-hole drill fence. Relief on the unconformity surface is 26 m, but there is relatively little variation in thickness of the overlying sandstone units, suggesting post-depositional fault subsidence. The fault trending northeasterly from Area C through areas I and C is downthrown to the southeast. Clay alteration in the sandstone is normal, illite/dickite above basal sudoite. The average ranking of Area I drill holes is 29%, which is only below the rankings of areas B and A. A mineralized intersection of 0.09% U3O8 over 1.4 m in sandstone was reported at the unconformity in CRE040. Although clay alteration does not suggest a hydrothermal system, drill hole ranking, sandstone mineralization and faulting are encouraging. Area I should be a moderate priority target.

Area J is an extensive geophysical target about 1 km east of Area G. In addition to a three-hole fence drilled to test the western conductor and resistivity low, a fourth hole was drilled about 2.5 km further east to test the eastern conductor and resistivity low. There are also two historical drill fences at Area J. On the main CanAlaska drill fence, unconformity relief is 28 m and there is considerable variation in thickness of the overlying sandstone units, suggesting both paleotopographic relief and syndepostional fault movement. A northeast trending fault appears to be coincident with the conductor and resistivity low. Clay alteration in the sandstone follows the normal background pattern of illite/dickite over dickite, with basal sudoite and dravite. The average rank of Area J drill holes, including CRE081, is 27%%, behind areas B, A and I. Mineralization occurs in the basement in CRE080, with the best intersection 0.02% U3O8 over 0.6 m in banded iron-formation just below the unconformity.

Clay alteration in CRE081, the CanAlaska hole drilled on the eastern conductor of Area J, is similar to that found on the fence. No mineralization was reported in that hole.

A six-hole fence was drilled by AGIP Canada Ltd. in 1981 across the western Area J conductor and resistivity low between Area G and CanAlaska's Area J fence. Unconformity relief is 32 m, with downthrow to the northeast by the same northeasterly trending fault recognized on the Area J fence. Faulting and core loss was reported in four of the holes. Clay alteration in the sandstone was reported to be "normal" illite/kaolinite, with chlorite above the unconformity. (Whereas historical clay mineralogy is based on geochemistry, rather than SWIR analysis, this is probably equivalent to illite/dickite with sudoite at the base.) A mineralized intersection of 0.01% U3O8 reported at the unconformity in ZF1-81 may be an extension of mineralization in CRE080.

A two-hole fence was also drilled by AGIP in 1982 about 1.4 km northeast of CanAlaska's Area J fence. Unconformity relief was only 4 m, but lost core in ZF82-7 suggests a fault zone. Clay alteration in ZF82-7 was reported to be kaolinite/illite (i.e., probably illite/dicikte); ZF82-8 had illite/kaolinite (i.e., illite/dickite) in the upper 75 m and chlorite (i.e., sudoite) below. No mineralization was reported.

Although clay alteration at Area J does not suggest the presence of a hydrothermal system, the presence of an apparently extensive fault zone, good drill hole rankings and associated uranium mineralization at the unconformity in two holes 600 m apart urges follow-up, and only a hew holes have tested this long conductor. Further work at Area J should be of moderate to high priority.

25.1.2 Discussion of Exploration Results on Grid 7

On grid 7, from north to south, target areas A, I, C, D, E and H lie along a sandstone resistivity low overlying a steep basement conductor trending southerly along the axis of northern Binkley Bay. Target Area B lies on a short sandstone resistivity low coinciding with a steep basement conductor between Binkley Bay and MacIntyre Lake. Target Area G lies east of Binkley Bay on a sandstone resistivity low, but the coinciding basement conductor appears flat lying in EM surveys. Target Area J is a horseshoe-shaped, steep basement conductor, open to the southwest, with several associated overlying sandstone resistivity lows.

Although unconformity elevation drops basinward, there is much local variation, resulting either from fault offset or paleotopographic relief. The Read Formation and overlying MFw-lp member ("MFb" in logs) generally thicken basinward, but local thickness variation indicates tens of metres of local paleotopographic relief or syndepositional fault displacement.

Pelite, graphitic pelite, semipelite, arkose and quartzite are common throughout the Grid 7 area, whereas Fe-pelite, siliceous, banded iron-formation and calc-silicate rocks are restricted to the northwest (target areas A, I, C, D and E) and southeast (Target Area J).

At Area A, foliation measurements suggest folding about easterly to northeasterly and southeasterly axes. Elsewhere in the western part of Grid 7, foliation measurements suggest a series of close, northwesterly verging folds. At Area G, in the southern part of Grid 7, foliation suggests an open southeasterly trending fold.

In addition to direct evidence in drill core, abrupt offsets on the unconformity and variation in thickness of sandstone units indicate widespread faulting in the Grid 7 area. A major northeast-trending fault is interpreted to follow the basement conductor through areas A, I and C. At Area A, this is cross cut by one or more northwest-trending faults.

Except at target areas A and B, illite/dickite, the regional background clay alteration assemblage, predominates in the upper Grid 7 sandstones, with dickite commonly increasing in abundance downward, and sudoite, dravite or kaolinite predominant above the unconformity. At Area A, clay alteration patterns are relatively complex, although illite predominates. At Area B, clay alteration is anomalous. Here, kaolinite predominates, with associated ‘grey alteration’ due to fine-grained disseminated pyrite in the lower sandstone.

Locally variable clay alteration patterns in basement rocks probably reflect differences in basement lithology. Alteration in eastern Athabasca Basin commonly extends tens of metres below the unconformity, but appears to extend much more deeply at the Grid 7 target areas. Most drillholes were still in altered rock when they were terminated, commonly 90 to 160 m below the unconformity.

Mineralized intersections at the unconformity were found in both the northwestern part of Grid 7, at target areas A (0.01% U3O8 in CRE063), D (0.01% U3O8 in CRE017) and I (0.09% U3O8 in CRE040), and the southeastern part of Grid 7 at Area J (0.02% U3O8 in CRE080), and in a nearby historical hole (0.01% U3O8 in ZF1-81). Several mineralized basement intersections were reported at Area A (up to 0.08% U3O8 in CRE063 and CRE067), Area B (up to 0.09% U3O8 in CRE083), Area G (up to 0.03% U3O8 in CRE057). No mineralization was found at areas C, E and H.

On the basis of exploration to date, target areas B and A are high priority, Area J is moderate to high priority, areas C, D and I are moderate priority and areas E, G and H are low priority.

25.1.3 Summary of Exploration on Other Grids

Grids 1 and 2, in the northwestern corner of the property, were laid out over a strong northeast-trending VTEM conductive feature coincident with a magnetic low. Whereas depth to basement (from magnetics) on this part of the property is likely over 350 m, AMT surveys were done on these grids instead of DC-Resistivity. The AMT surveys on grids 1 and 2 showed a strong northeast-trending resistivity low in the basement overlain by a resistivity high offset slightly to the northwest of the basement low. A TEM survey on grids 1 and 2 indicates an easterly dipping conductor, coincident with the axis of the AMT basement resistivity low at the unconformity, whose dip is steep to the east and increases northerly.

Grid 3 was laid out over a bullseye VTEM conductive feature southeast of Grid 2, over Ring Island. The AMT survey over Grid 3 showed an east-northeast trending resistivity low in basement, overlain by a resistivity high in sandstone, alsto offset slightly to the northwest. A TEM survey on Grid 3 indicates another easterly dipping conductor, coincident with the axis of the AMT basement resistivity low. Plate modelling of this conductor suggests it has both shallow and steep eastward dipping limbs.

Grid 5, at the eastern edge of the property, was laid out over a horseshoe-shaped VTEM conductor on the southern margin of a magnetic high. Most of the conductor lies off the property. A DC-Resistivity survey showed a northerly trending resistivity low truncated by, or bending sharply east into, an easterly trending resistivity low. The overlying sandstone is a broad resistivity high, with a weak resistivity low apparently extending upward into it. A two-line TEM survey suggests the presence of short, east to northeast-trending conductors, one of which may be associated with the easterly trending resistivity low.

Grid 6, over southern MacIntyre Lake between grids 5 and 7, was established over a heart-shaped VTEM conductor that extends southerly off the property. A DC-Resistivity survey found a segmented, easterly to southeasterly trending resistivity low in the basement with no expression in the overlying sandstone. A two-line TEM survey did not detect any conductor

25.1.4 Discussion of Exploration Results on Other Grids

Grids 1, 2 and 3 have similar geophysical features. The southeasterly dipping TEM conductors are interpreted to be graphitic pelite units, within which southeasterly dipping fault and fracture zones, manifested as resistivity lows in basement, have developed. In the overlying sandstone the southeasterly dipping structures may have been silicified, resulting in a resistivity high. This interpretation suggests that hydrothermal systems were active in these areas. A DC-Resistivity survey should be undertaken to confirm and better define the AMT resistivity features, followed by drilling to test for evidence of a hydrothermal system and uranium mineralization.

At Grid 5, there may be a conductor associated with the easterly trending basement resistivity low. The conductor may be a graphitic pelite unit within which a fault zone has developed. Further EM would be required to confirm this. The TEM survey did not test the northerly trending basement resistivity low at all. Whereas there is a broad resistivity high in the overlying sandstone, with only a weak potential resistivity low extending up into it, in contrast with the strong sandstone resistivity features elsewhere on the property, Grid 5 is a low priority target area.

At Grid 6, there does not appear to be a conductor associated with the basement resistivity low and the latter does not extend up into the sandstone at all. Although there is still potential for basement-hosted mineralization, the absence of any evidence for a hydrothermal system in the sandstone makes Grid 6 a low priority target area.

25.2 Conclusions

Targeting drill holes on coincident basement conductors and sandstone resistivity lows has been an effective exploration strategy at the Cree East property. Drilling has confirmed that the basement conductors are typically graphitic pelites which have locally controlled fault development and that the sandstone resistivity lows are commonly zones of fracturing, friability and alteration with which hydrothermal fluid plumes might be associated.

Area B, with attractive structural geology, anomalous kaolinite alteration extending throughout the sandstone, grey alteration and drusy quartz in the lower sandstone and uranium mineralization of probable hydrothermal origin in basement, is clearly the highest priority target on the property. Areas A and J are moderately high priority target areas. Areas C, D and I are moderate priority targets. With few encouraging results, areas E and H are low priority targets. Although uranium mineralization, favourable structural geology and relatively high drill hole rankings were reported at Area G, alteration and mineralization of hydrothermal origin has not been found; hence Area G is also a low priority.

As noted above, further geophysics should be undertaken on grids 1 – 3, but grids 5 and 6 are low priority target areas.

25.3 Reliability of Data

Exploration and drilling at Cree East project has followed accepted best practices for uranium exploration in Athabasca Basin. Standardized procedures for core handling, logging and sampling ensured consistency of the field data. Procedures for sample shipping, analytical methods, validation by inter-lab analysis and different analytical methods and a rigorous QA/QC protocol all comply with industry standards. Cross-checking of assay techniques and results through use of field and lab duplicates, replicates and lab standards also meet industry standards. Results from hand-held scintillometer logging of core, downhole radiometric probing and lab analyses are consistent.

Except locally (e.g., Target Area A), drilling density is too low to give more than a general picture of the geology at the target areas investigated to date.

26 RECOMMENDATIONS

Compared to other properties in southeastern Athabasca Basin, Cree East is very attractive. Faulting, alteration indicative of the presence of hydrothermal fluid systems and numerous mineralized intersections suggest a strong probablity that there is a uranium deposit on the property. Target Area B, in particular, was tested only in the most recent drill program, but appears to have a structural setting similar to that of the McArthur River and Phoenix deposits and alteration comparable to that at Cameco's Fox Lake prospect.

In addition to specific exploration recommendations following up the results of recent work, some general recommendations can be made to facilitate advancement of the property.

26.1 Proposed Exploration

Follow-up drilling at Area B is a high priority. Although no significant uranium has yet been intersected, there is good evidence for a major hydrothermal system associated with intense brittle deformation. A series of four three-hole drill fences oriented to test the fault zone and alteration associated with the eastern boundary of a probable quartzite ridge are recommended. Two fences should be drilled northeast of the 2012 drill area, and two fences to the southwest, depending on results of detailed geophysical surveys.

Detailed DC resistivity, gravity and FLEM surveys are recommended to map the extent and shape of the Area B hydrothermal system prior to further drilling. The surveys should include 7 lines x 2.4 km of DC-Resistivity at 200 m line spacing, 11 lines of Gravity with 300 stations at 50 to 100 m intervals on lines 200 m apart, and 20 line-km of FLEM with stations 50 m apart and 200 m line spacing (Figure 82). The cost of this work would be equivalent to drilling one or two holes.

Alteration in Area A is still open to the north and southeast. Faulting, alteration and several mineralized intersections at Area A are also encouraging. A six-hole drill program to further test Area A is recommended.

Area J has given some positive results and has been only broadly tested. Further drilling on a series of four three-hole fences is recommended. One fence should be drilled between the 2012 CanAlaska fence and the 1981 fence drilled by AGIP to test whether mineralization and alteration are continuous between CRE080 and ZF1-81.

Estimated cost for this exploration is $7,952,120 (Table 17-1). A tentative budget is proposed for three years of work, for a total of $23,887, 820.

Table 26-1 - Proposed Exploration Budget

Phase 1			
Work Description	**Quantity**	**Unit Cost***	**Total Cost**
Soil geochemistry - soil sampling at Area A and B	1,000 samples	$100/sample	$100,000
Linecutting at Area B (11 lines x 4 km)	44 line km	$1,000/line-km	$44,000
FLEM survey at Area B (10 lines x 2 km; 50m station spacing)	20 line-km	$250/line-km	$5,000
Gravity survey on Area B (11 lines: 300 stations at 100m spacing)	300 stations	$100/station	$30,000
IP/resistivity survey at Area B (7 lines x 2.4 km)	168 line-km	$6,000/line-km	$1,008,000
NQ diamond drilling at Area B (12 holes x 500 m)	6000 m	$350/m	$2,100,000
NQ diamond drilling at Area J (12 holes x 500 m)	6000 m	$350/m	$2,100,000
NQ diamond drilling at Area A (6 holes x 500 m)	3,000 m	$350/m	$1,050,000
Assays; physical properties measurements	3,000 samples	$45/sample	$135,000
Contingency (10%)			*$657,200*
Project Management (10%)			*$722,920*
		Phase 1 total	***$7,952,120***
Phase 2			
Work Description	**Quantity**	**Unit Cost***	**Total Cost**
Linecutting (Grids 1, 2 & 3)	300 line-km	$1,000 line-km	$300,000
IP/resistivity survey (Grids 1, 2 & 3)	300 line-km	$6,000/line-km	$1,800,000
NQ diamond drilling (30 holes x 500 m)	15,000 m	$350/m	$5,250,000
Assays; physical properties measurements	3,000 samples	$45/sample	$135,000
Contingency (10%)			*$748,500*
Project Management (10%)			*$823,350*
		Phase 2 total	***$9,056,850***
Phase 3			
Work Description	**Quantity**	**Unit Cost***	**Total Cost**
Infill NQ diamond drilling on best Phase 1 & 2 targets (30 holes x	15,000 m	$350/m	$5,250,000
Assays; physical properties measurements	3,000 samples	$45/sample	$135,000
Baseline environmental studies	1 study		$150,000
Preliminary metallurgical testing, deposit modeling	1 study		$150,000
Contingency (10%)			*$568,500*
Project Management (10%)			*$625,350*
		Phase 3 total	***$6,878,850***
		Total: Phases 1, 2 and 3	**$23,887,820**

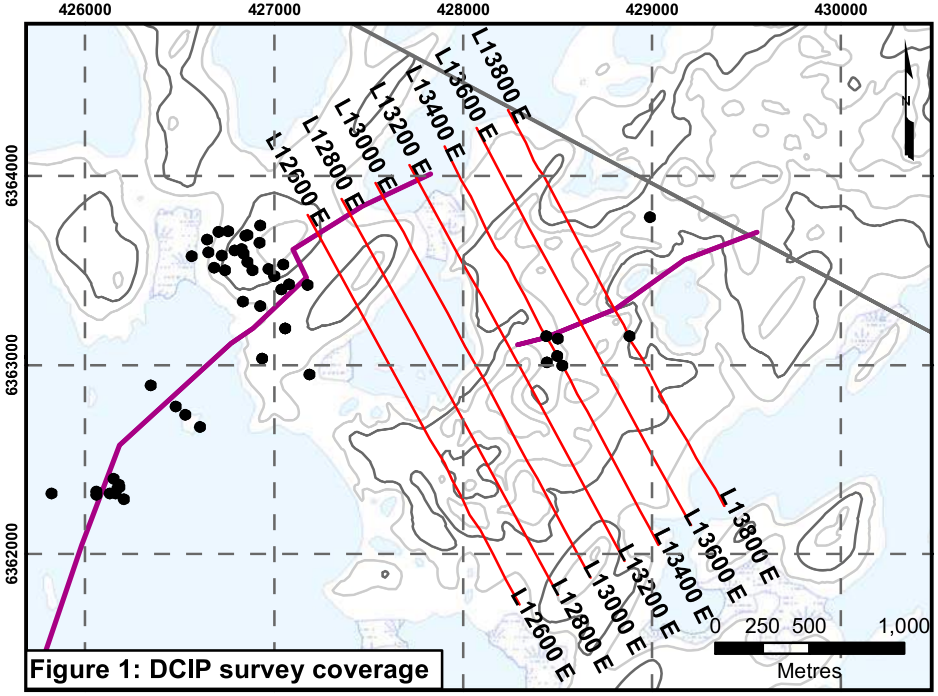

Figure 1: DCIP survey coverage

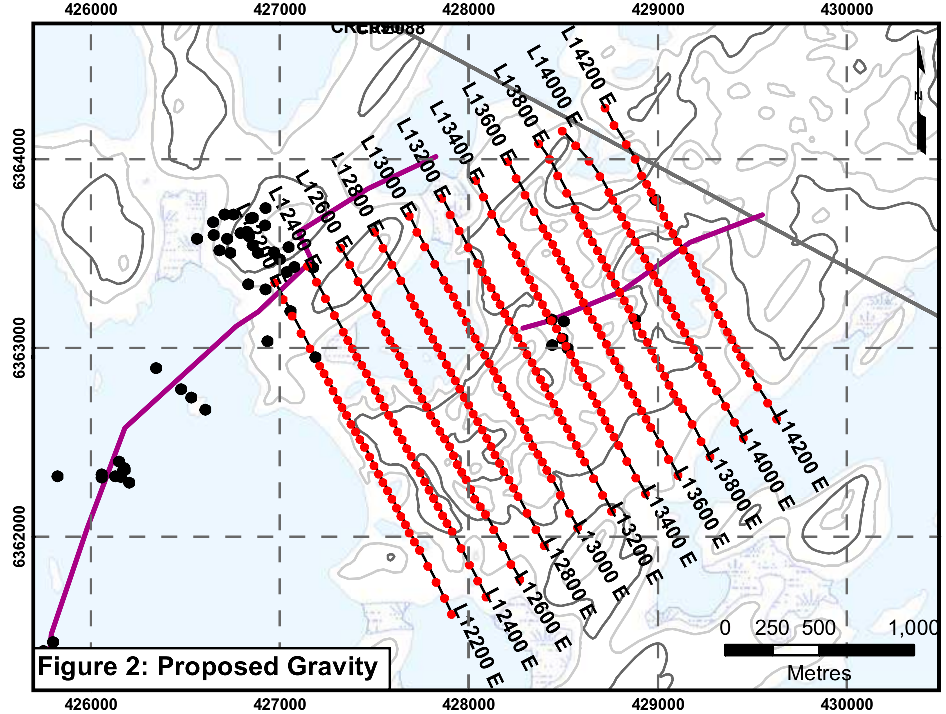

Figure 2: Proposed Gravity

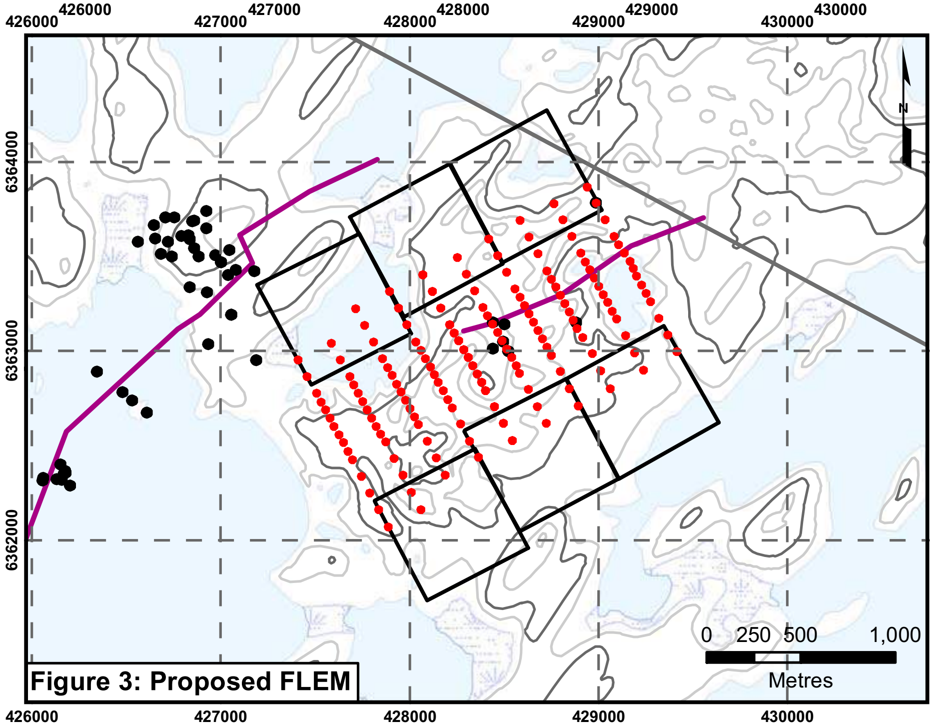

Figure 3: Proposed FLEM

Figure 1 Legend
- Proposed DCIP Lines

Figure 2 Legend
- Proposed Gravity Stations
- Proposed Gravity Lines

Figure 3 Legend
- Proposed FLEM Stations
- Proposed FLEM Loops

General Legend
- Drill Holes
- MLEM Interpreted Conductor
- Claims

Contours
- Major
- Minor
- Swamps
- Lakes

CanAlaska Uranium Ltd.

Cree East Project

Proposed Pre-Drilling Geophysical Programme on Area B

UTM NAD 83, Zone 13	NTS: 74G08/09, 74H05/12	Scale: 40 000	Fig No: 82
Date: Feb. 28, 2013	Drawn by: GRB	Report: CRE2013-01	

26.2 General Recommendations

More can be gleaned from data already available, particularly to improve understanding of property geology, structure, alteration and sandstone geochemistry.

26.2.1 Update Grid 7 Structural Geology Map

Whereas unconformity-associated uranium deposits are structurally controlled, mapping of fault zones is important. Smart et al. (2010) produced a structural interpretation map based on data from the 43 drill holes drilled on the property up to that time. Whereas there is now more than twice as much potential structural data (90 drill holes), an updated structural geology map would be useful.

Faults are indicated on drill cross-sections, but except on target areas A and G, these have not been synthesized into a map or 3D model.

Whereas unconformity-associated uranium deposits are commonly controlled by reverse faults, it would be helpful to know whether faults have normal, strike-slip or reverse sense of displacement. Slickenside observations and small-scale stratigraphic offsets in core would indicate the sense of movement. It may be worthwhile to re-log selected core intervals to obtain this information.

26.2.2 Sandstone Structure Contour and Isopach Maps

A common feature of Athabasca uranium deposits is thinning of the Read/Smart and MFb units on the hangingwall side of syndepositional faults and thickening on their footwall side (e.g., Key Lake, McArthur River and Millenium). Structure contour and isopach maps of the basal sandstone units could be useful guides to the location and orientation of such faults. Unconformity structure contour maps of Zones A, I and C have been done by Smart et al. (2010, Fig. 2) and Schimann and Duff (2011, Fig. 9)

26.2.3 Update Basement Geology Map

A basement pseudo-geology map of the Grid 7 area (Figure 43), originally included in the 2011 winter drill report, was interpreted from the total field magnetic pattern. Drill results, however, suggest that the basement geology is more complex than indicated. Some areas indicated as magnetic highs are actually underlain by metasedimentary rock, possibly lapping onto granitic domes. The vertical and horizontal derivative magnetic maps suggest alternating (folded?) bands of variably magnetic metasedimentary rock. The main EM conductors are interpreted to result from graphitic pelites. This information might be used to produce a more detailed map, including actual observed lithologies. Structural interpretation should be integrated into this map, which should be another useful guide to exploration.

26.2.4 Mapping and Modelling of Rock Alteration and Geochemistry

Uranium and pathfinder element geochemistry, RQD (measure of brittle deformation) and SWIR (Short Wave Infra Red) spectrometric data have been collected systematically on drill core. For target areas with a higher density of drillholes (e.g., areas A, I and C, Area B, Area D and Area G) this data might be synthesized into 3D block models. 3D alteration and geochemical haloes, particularly in the sandstone, ought to be effective vectors to guide future drilling, especially combined with other data (e.g., structural geology).

As a vector to potential basement-hosted uranium mineralization, it would be useful to plot mobile elements (e.g., Na and K) on sections, along with clay alteration, structural geology (e.g., RQD) and basement lithology.

26.2.5 Surficial Geochemical Surveys

Surficial geochemistry has been controversial in Athabasca Basin, since results have been inconsistent. Anomalous uranium (> 1 ppm U3O8) occurs in the uppermost sandstones over McArthur River, and recent work (Power et al., 2012 and others) suggests that anomalous uranium in the uppermost sandstones and in soils at Phoenix has been remobilized upward along fracture systems.

Whereas elevated sandstone uranium can be traced from the unconformity upward into MFd sandstone in some Cree East cores (e.g., CRE039), there is a good chance that uranium and pathfinder elements in soils derived from such sandstone could be detected on surface. Soil sampling undertaken at Cree East in 2007 gave encouraging results in areas with anomalous sandstone boulders, but these anomalies have not traced to their source. Although some target zones at Cree East are underwater, several zones are on land and potentially suitable for a soil sampling program. In Area G, for example, sandstone uranium geochemistry sections indicate that uranium concentrations up to 0.5 ppm extend as high as the middle of the MFc sandstone (< 100 m from surface in CRE057, CRE053 and CRE061). Survey lines should be oriented perpendicular to known or interpreted brittle structures, which are potentially mineralized. Better results might also result from sampling humus rather than the C-horizon, and using a weak chemical leach technique, as suggested by Powers et al. (2012) and others.

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28 Date and Signature Page

The undersigned prepared this Technical Report, titled "NI 43-101 Technical Report on the Cree East Project, Athabasca Basin, Saskatchewan, Canada", dated 16 October 2013. The format and content of the report are intended to conform to Form 43101F of National Instrument 43-101 (NI 43-101) of the Canadian Securities Administrators.

The effective date of this Technical Report, prepared on behalf of CanAlaska Uranium Ltd. and entitled, "NI 43-101 Technical Report on the Cree East Project, Athabasca Basin, Saskatchewan, Canada" is 16 October 2013.

"Signed and Sealed"

Gary Yeo

GYeo Research and Exploration

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Dated: 16 October 2013

"Signed & sealed"

Patricia Ogilvie-Evans

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647 Briarvale Terrace, Saskatoon,

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Date: 16 October 2013

29 CERTIFICATES OF QUALIFIED PERSONS

29.1 CERTIFICATES OF QUALIFIED PERSON

Gary Yeo, PhD, P. Geo.
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I am a Professional Geologist registered in Saskatchewan (License #09827). I graduated with a PhD in Geology from the University of Western Ontario in 1984, preceded by a BSc (Honours) in Geology & Biology in 1974 from Carleton University.
I have practiced as a geologist for 34 years. During this time I have been a government survey geologist (14 years), a university lecturer in geology (8 years) and an exploration geologist (12 years), mainly for uranium. I have written or co-authored approximately 50 published papers, and numerous project reports and property reviews. As a result of my experience and qualifications, I am a Qualified Person as defined in National Instrument 43-101 Standards for Disclosure of Mineral Products (NI 43-101).

I have briefly visited the Cree East property twice, on 2 and 29 March 2013; hence, my knowledge of the property is based mostly on historical and current exploration and geological data. The co-author of this report, Patty Ogilvie-Evans, however, has spent significant time working on the property.

I prepared all sections of this report, except sections 10.2 on CanAlaska Drilling, 10.3 on Core Handling, Drill Hole Surveys and Logistical Considerations and 11.0 on Sample Preparation, Analysis and Security.

I am independent of CanAlaska Uranium Ltd. as independence is defined by Section 1.4 of NI 43-101. I have not previously provided technical assistance on the Cree East Project and have had no prior involvement with the project. I have read NI 43-101 and this report has been prepared in compliance with that instrument.

"Signed & sealed"

Gary Yeo

Date: 16 October 2013

29.2 CERTIFICATES OF QUALIFIED PERSON

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I am a Professional Geologist registered in Saskatchewan (License #14030). I graduated with a BSc (Honours) in Geology from the University of Saskatchewan in 2006.

I have practiced as a geologist for 8 years. I have primarily worked in exploration, including diamond exploration (5 years), uranium exploration (2 years) and have recently made a transition to the mining sector as a Senior Mine Geologist (6 months uranium, 2 months gold). I have written project reports and drilling compilations and property reviews. As a result of my experience and qualifications, I am a Qualified Person as defined in National Instrument 43-101 Standards for Disclosure of Mineral Products (NI 43-101).

I worked for CanAlaska Uranium Ltd from January 1, 2011 to June 11, 2012. While employed with CanAlaska Uranium Ltd., I worked on the Cree East property as acting project geologist from January 2012 thru to April 2012. I continued evaluating the data to produce the drill report for the CREE 2012 drill program. Further knowledge of the property is based upon working with the data verification and results from the previous year's (2011) drill program and historical and exploration and geological data.

For this report, I prepared sections 10.2 on CanAlaska Drilling, 10.3 on Core Handling, Drill Hole Surveys and Logistical Considerations and 11.0 on Sample Preparation, Analysis and Security.

I am a former employee of CanAlaska (January 1, 2011 to June 11, 2012), but I am currently independent of CanAlaska Uranium Ltd. as independence is defined by Section 1.4 of NI 43-101. I have read NI 43-101 and this report has been prepared in compliance with that instrument.

"Signed & sealed"

Patricia Ogilvie-Evans

Date: 16 October 2013

APPENDIX 1

CREE EAST DRILLING SUMMARY

Hole ID	Area	X	Y	Z	Azimuth (º)	Dip (º)	Water (m)	OB (m)	U/C depth (m)	TD (m)	U/C-ASL (m)	StartDate	EndDate	Basement	Alteration	Max-U-cps core	Max-U-ppm	UC-X	UC-Y	UC-Z	Rank %	Comments
CRE001		427,054.1	6,363,191.3	498.4	120	75	N/A	21.6	N/A	395.9	N/A	6-Feb-10	12-Feb-10	N/A	moderate to strong friability, with fracturation and moderate hematisation	20 sandstone	0.5 sandstone	N/A	N/A	N/A	N/A	abandonned, bad ground
CRE002	A	427,054.1	6,363,191.3	491.0	150	75	N/A	69.9	327.6	441.8	171.6	5-Mar-08	17-Mar-08	graphitic and strongly pyritic metapelites	moderate to strong friability, with fracturation and moderate to strong hematisation; 20 m of regolith, illite & chlorite in basement. Graphitic pelite from 346.2-375m.	90 sandstone 90 basement	1.6 sandstone 11.5 basement	427,088.4	6,363,127.4	171.6	26%	
CRE003	C	426,176.1	6,362,368.2	480.5	150	75	6.5	48.8	N/A	48.8	N/A	18-Mar-08	20-Mar-08	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	abandonned, bad ground
CRE004	C	426,150.7	6,362,401.2	480.5	N/A	90	7	41.0	N/A	100.6	N/A	21-Mar-08	28-Mar-08	N/A	extensive fracturation, firability, & clay alteration with bleaching from 41-81.4 m	15 sandstone	0.4 sandstone	N/A	N/A	N/A	N/A	abandonned, bad ground
CRE005	C	426,203.2	6,362,290.8	480.5	N/A	90	6.5	41.0	266.4	316.5	214.1	28-Mar-08	5-Apr-08	graphitic and pyritic metapelites	strong friability and clay with moderate hematite from 85-125 m; 40 m of regolithic alteration with strong hematisation. Graphitic pelite from 307.2-312.8m.	35 sandstone 50 basement	0.9 sandstone 10.2 basement	426,203.2	6,362,290.8	214.1	30%	
CRE006	C	426,179.3	6,362,357.3	480.5	N/A	90	6.5	35.6	N/A	87.6	N/A	6-Apr-08	8-Apr-08	N/A	N/A		0.4 sandstone	N/A	N/A	N/A	N/A	abandonned, bad ground
CRE007	C	426,168.9	6,362,350.5	480.5	N/A	90	6.5	35.6	274.8	316.1	205.2	8-Apr-08	12-Apr-08	mylonitic metapelites, some graphite	Strong friability down to 79 m; regolithic alteration, red & red-green to 292 m, green to EOH. Graphite from 290-296m	125 sandstone1 10 basement	45 sandstone5 6.9 basement	426,168.9	6,362,350.5	205.2	24%	
CRE008	A	426,827.0	6,363,618.0	505.0	150	75	0	57.6	399.8	630.0	122.4	11-Aug-08	21-Aug-08	graphitic metapelites & calcsilicates	Sandstone: minor alteration basement: highly altered and strongly fractured to EOH. Weak graphite zone at 419-425m, followed by strong-moderate graphite zone at 450-455. Strongest graphitic zone at 529-617m.	110 sandstone 45 basement	4.7 sandstone 12.7 basement	426,869.7	6,363,511.2	122.4	50%	very strongly fractured basement
CRE009	A	426,827.0	6,363,618.0	505.0	150	84	0	45.3	402.7	575.2	104.9	22-Aug-08	28-Aug-08	graphitic pelites, semipelites, calcsilicates	Sandstone: moderate to strong alteration Basement: strong hematisation 417-440m. Graphite zone at 432.1-447.6m	30 sandstone 35 basement	2.3 sandstone 9.4 basement	426,853.1	6,363,581.3	104.9	24%	little fracturation in basement, although close to CRE008
CRE010	A	426,935.0	6,363,038.0	503.0	165	70	0	69.1	318.5	422.8	201.6	30-Aug-08	3-Sep-08	semipelites, calcsilicates, graphitic pelites	Sandstone:moderate-strong alteration and fracturation 110-220m. Basement: kaolinite-illite 356-423m. Weak to moderate graphite zone at 352-420m followed by very strong graphite zone to EOH.	45 sandstone1 30 basement	19.6 sandstone 39.9 basement	426,950.3	6,362,938.0	201.6	36%	
CRE011		428,988.0	6,363,787.0	499.0	150	75	0	45.4	428.3	517.2	85.5	5-Sep-08	10-Sep-08	pegmatite, graphitic pelite, amphibolite	Sandstone: fresh. Basement: thin regolith. Graphitic pelite at 449.85-510.5m.	25 sandstone 60 basement	0.6 sandstone 37.7 basement	429,038.0	6,363,685.5	85.5	12%	"regional" hole
CRE012	A	426,678.0	6,363,519.0	496.0	130	73	0	45.3	365.1	535.5	144.5	12-Sep-08	16-Sep-08	pelite, calcsilicate, pegmatite	Sandstone: weak alteration, 50% illite. Basement: brecciation and hematisation 425-450 m	25 sandstone3 08 basement	4.3 sandstone1 66 basement	426,745.5	6,363,447.3	144.5	34%	0.10 m @ 0.020% U3O8 (449.20-449.30m)
CRE013	A	426,562.6	6,363,579.5	486.6	75	75	0	36.7	334.6	431.9	164.0	8-Feb-09	13-Feb-09	pelite, calcsilicate, pegmatite	Sandstone: minor bleaching & friability in SS; dravite at 160 m. Basement: 5 m regolith after the U/C.	35 sandstone 60 basement	3.1 sandstone 6.4 basement	426,650.0	6,363,590.7	164.0	14%	
CRE014	D	425,663.8	6,361,324.7	485.9	90	75	20	61.0	233.1	331.3	259.4	12-Feb-09	18-Feb-09	quartzite, pelite, pegmatite	Sandstone: Clay content is dickite and illite. Basement: Vuggy silicification and hematization in top 80m, minor clay (kaolinite) from 308-EOH. Graphite (~20%) at 411-415m.	30 sandstone 35 basement	8 sandstone9 .8 basement	425,718.4	6,361,328.6	259	24%	

CREE EAST DRILLING SUMMARY

Hole ID	Area	X	Y	Z	Azimuth (°)	Dip (°)	Water (m)	OB (m)	U/C depth (m)	TD (m)	U/C-ASL (m)	StartDate	EndDate	Basement	Alteration	Max-U-cps core	Max-U-ppm	UC-X	UC-Y	UC-Z	Rank %	Comments
CRE015	A	426,651.5	6,363,599.6	488.9	75	75	0	36.7	359.2	477.6	140.7	13-Feb-09	17-Feb-09	pelite, quartzite	Sandstone: Moderately friable and hematized above U/C. Sooty pyrite occurs in fractures, and dominant clay is illite. Basement: Hematized to 450m, graphite intersected at 411-415m.	35 sandstone 40 basement	4.8 sandstone29.5 basement	426,743.3	6,363,606.9	141	38%	
CRE016	A	426,926.5	6,363,312.8	461.7	90	70	0	57.9	337.2	474.6	142.9	18-Feb-09	23-Feb-09	graphtic pelite, pegmatite, pelite	Sandstone: minor hematite and clay alteration, increase of illite above the U/C. Basement: Red and green regolith in top 25 m Graphite (up to 30%) and pyrite (up to 25%) at 369-384m, 447-451m.	40 sandstone 40 basement	3 sandstone14.2 basement	427,035.9	6,363,306.2	142.9	32%	
CRE017	D	425,766.8	6,361,325.0	485.0	90	75	25.9	54.9	261.1	383.1	228.4	19-Feb-09	23-Feb-09	graphitic pelite, semi-pelite, pegmatite	Sandstone: minor pervasive silicification and bleaching from 237-U/C. Basement: Regolith in first 10 m, graphite (up to 50%) from 368-EOH.	1622 sandstone 100 basement	100 sandstone18.8 basement	425,808.8	6,361,318.7	228.4	34%	1.7 m @ 0.012% U3O8 (255.2-256.9m)
CRE018	A	426,834.7	6,363,340.0	497.1	90	75	0	52.4	329.2	453.2	182.1	23-Feb-09	26-Feb-09	graphitic pelite, pelite	Sandstone: moderately hemitized above U/C. Minor clay alteration, (illite and kaolinite). Basement: Red and green regolith in top 20 m, strong graphitic zone at 344-350m, moderate graphitic zone from 432-EOH	50 sandstone 125 basement	4.1 sandstone183 basement	426,929.3	6,363,327.6	182.1	38%	
CRE019	D	425,859.7	6,361,328.1	485.9	90	75	26.21	64.6	279.4	416.7	212.5	24-Feb-09	28-Feb-09	pelite	Sandstone: minor clay alteration from 250-U/C (dickite to illite-kaolinite). Basement: Regolith in top 10 m. Hematite reoccurs at 326-335m. Minor graphite at 303-306m.	35 sandstone 50 basement	1.8 sandstone7.3 basement	425,916.8	6,361,329.1	212.5	16%	
CRE020	C	426,159.3	6,362,321.3	486.1	90	75	7.01	67.2	270.2	441.0	224.6	27-Feb-09	6-Mar-09	graphitic pelite, pelite	Sandstone: increase in kaolinite from 242-U/C. Basement: Graphitic zones from 308-355m (~20%) and 395-EOH (~40%).	30 sandstone 50 basement	5.6 sandstone35.1 basement	426,227.0	6,362,318.0	224.6	22%	
CRE021	E	425,543.0	6,360,275.8	485.9	75	75	10.36	36.6	289.4	422.8	206.8	1-Mar-09	5-Mar-09	pelite, pegmatite	Sandstone: minorly friable and hematized above U/C, sooty pyrite in fractures. Basement: thin bleaced regolith, followed by the red regolith. Minor disseminated graphite at 318-360m locally.	30 sandstone 45 basement	2.2 sandstone12.5 basement	425,619.2	6,360,270.6	206.8	12%	
CRE022	C	426,057.7	6,362,317.0	485.9	90	75	10.4	N/A	N/A	88.4	N/A	6-Mar-09	10-Mar-09	N/A	Extremely fractured sandstone	N/A	N/A	N/A	N/A	N/A	N/A	abandoned, bad ground
CRE023	E	425,627.5	6,360,302.6	485.9	75	75	10.36	30.5	295.97	413.6	201.8	5-Mar-09	9-Mar-09	pelite, pegmatite	Sandstone: minor friability above U/C. Sooty pyrite in fractures. Basement: Red regolith in top 10m. Minor graphite (~2%) from 320-EOH.	25 sandstone 75 basement	13.3 sandstone4 basement	425,710.3	6,360,304.4	201.8	10%	
CRE024	E	425,390.7	6,360,232.0	486.0	75	75	18.29	34.0	291.35	377	208.3	9-Mar-09	14-Mar-09	graphitic pelite, calc-silicates, pelite, pegmatite	Sandstone: strongly hematized, moderately friable; clay alteration (dickite to illite and kaolinite) Basement: Thin red and green regolith, graphite from 296-355m.	75 sandstone 70 basement	1.9 sandstone12 basement	425,478.6	6,360,235.3	208.3	18%	
CRE025	C	425,823.0	6,362,321.6	485.9	90	75	6.71	25.0	264	422.8	229	10-Mar-09	15-Mar-09	pelite, amphibolite, banded iron stone, pegmatite	Sandstone: minor local bleaching; SS friable above the U/C; Sooty pyrite in fractures Basement: Red and green regolith in top 80 m. Hematization occurs locally to 401m.	25 sandstone 25 basement	2.5 sandstone6.3 basement	425,881.4	6,362,310.3	229.0	20%	

CREE EAST DRILLING SUMMARY

Hole ID	Area	X	Y	Z	Azimuth (º)	Dip (º)	Water (m)	OB (m)	U/C depth (m)	TD (m)	U/C-ASL (m)	StartDate	EndDate	Basement	Alteration	Max-U-cps core	Max-U-ppm	UC-X	UC-Y	UC-Z	Rank %	Comments
CRE026	D	426,129.8	6,362,323.1	484.1	270	75	7.92	36.5	269.7	407.5	222.1	15-Mar-09	19-Mar-09	graphitic pelite, amphibolite, pelite, quartzite, pegmatite	Sandstone: strongly fractured and friable to 84m. Basement: Weak to moderate graphite zone at 294-360m	20 sandstone 40 basement	2.8 sandstone1 2.3 basement	426,065.9	6,362,325.0	222.1	22%	
CRE027	D	425,802.1	6,361,444.2	486.0	315	75	21.03	30.5	264.6	485.5	233.9	16-Mar-09	22-Mar-09	pelite, amphibolite, quarzite, pegmatite	Sandstone: vuggy silicification from 114 to 118m. Hematization above the U/C. Basement: Moderately hematized and chloritized in top 80m.	25 sandstone 30 basement	2.6 sandstone7 basement	425,749.0	6,361,504.3	233.9	24%	
CRE028	A	427,188.2	6,362,953.8	488.1	128	70	0	53.0	352.2	447.1	156	20-Mar-09	27-Mar-09	pelite, pegmatite, meta-arkose, calc-silicate	Sandstone: Strongly fractured and friable to 160m, dravite occurs from 153 - 164m. Basement: Red regolith in top 30 m. Minor graphite zone at 399-439m.	25 sandstone 30 basement	1 sandstone1 2.5 basement	427,281.6	6,362,883.5	156.0	18%	
CRE029	G	427,148.7	6,358,980.2	498.4	120	75	N/A	21.6	294	395.9	218.5	6-Feb-10	12-Feb-10	hematised metapelites, metasemipelite and metapelites ± garnet ± cordierite ± pyrite ± graphite	weak friability, weak hematisation along bedding plane in sandstone and weak pyrite and graphite (392-395.9m) in basement	15 sandstone 776 basement	1.5 sandstone 59.8 basement	427,203.4	6,358,909.7	218.5	20%	
CRE030	G	426,974.2	6,359,083.6	516.0	120	75	N/A	30.9	307.8	461.5	216	12-Feb-10	17-Feb-10	graphitic and pyritic metapelites, metapelites and leucosomes	weak friability, weak hematisation along bedding plane in sandstone and weak pyrite and graphite in basement. Weak chlorite alteration in basement. Minor graphite zone at 333-342m.	30 sandstone5 26 basement	2.5 sandstone1 8.9 basement	427,026.0	6,359,038.4	216	22%	As=210ppm, Co=156ppm @ 328.8-329.80 m
CRE031	A	426,848.0	6,363,688.0	507.0	65	75	N/A	N/A	N/A	39.6	N/A	16-Feb-10	17-Feb-10	N/A	N/A	N/A	N/A			N/A	N/A	Hole abondoned. Drill moved 6 m to CRE032.
CRE032	A	426,857.6	6,363,692.6	505.2	65	75	7	51.8	382.1	538.8	134.1	17-Feb-10	27-Feb-10	N/A	Sandstone: weak firability, weak dravite from 358-U/C. Basement: moderate hematite from 499-516m and strong chlorite from 464-498m and from 520-538m.	255 sandstone 20 basement	42.2 sandstone 11.8 basement	426,948.0	6,363,697.2	134.1	28%	As x8, P x50 bkg in sandstone
CRE033	G	427,331.1	6,358,874.9	496.2	120	75	N/A	24.4	291.1	404.8	214.5	18-Feb-10	23-Feb-10	Pelites, semi-pelites, pegmatite	Sandstone: Weak silicification zones in the sandstone between 91-191m. Basement: weak silicification at 266-272m, weak friability at 289-299m, weak clay from 300-310m, 363-380m, weak hematite at 299-322m and weak to moderate pyrite at 325-404.8m. Weak graphite at 350-355m.	25 sandstone3 932 basement	0.8 sandstone 43.9 basement	427,392.1	6,358,834.0	214.5	24%	
CRE034	D	425,831.7	6,361,337.9	484.2	310	75	24.1	65.5	260.0	380.1	235.9	22-Feb-10	5-Mar-10	Pelites, semi-pelites, pegmatite	Sandstone: weak friability from 240-242m. Basement: weak friability from 322-334m and from 355-380.1m, weak to strong hematite and chlorite alteration from U/C to EOH	20 sandstone 20 basement	3.1 sandstone 11.8 basement	425,775.9	6,361,390.7	235.9	26%	
CRE035	A	426,791.5	6,363,611.2	504.3	65	75	N/A	76.3	401.3	493.2	114.1	27-Feb-10	4-Mar-10	Pelites	Sandstone: weak hematite along fracture from 76.3-147m and from 228-261m. Basement: clay from 448-455m, weak to moderate hematite from U/C to 474m and weak to moderate chlorite from 465-479m.	20 sandstone9 56 basement	2.7 sandstone 702.8 basement	426,881.4	6,363,636.6	114.1	42%	0.5m @ 0.083% U3O8 (430.55-431.05m)

CREE EAST DRILLING SUMMARY

Hole ID	Area	X	Y	Z	Azimuth (º)	Dip (º)	Water (m)	OB (m)	U/C depth (m)	TD (m)	U/C-ASL (m)	StartDate	EndDate	Basement	Alteration	Max-U-cps core	Max-U-ppm	UC-X	UC-Y	UC-Z	Rank %	Comments
CRE036	D	425,749.4	6,361,397.3	484.1	310	75	N/A	63.1	249.2	353.0	244.4	3-Mar-10	9-Mar-10	Pelites	Sandstone: weak silicification zones from 117-137m and hematite at 219m. Basement: Weak to moderate hematite from U/C to 323m and weak to moderate chlorite from 280-324m.	30 sandstone 30 basement	4.5 sandstone 8.4 basement	425,699.5	6,361,443.4	244.4	20%	
CRE037	A	426,721.7	6,363,581.3	492.2	65	75	N/A	44.5	388.0	490.1	115.0	5-Mar-10	9-Mar-10	Pelites, semi-pelites, pegmatite	Sandstone: Waek silicification from 106-112m, weak hematite from 179-384m, weak friability from 110-125m, 250-265m. Basement: Weak to moderate hematite from U/C to 419m, 433-448m. Weak to strong chlorite from 315-467m.	30	4.6 sandstone 14.2 basement	426,806.2	6,363,613.6	115.0	32%	
CRE038	A	426,924.3	6,363,742.9	507.2	56	75	N/A	61.0	365.7	468.8	151.0	10-Mar-10	16-Mar-10	Semipelites, leucosomes	Sandstone: weak clay altn from 117m-119,weak silicification from 153-157m, weak chloritisation from 201-301m. Basement: Hematite altn from 402m-410, chlritisation from 428m-433 and 454-467m, silicified from 457 - 458.8m	50 sandstone 40 basement	2.8 sandstone 6.5 basement	426,999.2	6,363,776.1	151.0	24%	
CRE039	D	425,660.8	6,361,397.2	484.5	305	70	8.2	61.0	238.7	332.2	253.5	11-Mar-10	15-Mar-10	Pelites	Sandstone: weak hematite zones from 73-97m and 106-136m, weak silicification from 133-135m and 217-226m, Weakly friable from 229m - 231. Basement: Weak silicification at 322m chloritised from 247-263m.	40 sandstone 25 basement	1.7 sandstone 9.3 basement	425,615.1	6,361,434.6	253.5	16%	
CRE040	I	426,531.0	6,362,739.5	484.2	310	75	1.0	60.5	257.0	423.1	235.9	16-Mar-10	20-Mar-10	Pelites and semi-pelites	Sandstone: Minor chlorite alterantion from 134-157m and 176-182m. Basement: hematite alteration from 348-370m. Minor graphite at 306-314m, 333-342m.	5067 sandstone 60 basement	1644.7 sandstone 11.8 basement	426,481.3	6,362,783.7	235.9	36%	1.40 m @ 0.091% U3O8 (254.10-255.5m)
CRE041	A	426,739.6	6,363,504.7	498.1	245	70	N/A	51.5	362.0	495.0	157.2	16-Mar-10	21-Mar-10	Quartzite, pelites, augen gneiss, psammite.	Sandstone: weakly heamtised at 340m, strongly friable from 333-335m. Basement: Hematite alteration from 425-432m and sericite alteration fom 436-495m.	20 sandstone 40 basement	4.3 sandstone 6 basement	426,625.0	6,363,462.4	157.2	24%	
CRE042	I	426,608.4	6,362,675.8	484.1	310	75	1.5	64.0	284.4	409.3	226.5	22-Mar-10	28-Mar-10	Semipelites, pelites and leucosomes	Sandstone: Minor limonite alternation throughout, minor chlorite on metere intervals from 112-252m. Basement: Minor hematite and silicification. ~2% graphite found locally at 322m, pyrite alteration increases to end of the hole.	35 sandstone 100 basement	3.2 sandstone 7.4 basement	426,512.0	6,362,747.9	226.5	26%	
CRE043	G	426,620.0	6,359,280.1	491.8	120	75	N/A	33.6	328.5	453.5	173.6	23-Mar-10	29-Mar-10	Quartzite, pelites, semi-pelites, calcsilicate, meta-arkose and graphite pelite.	Sandstone: weak to mod friability and clay altn at 320-U/C. Weak hematite altn at 298m, 315m. Basement: weak to moderate clay altn contines down to about 80m below U/C, small intervals of hematite and chlorite altn. Minor graphite at 410-415m.	25 sandstone 2223 basement	1.6 sandstone179.9 basement	426,686.2	6,359,232.7	173.6	40%	3.10 m @ 0.013% U3O8 (408.6-411.7m)

CREE EAST DRILLING SUMMARY

Hole ID	Area	X	Y	Z	Azimuth (º)	Dip (º)	Water (m)	OB (m)	U/C depth (m)	TD (m)	U/C-ASL (m)	StartDate	EndDate	Basement	Alteration	Max-U-cps core	Max-U-ppm	UC-X	UC-Y	UC-Z	Rank %	Comments
CRE044	A	426,836.5	6,363,593.6	505.6	155	70	N/A	64.2	397.3	554.1	123.77	25-Jun-10	4-Jul-10	Pelite, Marble, Breccia,	Sandstone: weak to moderate short clay altn intervals from 255-374m. Local bleaching from near U/C. Hematite, sooty pytire and vuggy qtz along fractures ~341m. Basement: weak chlorite altn throughout, ~1% graphite from 449-454m. small intervals of hematite altn from 417-543m.	35 sandstone 40 basement	6.6 sandstone 22.3 basement	426,866.3	6,363,489.1	123.77	40%	
CRE045	G	426,625.4	6,359,128.7	494.5	40	70	N/A	20.6	341.2	455	178.01	29-Jun-10	6-Jul-10	Pelite, Semi-Pelite, Pegmatite, Granite,	Sandstone: weak to moderate clay altn from 280-336m along with local bleaching. Weak limonite observed from top 130m. Basement: weak to strong hematite at 344-420m, weak chlorite from 381-400m.	30 sandstone 120 basement	2.3 sandstone 61.3 basement	426,719.9	6,359,213.1	178.0	32%	
CRE046	A	426,859.0	6,363,547.5	504.8	155	70	N/A	65.2	364.6	453.8	155.44	4-Jul-10	9-Jul-10	Pelite, Garnitiferous Pelite, Pegmatite, Pelite+/-graphite	Sandstone: Hematite altn along fractures on top ~200m. Weak clay altn and bleaching observed. Sooty pytire and vuggy qtz along low angle fractures. Basement: Weak chlorite altn throughout with locally moderate sections. ~3% graphite zone at 432-436m.	25 sandstone 25 basement	2.5 sandstone 13.5 basement	426,879.1	6,363,446.3	155.44	26%	
CRE047	G	426,562.9	6,359,047.9	494.1	155	70	N/A	21.0	328.5	554.1	186.94	25-Jun-10	4-Jul-10	Pelite, Marble, Breccia,	Sandstone: local hematite altn, sudoite altn from 308-328.5m with ponctual drivite at 315m. Baselemt: weak to moderate chlorite altn from 364-447m. Sudoite from 328.5-400.5m, illite from 434-478m, sporatic kaolinite and ponctual drivite at 338m.	25 sandstone 600 basement	12.3 sandstone 851.2 basement	426,648.8	6,359,125.7	186.94	26%	
CRE048	A	426,884.1	6,363,504.8	505.0	155	70	N/A	64.2	359.9	554.1	130.79	25-Jun-10	4-Jul-10	Pelite, Marble, Breccia,	Sandstone: Weak clay altn at 232-242m. Few vuggy quartz from 314-319m. Weak to moderate hematite altn at 333-337m, 352-359.9m. Sudoite from 297-308m, 344-351m. Basement: Weak to moderate chlorite alteration from 359.9m to 406m. Kaolinite alteration from 412m to 484m. Graphite (10-30%) zone at 406-EOH.	30 sandstone 100 basement	9.8 sandstone 27.8 basement	426,934.1	6,363,381.5	130.79	32%	
CRE049	G	426,499.8	6,358,970.2	495.5	40	70	N/A	20.7	313	414.2	202.98	11-Jul-10	16-Jul-10	Graphitic Pelite, Pegmatite	Sandstone: Weak to mod hematite altn at 275-279m. Strong silc altn from 283-301m followed by 10m of moderate bleached section. Sudoite from 306-313m. Basement: weak chlorite altn throughout, sudoite from 313-363m. Graphitic zone from 329-EOH.	30 sandstone 450 basement	2.2 sandstone 152.9 basement	426,583.4	6,359,043.1	202.98	30%	
CRE050	A	426,922.2	6,363,650.6	509.2	335	70	N/A	67.1	N/A	79.2	N/A	15-Jul-10	17-Jul-10	N/A	Sandstone: Minor hematite and limonite alteration was intersected from 70m to 71m. Basement: N/A	N/A sandstone N/A basement	N/A sandstone N/A basement	N/A	N/A	N/A	N/A	abandoned hole
CRE051	G	426,687.0	6,359,207.0	492.0	40	70	N/A	21.2	338.8	429.5	174.76	17-Jul-10	21-Jul-10	Pelite, Calcsilicate, pegmatite, granite	Sandstone: Bleached section from 252-382m locally. Weak friable at 115m. Basement: Weak hematite altn from 303-312m and mod to strong altn from 340-370m.	20 sandstone 120 basement	1.2 sandstone 75.4 basement	426,783.5	6,359,275.2	174.76	22%	

CREE EAST DRILLING SUMMARY

Hole ID	Area	X	Y	Z	Azimuth (º)	Dip (º)	Water (m)	OB (m)	U/C depth (m)	TD (m)	U/C-ASL (m)	StartDate	EndDate	Basement	Alteration	Max-U-cps core	Max-U-ppm	UC-X	UC-Y	UC-Z	Rank %	Comments
CRE052	G	426,313.4	6,359,141.0	489.8	40	70	N/A	11.9	293.6	417.3	211.46	17-Jul-10	22-Jul-10	Pelite, semi-Pelite, Calcsilicate, marble, brecciated quartz carbonate, iron formation	Sandstone: zone of weak bleaching, friable, and clay zone from 144-172m, followed by more altered zone from 177-300m. Basement: weak to moderate chlorite altn throughout. Weak to moderate hematite altn locally from 269-377m. Weak graphite zone at 315-328m.	25 sandstone 30 basement	0.9 sandstone 9.8 basement	426,384.0	6,359,201.8	211.46	32%	No in-rod probe. Open until 260m.
CRE053	G	426,384.4	6,359,245.1	485.4	35	70	N/A	11.9	311.3	444.7	192.53	1-Aug-10	6-Aug-10	Semi-pelite, leucosomes, quartzite, calcsilicate, amphibolite	Sandstone: Minor silification from 90-211m locally. Basement: Zone of moderate bleach, friable and clay altn from 309-315m, 353-377m. Moderate to strong hematite altn from 262m-EOH locally. Strong chlorite altn from 350-392m, weak to mod zone from 392m to the end.	25 sandstone 70 basement	1.3 sandstone 72.1 basement	426,449.9	6,359,327.3	192.53	32%	
CRE054	H	425,519.0	6,359,482.4	486.6	270	70	N/A	15.4	266.6	399.0	235.38	1-Aug-10	5-Aug-10	Pelite, Pegmatite, Graphitic pelite, Semi-pelite, calcsilicate, garnetiferous pelite	Sandstone: Strong to moderate friable at 216-245m. Weak to moderate bleach at ~100m, 212-239m. Hematite altn at 202-253m. Chlorite at 131-174m. Basement: Moderate to strong hematite altn at 268-280m. Chlorite altn ~280m. Graphite zone at 299-302m, 330-336m, 361-377m.	25 sandstone 40 basement	0.9 sandstone 6.1 basement	425,430.1	6,359,487.3	235.38	28%	
CRE055	H	425,346.8	6,359,483.9	490.6	270	70	N/A	19.7	249.7	316.4	N/A	5-Aug-10	11-Aug-10	Arkose, Quartzite, Pegmatite	Sandstone: Strong friable zone from 68-168m locally associated with clay altn and bleaching. Basement: very weak hematite altn locally from 206-266m. Sericite altn from 252 to the end.	20 sandstone 20 basement	0.9 sandstone 1.3 basement	N/A	N/A	N/A	18%	No survey done due to BQ rods usage
CRE056	G	426,431.8	6,358,893.2	495.6	40	70	N/A	18.3	N/A	112.2	N/A	6-Aug-10	8-Aug-10	N/A	Sandstone: Weak to moderate silcification from 38m to 112m. Basement: N/A	N/A sandstone N/A basement	0.4 sandstone N/A basement	N/A	N/A	N/A	N/A	abandoned hole
CRE057	G	426,431.8	6,358,893.2	495.6	40	75	N/A	21.1	290.97	438.6	215.6	8-Aug-10	14/8/2010	Pelite, semi pelite, graphitic pelite, leucosome	Sandstone: weak to moderate silic from 40-140m locally. Friable at 182-279m with minor bleaching and clay altn. Basement: Hematite altn from 290-313m, minor clay altn from 320-338m, minor chlorite at 360-EOH. Graphite zone at 318-339m.	20 sandstone 250 basement	1.3 sandstone 262.3 basement	426,491.8	6,358,944.6	215.6	34%	
CRE058	H	425,677.9	6,359,477.8	493	270	70	N/A	10.7	286.7	380.7	244.97	12-Aug-10	16-Aug-10	Pelite, Siliminite rich pelite	Sandstone: Weak silicification from 21m - 33m, 42m- 54m, and minor hematite alteration from 95m - 98m. Basement: weakly friable basement from U/C to the bottom of the hole	30 sandstone 75 basement	3.8 sandstone 6.9 basement	425,575.2	6,359,489.7	244.97	18%	
CRE059	G	426,442.1	6,359,325.6	486.6	35	70	N/A	17.8	N/A	128.2	N/A	15-Aug-10	18-Aug-10	N/A	N/A	N/A sandstone N/A basement	0.5 sandstone N/A basement	N/A	N/A	N/A	N/A	
CRE060	G	427,562.5	6,358,282.2	497	300	70	N/A	15.3	283.4	392.9	229.61	18-Aug-10	20-Aug-10	pelite, granodiorite dyke, tonalite, pelite +/- cordierite and leucosome	Sandstone: Minor friable zone from 32m - 102m, minor silicification at 92m, clay alteration from 152m - 183m, hematite alteraton at 217m, and 257m - 258m, minor bleaching right above the U/C. Basement: Minor hematite alteration at 307m	2.5 sandstone 40 basement	0.8 sandstone 39.1 basement	427,486.0	6,358,335.9	229.61	16%	

CREE EAST DRILLING SUMMARY

Hole ID	Area	X	Y	Z	Azimuth (°)	Dip (°)	Water (m)	OB (m)	U/C depth (m)	TD (m)	U/C-ASL (m)	StartDate	EndDate	Basement	Alteration	Max-U-cps core	Max-U-ppm	UC-X	UC-Y	UC-Z	Rank %	Comments
CRE061	G	426,442.1	6,359,325.6	487	35	75	N/A	17.9	321.2	392.9	179.18	18-Aug-10	25-Aug-10	semi-pelite, leucosomes, quartzite, arkose, and granite	Sandstone: minor friable zone at 31-314m, clay altn at 141-304m both locally in small intervals. Minor silicification at 59-79m, 278-283m. Minor hematite altn at 74-96m and 278m to UC locally. Basement: moderate hematite altn from UC to 353m. ~5m sections of chlorite altn at 332m and 361m.	50 sandstone 100 basement	3.4 sandstone 45.4 basement	426,510.3	6,359,386.6	179.18	28%	
CRE062	G	427,658.8	6,358,236.8	502	300	70	N/A	15.0	295.3	420.3	139.14	20-Aug-10	26-Aug-10	Pelite, Leucosome and Garnet-rich Pelite	Sandstone: minor silicification and friable zone near top of the hole. Local bleachings in small intervals from 264m to UC. Basement: chlorite altn from 285-303m. Hematite at 210-211m.	55 sandstone 45 basement	0.9 sandstone 14.5 basement	427,550.8	6,358,331.2	139.14	22%	
CRE063	A	427,038.5	6,363,403.5	493.177	335	70	N/A	57.6	350.4	481.5	163.13	25-Aug-10	30-Aug-10	Pelite, Graphitic Pelite, Semi-Pelite, Iron rich Pelite	Sandstone: small minor bleaching and friable sections. Moderate silicification and bleaching from 293-300m, 331-341m. Chlorite altn from 250-288m locally. Basement: hematite locally, and chlorite altn at 396-415m and 460-464m. Graphite zone at 360-372m	90 sandstone 200 basement	91.3 sandstone 256.6 basement	426,999.1	6,363,514.2	163.13	48%	
CRE064	G	427,687.0	6,358,607.3	501.068	300	70	N/A	18.3	289.3	395.9	224.88	26-Aug-10	31-Aug-10	Iron rich pelite, pelite, Pelite with graphite, Arkose	Sandstone: Moderate silicification 23-69m locally, followed by minor bleaching sections to 268m. Hematite altn from 134-288m locally. Basement: Minor chlorite altn from 288-292m. Graphite zone at 308-333m.	45 sandstone 50 basement	1.9 sandstone 9.2 basement	427,616.1	6,358,655.5	224.88	18%	
CRE065	G	426,257.7	6,359,053.9	495.7	35	70	N/A	18.3	297.8	408.1	216.74	31-Aug-10	5-Sep-10	Pelite, Pelite with graphite, Pyritic pelite, Garnetiferous pelite	Sandstone: Minor silicification at 61-289m locally. Hematite along fracture and fault zones from 128m to UC. Basement: Hematite alteration occurs from 301m to 326m. Minoe graphite zone at 333-355m.	50 sandstone 200 basement	2.7 sandstone 11.9 basement	426,326.6	6,359,132.0	216.74	22%	
CRE066	A	427,001.2	6,363,473.2	502.2	335	70	N/A	N/A	N/A	45.7	N/A	31-Aug-10	2-Sep-10	N/A	N/A	N/A sandstone N/A basement	N/A sandstone N/A basement	N/A	N/A	N/A	N/A	abandoned hole
CRE067	A	427,001.2	6,363,473.2	502.2	335	74	N/A	64.2	363.1	487.4	153.22	2-Sep-10	8-Sep-10	Pelite, Calc-silicate, Marble, Pegmatite	Sandstone: small sections of weak friable, clay and silc zones. Hematite alth thoughout along fractures and bedding planes. Basement: hematite and chlorite altn in 3~10m interval sections from 364-473m locally.	50 sandstone 900 basement	2.6 sandstone 407.6 basement	426,969.5	6,363,568.0	153.22	46%	
CRE068	A	426,970.0	6,363,510.3	507.1	335	75	N/A	67.1	378.2	520.9	139.04	5-Sep-10	12-Sep-10	Pelite, leucosome, pegmatite, marble, dirty quartzite, calcsilicate and BIF	Sandstone: Weakly friable zone at 241-372m locally. Minor silc and clay at 135-327m locally. Strong hematite altn along fractures throughout. Basement: Hematite and chlorite altn from 363-473m locally.	35 sandstone 60 basement	4.6 sandstone 85.7 basement	426,953.9	6,363,595.0	139.04	40%	

CREE EAST DRILLING SUMMARY

Hole ID	Area	X	Y	Z	Azimuth (º)	Dip (º)	Water (m)	OB (m)	U/C depth (m)	TD (m)	U/C-ASL (m)	StartDate	EndDate	Basement	Alteration	Max-U-cps core	Max-U-ppm	UC-X	UC-Y	UC-Z	Rank %	Comments
CRE069	A	427,047.1	6,363,535.8	505.3	335	75	N/A	68.8	356.9	496.5	158.39	8-Sep-10	10-Sep-10	Pelite, Pegmatite, Marble, Quartzite, and Calcsilicate	Sandstone: Minor friable section from 192m to U/C locally. Minor bleaching 134-139m, 297m to U/C locally. Strong hematite altn along fractures from 255-292m. Basement: hematite and chlorite altn from UC to 472m locally.	25 sandstone 50 basement	61.6 sandstone 11.8 basement	427,004.6	6,363,607.9	158.39	36%	
CRE070	X	426960	6359787		N/A	90	N/A	N/A	N/A	23.8	N/A	13-Sep-10	14-Sep-10	N/A	N/A	N/A sandstone N/A basement	N/A sandstone N/A basement	N/A	N/A	N/A	N/A	water well
CRE071	A	427,079.2	6,363,431.1	494.6	335	70	N/A	61.1	N/A	90.8	N/A	5-Feb-11	6-Feb-11	N/A	Sandstone: No alteration observed.	25 sandstone NA basement	0.4 sandstone NA basement	N/A	N/A	N/A	N/A	
CRE072	A	427,177.6	6,363,426.2	441.7	335	70	N/A	61.0	338.3	441.7	177.5	7-Feb-11	13-Feb-11	Pelite, BIF, Pegmatite, Semi-pelitem, FeRich Graphitic Pelite, Garnetiferous Pelite	Sandstone: Minor bleaching and chloritiisation zones; Small infill fo pyrite present ;weakly friable in minor sections. Basement: 20% graphite present 384.10 m -398m and 15%graphite 401.0m -416.0m ; small pyrite amounts present	35 sandstone 45 basement	13.9 sandstone 20.9 basement	427,147.2	6,363,534.5	177.5	20%	
CRE073	A	426,646.3	6,363,668.2	486.4	60	70	N/A	42.7	351.5	389.8	153.4	7-Feb-11	19-Feb-11	BIF, Pelite, Pegmatite, Leucosome, Clay	Sandstone: Little to no alteration of sandstone; weak friability in sections. Basement: Weak-moderate chloritisation with strong at 365-368.5m; occasional moderate-strong hemaitizaton.	35 sandstone 20 basement	2.8 sandstone 6.9 basement	426,750.3	6,363,709.8	153.4	32%	4.5m thick clay seam at 368.5m and 3-4 m thick clay seam at 383.4m. Hole was abandoned.
CRE074	I	426,477.9	6,362,783.5	483.9	310	70	34.6	20.3	252.3	380.4	250.7	13-Feb-11	19-Feb-11	Pelite, Semi-pelite, Graphitic Pelite, Quartzite, Pegmatite, Leucosome	Sandstone: Mainly unaltered sandstone with minor amounts of weak clay and chlorite alteration. Basement: Strongy broken, sections of rubble, local sand/clay gauge in top 53-134m; decrease fratures to EOH.	110 sandstone 30 basement	6.9 sandstone 23.2 basement	426,407.0	6,362,848.2	250.7	26%	
CRE075	I	426,345.3	6,362,894.7	483.9	310	70	27.4	15.3	N/A	75.6	N/A	19-Feb-11	21-Feb-11	N/A	Sandstone: Strong friability at 51.20-52m. Basement: NA	15 sandstone NA basement	0.3 sandstone NA basement	N/A	N/A	N/A	N/A	Hole was abandoned.
CRE076	C	426,059.3	6,362,331.8	483.6	270	70	N/A	36.6	N/A	39.6	N/A	20-Feb-11	21-Feb-11	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Hole was abandoned.
CRE077	J	427,981.2	6,359,791.2	495.3	150	-75		15.2	327.7	453.5	180	31-Jan-12	5-Feb-12	Pelite, Semi-pelite, Graphitic Pelite, Pegmatite	Sandstone: moderately to strongly bleached; weak grey alterationfrom 98m to UC; Basement: regolithic to 341m	20 sandstone 100 basement	6 sandstone 45 basement	428,020.8	6,359,711.3	180	32%	
CRE078	J	428,422.1	6,358,945.1	490.6	150	-75				32.9		1-Feb-12	5-Feb-12	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	lost in overburden
CRE079	J	428,422.1	6,358,945.1	490.6	330	-75		18.3	295.8	365.2	208.2	4-Feb-12	12-Feb-12	Pelite, calcsilicate	Sandstone: minor chlorite near UC; Basement: Regolith to 310m, fesh beyond that.	60 sandstone 25 basement	1.7 sandstone 16.7 basement	428,403.5	6,359,030.2	208.2	22%	
CRE080	J	428,195.3	6,359,381.8	491.3	330	-75		18.6	302.1	474.9	199.2	5-Feb-12	11-Feb-12	BIF, pelite, graphitic pelite, leucosome, granite dyke	Sandstone: weakly altered; Basement: regolith to 335m, clay and friability to 420/440m	20 sandstone 90 basement	11.2 sandstone 127.1 basement	428,170.7	6,359,454.1	199.2	32%	0.4m @ 0.011% U3O8 (302.1-302.5m); 0.6m @ 0.015% U3O8 (303.2-303.8m)
CRE081	J	430,671.5	6,359,818.1	490.5	250	-75		12.8	318.4	438.3	187.6	13-Feb-12	17-Feb-12	Pelite, graphitic garnet pelite	Sandstone: weak alteration; Basement: regolith to 325m, clay ±friability to 430m	15 sandstone 60 basement	0.5 sandstone 8.4 basement	430,574.5	6,359,812.9	187.6	20%	
CRE082	G	426,371.7	6,358,807.8	493.1	220	-75		20.4	273.2	398.7	227.6	12-Feb-12	15-Feb-12	Pelite, semi-pelite, graphitic and/or garnetiferous pelite	Sandstone: essentially unaltered Basement: regolithic to 329m, ±clay latered to EOH	20 sandstone 50 basement	2.3 sandstone 9.6 basement	426,332.3	6,358,756.8	227.6	20%	

CREE EAST DRILLING SUMMARY

Hole ID	Area	X	Y	Z	Azimuth (º)	Dip (º)	Water (m)	OB (m)	U/C depth (m)	TD (m)	U/C-ASL (m)	StartDate	EndDate	Basement	Alteration	Max-U-cps core	Max-U-ppm	UC-X	UC-Y	UC-Z	Rank %	Comments
CRE083	B	428,496.6	6,363,051.0	507.2	330	-75		97.5	470.5	560.2	52.6	18-Feb-12	27-Feb-12	Pelite. quartzite	Sandstone: bleaching and silicifaction throughout with drusy quartz and pyrite; fault brecciae; Basement: regolith to 479m, bleaching 545-560m below fault	20 sandstone 200 basement	1.3 sandstone 765.9 basement	428,456.0	6,363,164.7	52.6	50%	0.5m @ 0.090% U3O8 (500.1-500.6m);
CRE084	B	428,880.8	6,363,154.2	498.9	330	-75		48.8	431.2	621.2	87.1	18-Feb-12	26-Feb-12	Pelite, quartzite, graphitic pelite, quartz-rich pegmatite	Sandstone: weak-moderate bleaching, pyrite 177-183m; Basement: regolith UC-470m; clay and ±friable to EOH	25 sandstone 110 basement	1.0 sandstone 117.7 basement	428,826.2	6,363,267.5	87.1	30%	0.5m @ 0.014% U3O8 (464.5-465.0m); 1m @ 13.3 g/t Au (598.8-599.8m)
CRE085	A	426,754.9	6,363,710.3	492.6	0	-90		46.5	340.5	441	152.1	28-Feb-12	6-Mar-12	Pelite, silicate IF, calcsilicate, pegmatite	Sandstone: chlorite 320m-UC; Basement: regolith to 400m, hematisation to 430m, ± friable to near EOH	20 sandstone 30 basement	3.2 sandstone 10.1 basement	426,752.0	6,363,708.2	152.1	34%	
CRE086	B	428,439.7	6,363,154.3	504.8	330	-85		61.0	398.2	490.1	107.8	28-Feb-12	5-Mar-12	Quartzite	Sandstone: ± bleached from OB to UC, silicification 355-388m; Basement: no regolith, some clay to 465m	100 sandstone 15 basement	0.7 sandstone 0.7 basement	428,422.3	6,363,179.5	107.8	30%	
CRE087	A	426,707.1	6,363,709.1	488.1	60	-70		60.4		67		5-Mar-12	9-Mar-12	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	lost in top of sandstone
CRE088	B	428,523.6	6,363,000.8	508.8	330	-75		64.8		474.9		5-Mar-12	19-Mar-12	N/A	176m-EOH: fractures, fault gouges, breccia, rubble; bleaching, grey alteration, pyrite (150m-EOH); Basement: N/A	40 sandstone NA basement	1.1 sandstone N/A basement	N/A	N/A	N/A	N/A	lost in sandstone near unconformity
CRE089	A	426,707.1	6,363,709.1	488.1	60	-70		70.7	388.2	484	130.8	8-Mar-12	16-Mar-12	Pelite, semi-pelite, quartzite, BIF, marble	Sandstone: weakly fractured Basement: strongly hematised just below UC, ± hematised to 450m	20 sandstone 20 basement	3.8 sandstone 10.5 basement	426,856.4	6,363,712.3	130.8	36%	
CRE090	B	428,442.9	6,363,016.9	507.6	330	-80		85.3		406.4		17-Mar-12	31-Mar-12	N/A	Sandstone: friable 170m-EOH, except where silicified 281-291m, grey alteration 144-152m clay alteration 324-EOH; Basement: N/A	20 sandstone NA basement	0.7 sandstone N/A basement	N/A	N/A	N/A	N/A	lost in sandstone
CRE091	B	428,502.8	6,363,143.0	509.5	0	-90		86.9		313.8		20-Mar-12	1-Apr-12	N/A	Sandstone: strongly fractured and friable from 239m to EOH; bleached from 185m to EOH; pyritic from 150m to EOH; Basement: N/A	40 sandstone NA basement	0.7 sandstone N/A basement	N/A	N/A	N/A	N/A	stopped in sandstone