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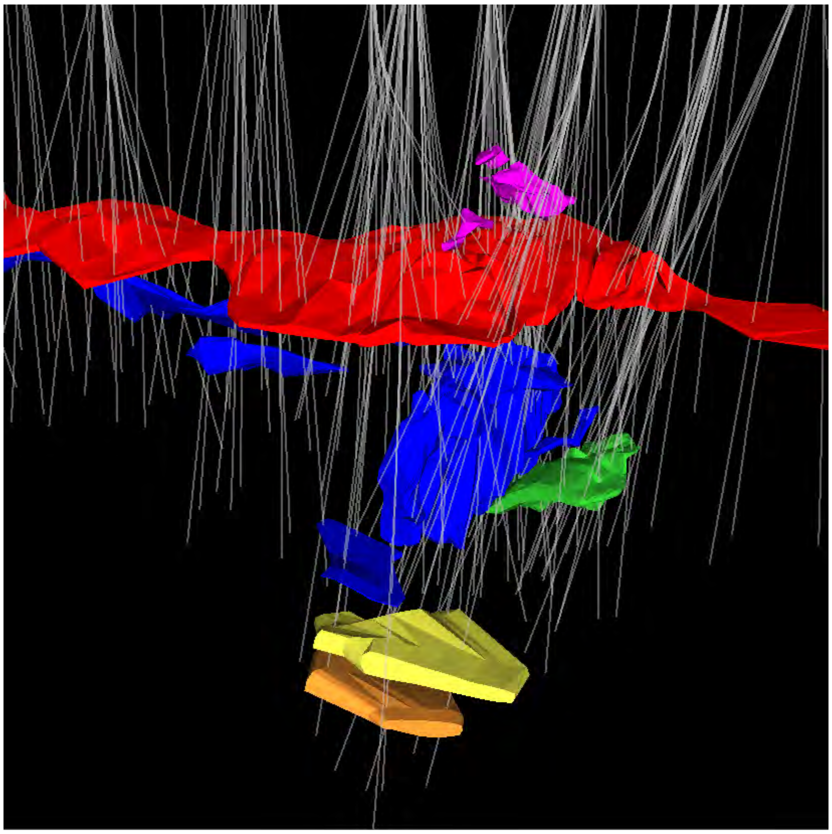
TECHNICAL REPORT ON THE SHEA CREEK PROPERTY, NORTHERN SASKATCHEWAN, WITH AN UPDATED MINERAL RESOURCE ESTIMATE



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May 31, 2013

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ITEM 1.0: SUMMARY

This Form 43-101F1 technical report was prepared in respect of a new mineral resource estimate and significant updated exploration results from the Shea Creek property ("Shea Creek") in northern Saskatchewan, in which UEX Corporation ("UEX") has a 49% interest. Shea Creek, which contains the Kianna, Anne, Colette and 58B uranium deposits, is located in the western Athabasca Basin of northwestern Saskatchewan, one of the most prolific uranium producing regions in the world. The property is 700 km north-northwest of the city of Saskatoon and approximately 20 km east of the border with the province of Alberta. It comprises eleven mineral dispositions totaling 19,581 hectares (196 km^2), which are registered to AREVA Resources Canada Inc. ("AREVA"). Shea Creek is subject to a joint venture (the "Joint Venture") between AREVA (51% interest) and UEX (49% interest), with AREVA acting as project operator.

UEX acquired its interest in Shea Creek through an option agreement ("the Agreement") which was signed in March, 2004. Under the Agreement, UEX was granted an option to acquire a 49% interest in eight uranium projects located in the Western Athabasca Basin that included Shea Creek from COGEMA Resources Inc. ("COGEMA"), the predecessor to AREVA, by funding C$30 million in exploration expenditures over an eleven year period. UEX fulfilled the option terms of the Agreement well ahead of the maximum eleven year period by December 31, 2007. Under the terms of the Agreement, UEX granted AREVA a royalty in an amount equal to US$0.212 per pound of future uranium in concentrate produced from the Anne and Colette deposits, to a maximum total royalty of US$10.0 million.

In April, 2013, AREVA granted UEX an option to increase UEX's interest in the nine Western Athabasca Projects, which include Shea Creek, to 49.9% through the expenditure by UEX of an aggregate of C$18.0 million (the "Additional Expenditures") on exploration drilling, intended to advance the four known Shea Creek deposits.

Shea Creek lies 15 km south of the formerly producing Cluff Lake mine. It can be accessed by the all-weather, maintained gravel Provincial highway #955, which passes through the property. A gravel airstrip located near the former Cluff Lake mine provides year round access to passenger aircraft and several large lakes in the area also allow float/ski plane access. Field operations at Shea Creek have been conducted from the former Cluff Lake mine camp.

1.1 Exploration History

The western portions of the Athabasca Basin were initially explored in the 1960's as exploration activities expanded outward from the established Beaverlodge uranium district. After airborne radiometric surveys in the late 1960's, ground prospecting followed by drilling led to the discovery the Cluff Lake deposits. Production from the Cluff Lake deposits commenced in 1980 and operations continued until 2002. Total production from the Cluff Lake mine site amounted to 64.2 million lbs U_3O_8 at an average grade of 0.92% U_3O_8, from several deposits.

Despite its proximity to Cluff Lake, systematic exploration on the Shea Creek property did not commence until 1990 when Amok Limited ("Amok") conducted an airborne GEOTEM electromagnetic (EM) survey which identified conductive north-northwest trending zones underlying the Athabasca sandstone sequence. Subsequent follow-up with ground electromagnetic surveys further refined position of the conductors, prompting Amok to reducing their mineral permit area claim to claims which now comprise the Shea Creek property. Amok drilled several of the EM conductors in 1992, intersecting narrow intervals of uranium mineralization in northern parts of the property near the sub-Athabasca unconformity. In 1993 ownership of the property was transferred to COGEMA (now AREVA), who continued exploration by drilling to the north the same conductive basement unit – now known as the Saskatoon Lake Conductor - and between 1994 and 2000, drilled more than 95,000 m in 156 drill holes. These resulted in discovery of the Anne and Colette deposits. Between 2000 and 2003, no drilling was completed, but additional airborne and ground EM surveys were undertaken to further enhance targeting.

In March, 2004, COGEMA (now AREVA) and UEX signed the option agreement. Drilling recommenced funded by UEX and between 2004 and December, 2012, approximately 141,317.0 m of drilling in 307 diamond drill holes was completed under management by AREVA. The drilling programs during this period resulted in the discovery and partial delineation of the Kianna Deposit between the Colette and Anne deposits, and discovery of new areas of mineralization along the prospective corridor between Anne and Colette (e.g. Colette South mineralization, 58B Deposit, and Kianna South). Exploration during this period also included a MEGATEM® survey of the property area, and ground-based geophysical surveys, which included a DC resistivity survey in 2005 that outlined several significant untested, or poorly tested, resistivity lows and a Tensor Magnetotelluric (MT) survey in 2008. In total, 240,628.5 m of drilling in 470 drill holes have been completed on the Shea Creek property since systematic exploration began in 1992, up to December 31, 2012.

1.2 Geological Setting

Local geology at Shea Creek comprises 400 to 800 m of Athabasca Group sandstone which unconformably overlie Lloyd Domain amphibolite-grade granitic and pelitic gneisses. The latter includes the Saskatoon Lake Conductor ("SLC"), a 40 to 80 m thick north-northwest trending and west-southwest dipping graphitic pelitic gneiss unit that is spatially associated with mineralization. The gneiss sequence is affected by penetrative syn-metamorphic deformation that occurred in at least two foliation forming phases during the 1950-1900 Ma Taltson orogeny. These peak metamorphic fabrics are overprinted by northeast-trending, right-lateral/oblique, retrograde mylonitic shear zones (D3; probable Hudsonian age) including the regional Beatty River Shear zone, and northeast-trending second and third order narrow mylonitic shear zones which offset the SLC. Post-Athabasca faulting remobilizes these mylonites, and is also associated with up to 50 m of reverse displacement of the unconformity along the R3 fault at the base of the SLC. Textural and geometrical relationships suggest that uranium mineralization was coeval with the late faulting, and that the architecture of the older D3 shear zones may have had a fundamental control on the position of mineralization.

1.3 Uranium Mineralization

To date, four uranium deposits have been discovered over a 3 km strike length along the SLC in northern parts of the Shea Creek property: Kianna, Anne, Colette and 58B. Uranium mineralization in these deposits occurs in three stacked styles that encompass the full range of types of unconformity uranium deposits. Most extensive is flat lying, massive pitchblende-hematite and chlorite matrix breccia-hosted mineralization which straddles the unconformity along, and immediately east of, the trace of the SLC. Breccia mineralization occurs both as pitchblende-coffinite fragments and as matrix replacement, suggesting it may have occurred in pulses that temporally spanned brecciation. Continuous unconformity mineralization occurs along the SLC for much of the 2.5 km known strike extent of the Shea Creek deposits, and is thickest and highest grade where basement mineralization lies beneath it. Basement mineralization forms a significant portion of the Shea Creek uranium inventory, and is most extensive at the Kianna Deposit. It comprises a) concordant reverse fault-hosted mineralization which often extends from the unconformity downward into granitic gneiss in the immediate footwall of the SLC, and b) discordant fault, vein and replacement pitchblende mineralization which occurs in steep, east-west to west-northwest trending, zones that may extend for several hundred metres below the unconformity, and which occurs along or beside remobilized mylonitic shear zones. Basement mineralization thickens where concordant and discordant faults intersect, forming west-plunging oreshoots. Lensoidal zones of perched mineralization are locally present up to several tens of metres above the unconformity often where reduced, pyritic chlorite alteration extends into the Athabasca sandstone above areas of basement and thicker unconformity mineralization.

1.4 Drilling Methods, Sampling and Results

Due to the greater than 600 m target depths, drilling is generally conducted by penetrating overburden with HW diameter casing followed by HQ coring to 400 m depth. The holes are typically completed by reducing to NQ-sized core (47.6 mm core diameter) which is the typical core size testing mineralization at target depths. Since 1999, directional drilling utilizing wedge cuts from a master (pilot) drill hole have been completed in areas where closely spaced drill holes are required to define mineralization. The directional drilling process reduces the overall quantity of coring required, and allows controlled drilling of deep targets. As is standard practice in uranium exploration, at the completion of each drill hole, downhole radiometric geophysical probing surveys are performed from the bottom of the hole up through the drill string.

Drill core sampling is conducted to industry standards, utilizing geological controls and scintillometer reading to determine position of mineralized intervals and sampling lengths. Mineralized samples, typically at 0.5 m intervals, are split, with half remaining in the core box, and the other half placed in a sample bag and numbered for geochemical analysis. Samples are analyzed geochemically at the Saskatchewan Research Council Geoanalytical Laboratories ("SRC") in Saskatoon, an ISO/IEC 17025:2005 accredited facility that is certified by the Canadian Association for Laboratory Accreditation Inc. Samples are analyzed for uranium by ICP-MS (Inductively Coupled Plasma Mass Spectroscopy) for samples with grades lower than 1,000 ppm U, and U_3O_8 uranium assay by ICP-OES (Inductively Coupled Plasma Optical Emission Spectroscopy) for samples determined by ICP-MS to contain uranium concentrations higher than 1,000 ppm U.

In addition to the geochemical analyses, downhole radiometric probe data are available for most drill holes. As is standard practice in uranium exploration in the Athabasca Basin, the probe data can be used to estimate uranium grade when sufficient geochemical data are available to calibrate the probe results to specific mineral deposits or mineralized areas. The converted probe data, which are denoted as "eU_3O_8", then provide a basis of comparison for the geochemical data, and allow estimation of uranium grade of mineralized intervals in areas of poor core recovery where representative sampling is not possible. Composited drilling results in areas of less than 80% core recovery, or where sampling is incomplete, are reported here as equivalent probe data.

Drilling on the northern Shea Creek has resulted in the intersection of numerous significant areas of uranium mineralization associated with the 3 km corridor hosting the Anne, Kianna and Colette deposits. Drill holes generally have steep dips of 75° or steeper which generally cross the flat-lying lenses of unconformity-hosted and perched mineralization styles at a high angle that is close to, or at true thickness. Mineralized intercepts of discordant basement mineralization have more complex morphology, and can contain combinations of steeply dipping vein-like mineralization which occurs at shallow core axis angles to many drill holes, in combination with foliation parallel, shallower dipping components which may form oreshoots.

1.5 Mineral Resource Estimates

Previous resource estimate

In May 2010, UEX released an initial mineral resource estimate for the Kianna, Anne and Colette deposits on the Shea Creek property, which is documented in a Technical Report with an effective date of May 26, 2010 which was filed on SEDAR at *www.sedar.com* on July 9, 2010. The 2010 Shea Creek resource estimate was prepared by K. Palmer, P.Geo., of Golder Associates Ltd., an independent Qualified Person as defined by N.I. 43-101. The resource estimate utilized 361 diamond drill holes (totaling 292,100 m) which were drilled from 1992 to 2009, and was based on mineralized wireframe models from the deposits that were constructed using a minimum cut-off grade of 0.05% U_3O_8. The resource estimate utilized a geostatistical block model technique of ordinary kriging using the DATAMINE Studio 3 software package. The resource database utilized primarily uranium geochemical analyses from the Saskatchewan Research Council (SRC) Geoanalytical Laboratories in Saskatoon, Saskatchewan. In cases where geochemical analyses were not available due to incomplete sampling or core recovery issues, downhole gamma probe data were used to calculate equivalent uranium grades based on correlation of assays with previous probe results. A total of 678 dry bulk density samples, representing all rock types and mineralization styles from the three Shea Creek deposits, form a comprehensive basis for the density component of the resource estimate.

The 2010 uranium mineral resource estimate for the three Shea Creek deposits, Kianna, Anne and Colette, at a cut-off grade of 0.30% U_3O_8, total:

- **63.57 million pounds of U_3O_8** in the Indicated mineral resource category comprising 1,872,600 tonnes grading 1.54% U_3O_8
- **24.53 million pounds of U_3O_8** in the Inferred mineral resource category comprising 1,068,900 tonnes grading 1.04% U_3O_8

Current resource estimate

This report documents a new, updated mineral resource estimate for the Shea Creek deposits, Kianna, Anne, Colette and 58B, supporting a UEX news release dated April 17, 2013. This current mineral resource estimate was completed by James N. Gray, P.Geo., of Advantage Geoservices Limited ("Advantage"). The estimate is based on drilling information up to December 31, 2012and utilized results of 477 diamond drill holes (totaling 402,800 m) which were drilled since 1992. Drill spacing across the deposits is variable, ranging between 5 m to greater than 50 m. On average, Indicated blocks are within 8 m of a drill hole and Inferred blocks within 16 m. As with the previous resource estimate, the mineralized wireframe models from the Kianna, Anne, Colette and 58B deposits bounding perched, unconformity and basement mineralization were prepared at a 0.05% U_3O_8 cut-off and used to constrain the mineral resource estimate at each deposit area. Estimation was by ordinary kriging using Gemcom Software. The impact of anomalously high-grade samples was controlled though a process of grade capping as well as restriction placed on high-grade interpolation distances.

The mineral resource estimate primarily utilized uranium geochemical analyses from the Saskatchewan Research Council (SRC) Geoanalytical Laboratories in Saskatoon, Saskatchewan. obtained through ICP-MS (Inductively Coupled Plasma Mass Spectroscopy) for samples with grades lower than 1,000 ppm U, and U_3O_8 uranium assay by ICP-OES (Inductively Coupled Plasma Optical Emission Spectroscopy) for samples determined by ICP-MS to contain uranium concentrations higher than 1,000 ppm U. In addition to AREVA's internal quality controls, duplicate and independent check analyses were performed by UEX on sample suites representing approximately 5% of the mineralized assay database since mineralization was discovered in 1992. In cases where geochemical analyses were not available due to incomplete sampling or core recovery issues, downhole gamma probe data were used to calculate equivalent uranium grades obtained using a DHT27-STD gamma probe which collects continuous readings along the length of the drill hole. Probe results are calibrated using an algorithm calculated from the comparison of probe results against geochemical analyses in previous drill holes in the Shea Creek area. A total of 674 dry bulk density samples, representing all rock types and mineralization styles from the Shea Creek deposits, form a comprehensive basis for the density component of the mineral resource estimate.

The updated uranium mineral resource estimate for the four Shea Creek deposits, Kianna, Anne, Colette and 58B, at a cut-off grade of 0.30% U_3O_8, total:

- **67.66 million pounds of U_3O_8** in the Indicated mineral resource category comprising 2,067,900 tonnes grading 1.48% U_3O_8
- **28.19 million pounds of U_3O_8** in the Inferred mineral resource category comprising 1,272,200 tonnes grading 1.01% U_3O_8

This estimate confirms that Shea Creek remains the largest undeveloped uranium resource in the Athabasca Basin. It also ranks as the third largest uranium resource in the Basin, exceeded in size only by McArthur River and Cigar Lake. Mineral resources at Shea Creek are still largely open and have excellent potential to expand significantly as drilling continues.

The changes in the mineral resource since the 2010 estimate reflect substantial increases in the basement mineral resources of the Kianna Deposit and new mineral resources from the recently defined 58B Deposit. However, these are also partly offset by mineral resource losses at Colette due to the restriction of mineralization in central and southern parts of that deposit based on new infill drilling there.

Mineral resource estimates at various cut-off grades are summarized in Table 1.1.

Table 1.1: Current, April, 2013 Shea Creek Mineral Resource Estimate, showing tonnes and grade at various U_3O_8 % cut-off grades. This mineral resource estimate was completed in April 2013 incorporating drilling information up to December 31, 2012, and using CIM standards of estimation of mineral resources and reserves.

Category	Cut-off U_3O_8 (%)	Tonnes	Grade U_3O_8 (%)	U_3O_8 (lbs)
Indicated	0.1	3,227,300	1.018	72,458,000
	0.3	**2,067,900**	**1.484**	**67,663,000**
	0.5	1,464,800	1.935	62,492,000
	1.0	795,800	2.966	52,047,000
	1.5	521,300	3.883	44,625,000
Inferred	0.1	2,601,600	0.586	33,616,000
	0.3	**1,272,200**	**1.005**	**28,192,000**
	0.5	784,500	1.388	23,999,000
	1.0	340,100	2.310	17,323,000
	1.5	215,600	2.937	13,961,000

The majority of the estimated mineral resource is in the Kianna and Anne deposits, over an approximately one km strike length in southern parts of the Shea Creek deposit trend where a significant portion of the resource lies in basement rocks beneath the Athabasca unconformity. In this area, a combined indicated mineral resource at the Kianna and Anne deposits at a cut-off grade of 0.3% U_3O_8 totals 59.6 million pounds of U_3O_8 grading 1.69% U_3O_8 in the Indicated category, and an additional 19.5 million pounds of U_3O_8 grading 1.27% U_3O_8 in the inferred category. Notably, at a 1.0% U_3O_8 cut-off grade, most of the resource is retained at much higher grade. At this cut-off grade, the combined mineral resource at the Kianna and Anne deposits totals 48.3 million pounds of U_3O_8 grading 3.18% U_3O_8 in the Indicated category and 14.4 million pounds of U_3O_8 grading 2.59% U_3O_8 in the Inferred category.

1.6 Exploration Potential and Recommendations

The Shea Creek property is highly prospective for discovery of additional uranium mineralization. Several levels of exploration potential are apparent. In known deposits, potential exists to expand the dimensions of high grade pods between, or outward from, previous drill holes. The high grade Kianna East zone of basement mineralization which was discovered in 2012 is open in many directions and will form a principal target for future follow-up drilling. Exploration potential exists for step-out drilling into open areas of mineralization, for example to expand the Kianna basement zone and to test open mineralization down dip in the Colette area. Gaps in drilling still lie along the main prospective corridor between Anne and Kianna and between Kianna and Colette also have high potential for new discoveries for both mineralization at the unconformity and in basement rocks. Outside of the 3 km strike length hosting the known deposits, drilling along the Saskatoon Lake Conductor is sparse and widely spaced, despite previous intersections of mineralization and anomalous alteration in several areas to the southeast of the Anne Deposit and to the northwest of the Colette Deposit.

Elsewhere on the Shea Creek property exploration is at early stages and targets are mainly geophysical (EM conductors and resistivity) with little or no drilling. Prospective areas of low resistivity with similar signature to the area around the Kianna, Anne, Colette and 58B deposits occur along the Klark Lake conductor in northwestern parts of the property. Low resistive zones lying between the Saskatoon Lake and Clark Lake conductors also form prospective targets that could represent alteration along discordant fault zones. Expansion of resistivity surveys to other parts of the property is recommended to further identify other low resistivity targets.

An exploration program at Shea Creek for 2013 is proposed to explore two principal areas:

1) To the southeast of the Anne Deposit, where initially a 50.4 km geophysical Tensor Magnetotelluric ("MT") survey to further refine the position and potential areas of offset along northeast-trending faults crosscutting the SLC that may control the position of mineralized zones. This is proposed to be followed by drilling totaling approximately 5,000 m to test for up to 2 km southeast of the Anne Deposit where there are only four previous drill holes in this area, including drill hole SHE-24 which intersected low grade uranium mineralization. The drilling will assess untested gaps between existing drill holes, some of which are more than 800 m apart, and also test areas where initial drill holes intersected only the margins of the prospective corridor. Costs for this program, are estimated at approximately C$3.1 million, of which UEX, as 49% partner, is responsible for C$1.52 million.

2) Drill testing of basement targets proximal to the Kianna Deposit, including testing of open areas of mineralization in the Kianna East Zone. A budget of C$2.0 million is proposed for this program, which will be funded by UEX under the terms of the Additional Expenditure agreement that was announced in a UEX news release dated April 10, 2013.

ITEM 2.0: INTRODUCTION

This report was prepared for UEX Corporation ("UEX") to provide supporting documentation of an updated mineral resource estimate on the Shea Creek property ("Shea Creek"), which was announced by in a news release dated April 17, 2013. The report also provides an updated technical review of the geology and exploration results received from exploration of the property, which lies in the western Athabasca Basin of Northern Saskatchewan. Shea Creek is owned 49% by UEX Corporation ("UEX") and 51% by AREVA Resources Canada Inc. ("AREVA").

This report was prepared to allow filing of a current Form 43-101 F1 technical report in accordance with National Instrument 43-101 ("N.I. 43-101") requirements concerning disclosure of technical information regarding material properties. The reporting here utilizes the new 43-101 F1 form guidelines which were implemented in 2011, and therefore headings may differ from previous reports.

2.1 Sources of Information

The Shea Creek property has been subject to ongoing exploration programs conducted since 1990. Details of exploration activities on the property are outlined in numerous exploration reports by technical staff of AREVA Resources Canada ("AREVA"), the operator of the project, which was formerly named COGEMA Resources Inc. ("COGEMA"). In approximate chronological sequence, the principal reports documenting exploration activities, results and interpretations include Koch (1990), Dalidowicz (1991, 1993), Alonso et al. (1992), Alexander et al. (1994, 1995), Baudemont (1996, 2000), Pacquet and Reyx (1995, and petrographic reports in later assessment reports), Munholland et al. (1996), Moriceau (1997), Robbins et al. (1997-2000), Robbins (2005), Bingham and Koning (2003), Koch (2003), Nimeck (2005), Robbins et al. (2006-2007), Reddy et al. (2007), Koning et al. (2007), Nimeck (2008), Modeland et al. (2008), Dodd and Carroll (2009), Morales (2009), Rhys et al. (2009), Emde et al. (2010, 2010a, 2010b, 2011), Revering (2010), Palmer (2010), Rhys et al. (2010), French et al. (2010, 2011, 2012), French and Robbins (2011a, 2011b), Zalutskiy and Robbins (2012) and Greger and Robbins (2012). These reports are authored or co-authored by Qualified Persons as defined by National Instrument 43-101.

In addition to the previous reporting, information in the sections below concerning project geology and uranium mineralization have also been obtained by the authors by direct observation through on-site evaluation of drill core, review and assessment of database information, and geological interpretation of exploration data. This has been augmented by communication with AREVA personnel on technical and logistical aspects of the project.

Regional geological setting and context of the Shea Creek property and adjacent Carswell structure are outlined in syntheses by Tona et al. (1985), Bell (1985), Laine (1985), Pagel et al. (1985), Pagel and Svab (1985), Lewry and Sibbald (1980), Baudemont and Fedorowich (1996), Hanmer (1997), Card (2002, 2006), Card et al. (2007), Ramaekers et al. (2007), and many other reports and papers. Metallogenic setting of the Athabasca Basin region is reviewed by Jefferson et al. (2007).

2.2 Scope of Involvement of the Authors

S. Eriks (P.Geo.), D. Rhys (P.Geo.), and S. Hasegawa (P.Geo.) have visited the Shea Creek project multiple times between 2006 and 2012. Site visits have involved the review and re-logging of numerous drill hole intercepts to 1) to provide to UEX an in house review of the geology and exploration potential of the Shea Creek deposits, 2) to ultimately contribute to the geological model of the deposits being formulated by AREVA technical personnel, and 3) to provide the basis for an independent N.I. 43-101 compliant review of the project. At the time of these site visits drilling was active on the project, and core handling, sampling and logging methodologies were observed and discussed with AREVA personnel. The authors have conducted extensive office based review and interpretation of exploration data from the property.

The project was visited by J. Gray, P. Geo. on July 21 and 22, 2012 accompanied by J. Robbins, P. Geo, Senior Project Geologist for AREVA, as well as S. Eriks, D. Rhys and S. Hasegawa. The visit allowed inspection of drill core, sampling procedures and drilling sites by J. Gray, and represents the most recent visit to the site by the authors.

Responsibility for the writing of individual sections of this report is as follows: S. Eriks and D. Rhys prepared or contributed significantly to Items 1.1 to 1.4, 1.6; Items 2 to 12 inclusive, and Items 23 to 27 inclusive. S. Hasegawa contributed to Items 7 and 12. J. Gray prepared and is responsible for mineral resource estimates and supporting content in Item 1.5, Item 14, and portions of Item 25. Wireframe models of mineralization outlines at 0.05% cut-off grade that were utilized in the resource estimate were prepared by S. Hasegawa with peer review by D. Rhys and J. Gray.

ITEM 3.0: RELIANCE ON OTHER EXPERTS

Additional technical information that is beyond the scope, or expertise, of the authors' work is largely the work of other qualified persons, and is referred through citations in the text below. Information concerning claim status, ownership, and assessment requirements which are presented in Item 4 below, Figure 4.2 and in Table 4.1 have been provided to the authors by AREVA, and have not been independently verified by the authors. However, the authors have no reason to doubt that the title situation is other than what is presented here.

ITEM 4.0: PROPERTY DESCRIPTION AND LOCATION

4.1 Property Location

The Shea Creek property is located in the western Athabasca Basin of northwestern Saskatchewan approximately 700 km north-northwest of the city of Saskatoon (Figure 4.1) and approximately 20 km east of the border with the province of Alberta. The property is approximately 230 km north of the town of La Loche and 15 km south of the former producing Cluff Lake mine site. It lies between latitudes 58°00'N to 58°15'N and longitudes 109°15'W to 109°35'W (Figure 4.2), and straddles parts of topographic map sheets 74K/3 and 74K/4 of the Canadian National Topographic system.

4.2 Concession Descriptions

The Shea Creek property consists of 19,581 hectares (196 km^2) in 11 mineral dispositions (Table 4.1, Figure 4.2). The project is a joint venture agreement between AREVA (51% interest) and UEX (49% interest), with AREVA acting as project operator. All mineral dispositions are registered to AREVA.

The disposition status of the Shea Creek Project is shown in Table 4.1 and includes the dates in which the mineral claims were recorded and when they will expire without the filing of additional assessment expenditures. All dispositions are contiguous and groupings can be made on an annual basis if the dispositions are in good standing. There are no surface rights to any portions of the property.

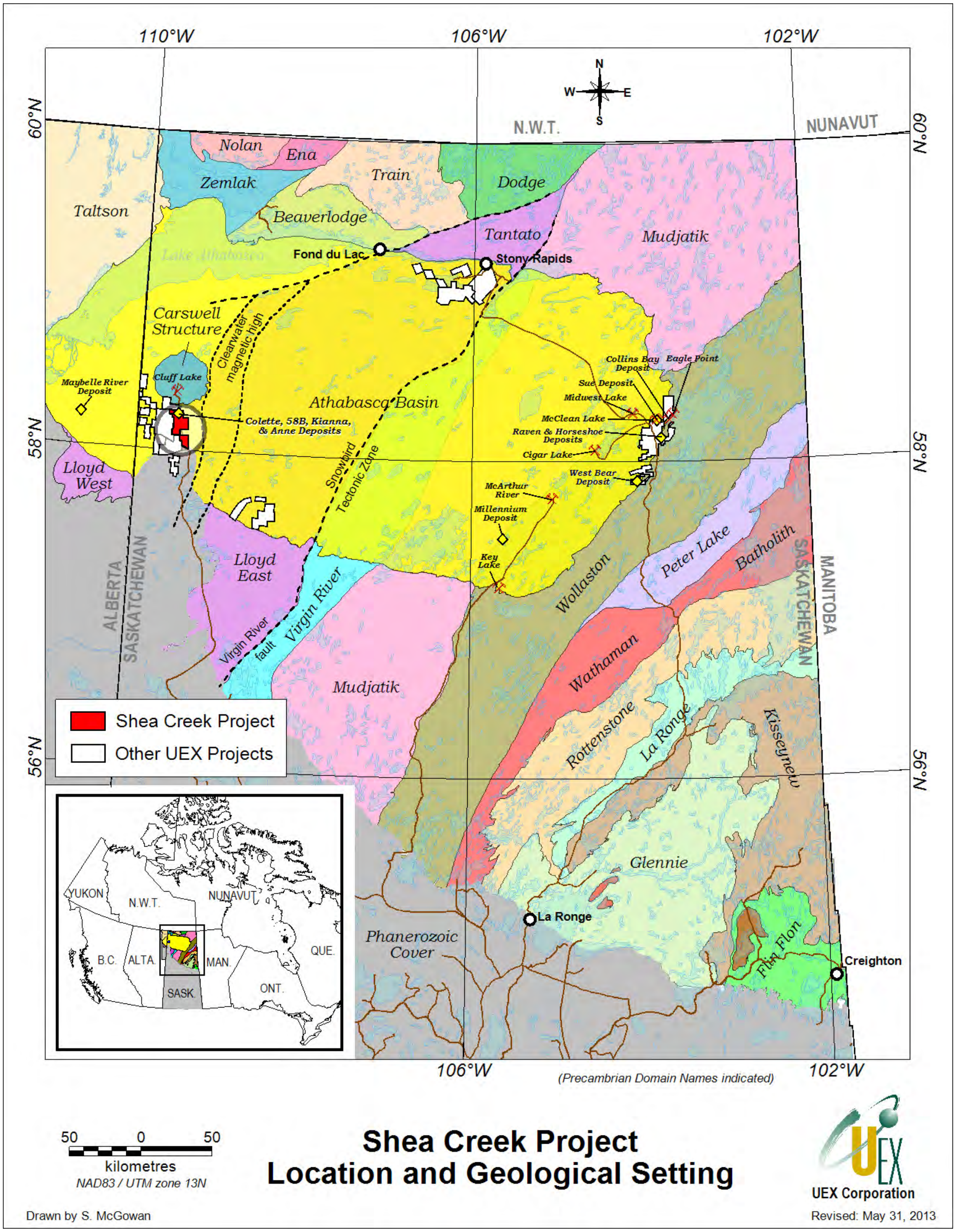


Figure 4.1: Shea Creek Project - Location and Geological Setting. Major lithostratigraphic domains and the extent of the Athabasca Basin are illustrated. The property is located in the western portions of the Athabasca Basin which are underlain by metamorphic rocks of the western Lloyd Domain.

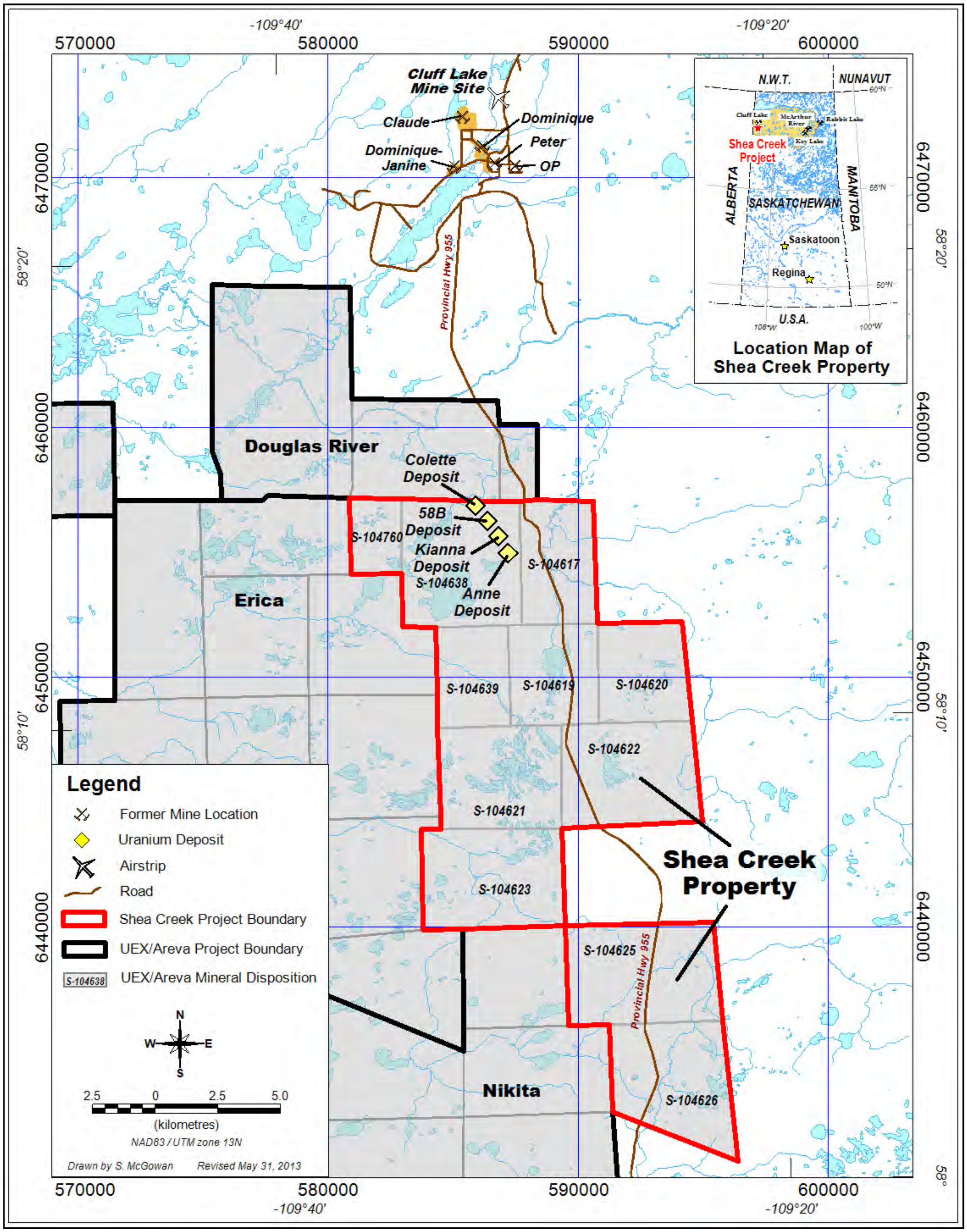


Figure 4.2: Mineral disposition map of the Shea Creek property. Note other adjacent properties which are held by AREVA and UEX. Grid is NAD83 UTM zone 12.

Mineral dispositions are located in the field by corner and boundary claim posts which lie along blazed and cut boundary lines. The entire length of the Shea Creek property boundary has not been surveyed. A legal survey is not required under the provisions of the Saskatchewan Mineral Disposition Regulations (1986). The property location is defined on the government claim map.

Table 4.1: List of mineral dispositions comprising the Shea Creek property as of the time of writing. The data was provided by AREVA, and has not been independently verified by the authors.

Disposition Number	Recording Date	Area (Ha)	Annual Assessment Requirement	Next Assessment Due
S-104617	1990-Jan-29	1478	$36,950.00	2033
S-104619	1990-Jan-29	1445	$36,125.00	2033
S-104620	1990-Jan-29	1431	$35,775.00	2033
S-104621	1990-Jan-29	2000	$50,000.00	2034
S-104622	1990-Jan-29	2208	$55,200.00	2033
S-104623	1990-Jan-29	2276	$56,900.00	2034
S-104625	1990-Jan-29	2444	$61,100.00	2033
S-104626	1990-Jan-29	2077	$51,925.00	2033
S-104638	1992-Jun-12	2438	$60,950.00	2034
S-104639	1992-Jun-12	1164	$29,100.00	2034
S-104760	1995-Jun-15	620	$15,500.00	2034
	Totals	**19,581**	**$489,525.00**	

4.3 Title and Option Agreement

In March 2004, AREVA (formerly COGEMA) and UEX announced the West Athabasca Option Agreement (“Agreement”) whereby UEX was granted an option to acquire a 49% interest in eight uranium projects located in the Western Athabasca Basin of northern Saskatchewan, by funding C$30 million in exploration expenditures (see UEX’s news release dated March 18, 2004). Two new projects were staked in late 2004, bringing the total number of projects in the Agreement to ten (see UEX’s news release dated January 31, 2005). The ten original Western Athabasca Projects (“Projects”) included Shea Creek (containing the Anne and Colette uranium deposits), Douglas River, Erica, Alexandra, Laurie, Mirror River, Nikita, Uchrich, James Creek and Brander Lake, several of which are shown on Figure 4.2. The James Creek Project was written off from an accounting perspective by UEX in 2012, as AREVA and UEX had no plans to continue with exploration on these claims which have now lapsed.

Under the terms of the Agreement, UEX earned a 12.25% interest in the Projects for every C$7,500,000 spent to the maximum total interest in the Projects of 49%. Minimum annual expenditures to fulfill the Agreement over a maximum 11 year period were stipulated as follows:
a) Year 1 & 2: minimum C$2,000,000 per year,
b) Year 3, 4, 5, 6: minimum C$2,500,000 per year,
c) Year 7, 8, 9: minimum C$3,000,000 per year, and
d) Year 10 & 11: minimum C$3,500,000 per year.

Under the terms of the Agreement, UEX also granted AREVA a royalty for the Anne and Colette deposits, in an amount equal to US$0.212 per pound of uranium in concentrate produced from the Anne and Colette deposits and delivered to the parties for sale, to a maximum total royalty of US$10.0 million payable by UEX.

UEX received confirmation from AREVA that the total amount of UEX expenditures on AREVA's Western Athabasca Projects exceeded C$30.0 million as of December 31, 2007 (see January 11, 2008 news release), and fulfilled the terms of the Agreement well ahead of the maximum 11 year period. As a result, the Shea Creek property is now 51% and 49% owned by AREVA and UEX, respectively. Exploration activities on the Shea Creek Project will continue to be managed by AREVA as operator of the Joint Venture pursuant to the terms of the Agreement, as amended.

4.4 Other Property Interests

In April, 2013, AREVA granted UEX an option to increase UEX's interest in the nine Western Athabasca Projects, which include the Shea Creek, to 49.9% through the expenditure by UEX of an aggregate of C$18.0 million (the "Additional Expenditures") on exploration drilling intended to advance the four known Shea Creek deposits. Initial exploration expenditures under this agreement are planned in 2013.

As specified in the Agreement, UEX has granted AREVA a royalty in an amount equal to US$0.212 per pound of uranium in concentrate produced from the Anne and Colette deposits and delivered to the parties for sale, to a maximum total royalty of US$10.0 million payable by UEX. To the knowledge of the authors, there are no other underlying interests, back-in rights, payments, or other agreements on the property.

4.5 Environmental Liabilities

The authors are not aware, at the time of writing this report, of any known environmental liabilities on the Shea Creek Property. No mining or waste disposal has occurred on the Shea Creek property and consequently the property is not subject to any liabilities due to previous mining activities.

4.6 Annual Expenditures

Annual expenditures of C$12.00 per hectare are required by the provincial government pursuant to the terms of the mineral disposition for the first 10 years after staking of a claim to retain each disposition. This rate increases to C$25.00 per hectare annually after 10 years, a rate which currently applies to all the mineral dispositions comprising the Shea Creek property. Required assessment work for each mineral disposition is listed in Table 4.1. Total annual assessment expenditure requirements for the entire Shea Creek property are C$489,525. Mineral dispositions on the property have exploration credits that will maintain the individual properties in good standing to at least the dates listed in Table 4.1. Exploration conducted in 2011 and 2012 which has not yet been filed for assessment purposes will further increase the credits on the property.

4.7 Permits for Exploration

Permits for timber removal, work authorization, work camp permits, shoreland alteration and road construction are required for most exploration programs from the Saskatchewan Ministry of Environment and Saskatchewan Watershed Authority. Necessary permits include a Surface Exploration Permit, a Forest Product Permit and an Aquatic Habitat Protection Permit. All drilling programs require a Term Water Rights license from the Saskatchewan Watershed Authority. If any exploration work crosses or includes work on water bodies, streams, and rivers, the Department of Fisheries and Oceans and the Coast Guard must be notified. Ice/snow bridges and clear-span bridges do not require approval from the Coast Guard. Permits may take up to three months to obtain from the regulators. Apart from camp permits, fees for these generally total less than C$200 per exploration program annually. Camp permit fees are assessed on total man day use per hectare, with a minimum camp size of one hectare assessed. These range from C$750 per hectare for more than 500 man days to C$175 per hectare for less than 100 man days. All of these permits have been obtained as of the date of this report.

ITEM 5.0: ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

5.1 Accessibility and Infrastructure

The Shea Creek property is located in northwestern Saskatchewan, approximately 230 km north of the town of La Loche, 15 km south of the former producing Cluff Lake mine site and 25 km east of the border with the province of Alberta (Figure 4.1). Provincial highway #955, an all-weather maintained gravel road which begins in La Loche and terminates at the Cluff Lake mine site, passes through and provides year-round ground access to the property (Figure 5.1). A gravel airstrip located to the northeast of the former Cluff Lake mine site (Figure 5.1) provides summer access to passenger aircraft, as do several large lakes which allow float-plane, or in winter, ski-plane access. Field operations have been conducted from the former Cluff Lake mine camp, 9 km due north of the Shea Creek property (Figure 5.1). The camp, which is operated by AREVA, provides accommodations for up to thirty-one exploration personnel. Fuel and miscellaneous supplies are stored in the existing warehouse and tank facilities north of the camp. The site generates its own power by generator. Abundant water is available from the numerous lakes and rivers in the area.

Access to the principal areas of drilling in the area of and between the Colette, Kianna and Anne deposits in the north central portions of the property is from a series of skidder trails which extend 1 to 2.5 km southwestward from Highway 955. Much of the area of current exploration focus in the northern Shea Creek property occurs in areas of dry ground, allowing year round ground exploration activities and drilling.

5.2 Climate, Vegetation and Physiography

Physiography of the Shea Creek area is typical of Canadian shield terrain, comprising low rolling hills separated by abundant lakes and areas of muskeg. Relief varies from 340 m above sea level in the depressions and lakes, to 385 m above sea level along esker ridges (Koning et al., 2007). Hills are typically covered in a mixed boreal jack pine, spruce and aspen forest, separated by low lying, swampy areas and muskeg fringed by stunted spruce stands. The geomorphology is dominated by glacial and periglacial sediments that were produced during several ice advances, and outcrop of the underlying Athabasca sandstone is rare. Regional drainage and water flows are to the north and the north-northwest towards Lake Athabasca. The Douglas River and Beatty River are the principal drainage systems.

Climatic conditions for the area have been monitored for a number of years, mainly at Cluff Lake. The summers are short and cool with an average frost-free period of less than 90 days and a mean daily summer temperature ranging from 14.7ºC to 17.0ºC (Koning et al., 2007). The cold winters are characterized by influxes of Arctic air alternating with intrusions of milder Pacific air. Average winter temperatures range from -17.5ºC to -20.3ºC. Extreme temperature ranges from 36ºC in the summer to as low as -49ºC in the winter. The prevailing wind direction for the area is from the southeast. The average annual precipitation for the area is 450 mm, with more than half of the annual precipitation occurring from June through to September (Koning et al., 2007). Snowfall usually occurs from October to May, with most winter precipitation occurring between January and April.

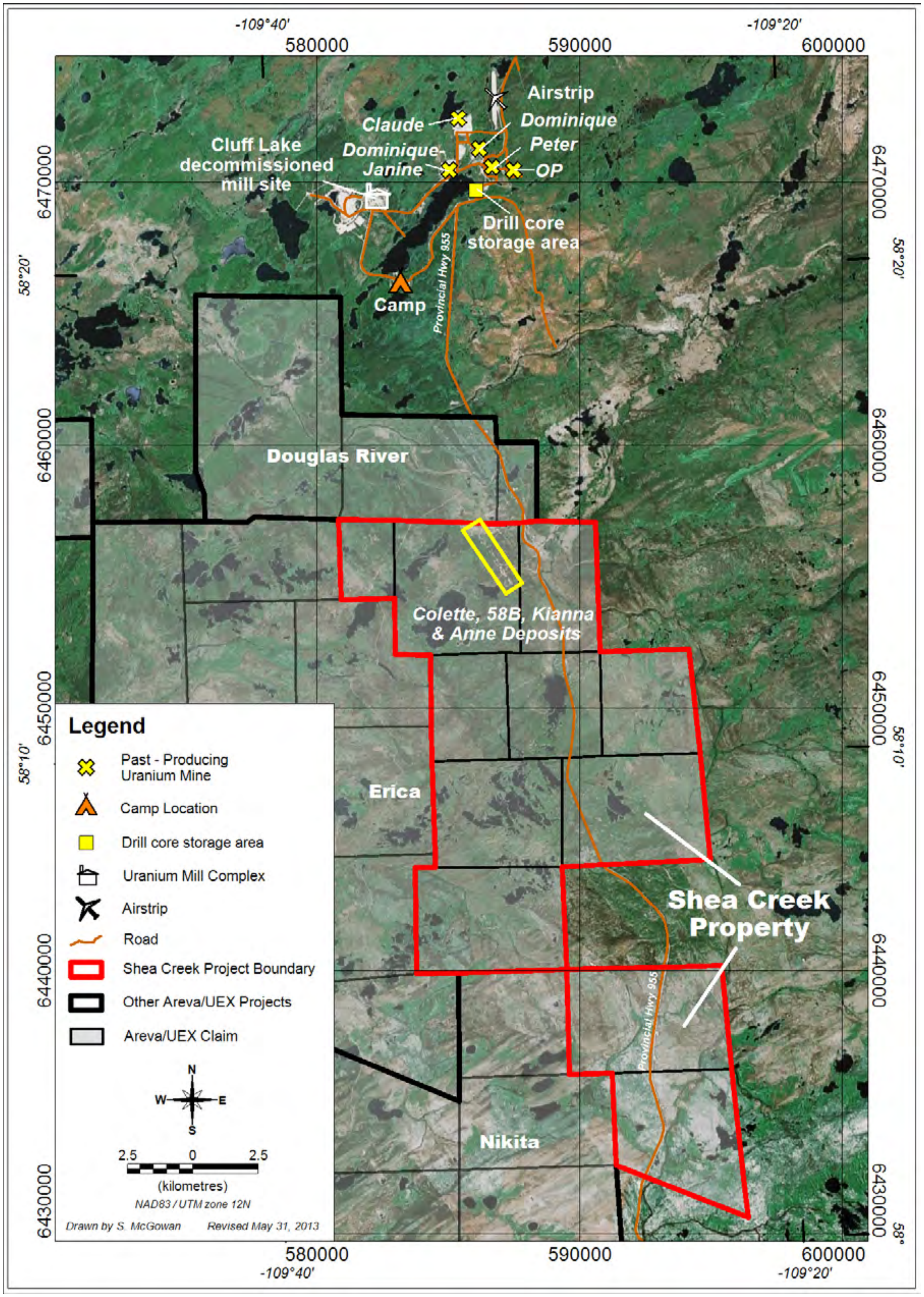


Figure 5.1: Infrastructure and deposits on and adjacent to the Shea Creek property. Note locations of former mining facilities and mines of the Cluff Lake mine complex in upper portions of the map. Grid is NAD83 UTM zone 12.

ITEM 6.0: HISTORY

The western portions of the Athabasca Basin was initially explored in the 1960's as exploration activities expanded outward from the established Beaverlodge uranium district utilizing airborne radiometric (scintillometer) surveys. In 1967, Mokta Ltd. (Amok Ltd.), owned by French companies Compagnie Francaise de Mokta (CFM), Pechiney-Ugine Kuhlman, and French state-owned Commissariat a L'Energie Atomic (COGEMA), conducted airborne radiometric surveys in the local region which identified anomalies in the Carswell and Cluff Lake areas (Tona et al., 1985). In 1968, follow-up ground surveys and prospecting discovered of the "A" train of uranium-bearing sandstone boulders, which led to extensive claim staking in the area. Subsequent radiometric surveys and follow-up ground work between 1968 and 1970 identified additional boulder trains and prospects in the Cluff Lake area (Tona et al., 1985). Subsequent detailed geological exploration by Mokta, including diamond drilling, led to the discovery of the "D" sandstone-hosted unconformity deposit in 1970. Exploration continued, and by the end of 1995, seven additional basement-hosted unconformity related deposits had been delineated on the Cluff Lake mine site: OP and N discovered in 1970, Claude in 1971, Dominique-Peter in 1981, Dominique-Janine in 1984, Dominique-Janine extension in 1988, and West Dominique Janine in 1995 (Koning and Robbins, 2006; Figure 5.1).

Production from the Cluff Lake deposits commenced in 1980 and operations continued until 2002. Total production from the Cluff Lake mine site amounted to 64.2 million lbs U_3O_8 at an average grade of 0.92% U_3O_8, with the largest producer being the Dominique-Peter underground operation, which produced 24.2 million lbs U_3O_8 (Koning and Robbins, 2006). The formerly producing Cluff Lake properties are currently held and maintained by AREVA.

6.1 Early History of Exploration in the Shea Creek Area

With the nearby discoveries at Cluff Lake, exploration activities by various companies were undertaken on properties surrounding the area, including parts of the current Shea Creek property. The property was partially or totally held by various companies between 1969 and 1985, with most field activities during this period occurring between 1978 and 1981 (Alexander et al., 1994). Regional studies completed include geophysical surveys (airborne radiometry, magnetometer, ground magnetic, refraction seismic, and VLF EM), prospecting and mapping, and geochemistry (water, stream and lake, lake sediments, till and vegetation).

Earliest exploration work on the property area is documented in 1969. That year, Kamalta Exploration Ltd., Houston Oils and Pentagon Petroleum Inc., and Magellan Petroleum Corporation conducted interpretation of geophysical data, air photo interpretation, and reconnaissance geochemical programs which extended over different parts of the current Shea Creek property. The work included a seismic refraction geophysical survey by Kamalta, and an airborne radiometric survey by Houston Oils and Pentagon Petroleum Inc., the latter which identified two radiometric anomalies in the area. Follow-up ground surveys to the airborne radiometric anomalies did not, however, identify any significant uraniferous occurrences in the area (Alexander et al., 1994).

In 1978, Marline Oil Corporation conducted a program of lake water and lake sediment sampling, surficial prospecting, reconnaissance geological mapping, and a small program of ground magnetic surveying on parts of the current property area, with follow-up ground work in 1970. Although several geochemical anomalies were located on the property, these were interpreted to be down-ice geochemical dispersion from the Cluff Lake ore bodies (Alexander et al., 1994).

Radioactive springs with associated red soils in several areas were also identified and attributed to an unknown, up-groundwater gradient, dispersed source.

Other programs completed in the property area prior to discovery of the Shea Creek deposits include an airborne magnetic survey flown by Kenting Earth Sciences Ltd. in 1980, for which Marline Oil drilled two regional diamond drill holes (AS-1 and AS-2) southwest of the Shea Creek property as follow-up, and investigation of a surface yttrium phosphate-bearing anomaly – probably representing diagenetic phosphates in the Athabasca Group - by Saskatchewan Mining and Development Corporation (SMDC) west of the Shea Creek property (Alexander et al., 1994).

6.2 Exploration on the Shea Creek Property, 1990 to Present

Systematic exploration of the Shea Creek property began in 1990 after granting of one mineral permit (MPP-1164 totaling 48,500 hectares) to Amok Limited which covered much of the current area of the property. Amok initially conducted a 1,515 line-km combined airborne GEOTEM electromagnetic and magnetic survey over the project area which identified the presence of conductive north-northwest and northeast trending zones within basement rocks underlying the Athabasca sandstone sequence (Koch, 1990). The airborne survey results led to the addition of new exploration mineral permit, MPP-1165 covering 13,000 hectares to the project area (Alexander et al., 1994). The airborne surveys were followed-up in 1991 with ground EM moving loop, gravity, magnetic, VLF-EM and UTEM surveys on several northeast-oriented lines which verified the position and better outlined the conductors identified by the initial airborne GEOTEM survey (Dalidowicz, 1991). During March and June, 1992, Amok restaked the area, reducing the original MPP-1164 claim to 12 individual claims (Alonso et al., 1992); these claims incorporate all of the current claim outlines in the Shea Creek project with the exception of two claims which were subsequently allowed to lapse. Additional ground EM and other geophysical surveys were also conducted in 1992 to refine and further evaluate conductors identified on the property.

Amok drilled several of the EM conductors which were identified by the 1991-1992 ground geophysical surveys in 1992. Three vertical diamond drill holes, and one incomplete hole totaling 2,421.0 m (SHE-001, and SHE-001A to SHE-003) were drilled to test three of the conductors (Alonso et al., 1992). SHE-001 did not reach target depth. While drill hole SHE-003 was barren and lacked any significant mineralization or alteration, drill holes SHE-001A and SHE-002 both intersected favorable alteration, faulting and anomalous geochemistry in the lower sandstone column, including reverse faulting, argillization, silicification, (drusy and vein quartz), tilted sandstone blocks, Ni-As sulphides, and bleaching (Alonso et al., 1992). Drill hole SHE-002, drilled in north-central parts of the Shea Creek property, also intersected in basement granitic gneiss approximately 11 m below the unconformity at a downhole depths of 706.8 m a shallow dipping radioactive fault zone (Alonso et al., 1992). This returned an intercept of 0.34% U_3O_8 over 0.40 m. This is considered the discovery drill hole of mineralization on the Shea Creek property (Robbins, 2006).

In 1993 ownership of the Shea Creek Project was transferred to COGEMA Resources Inc. COGEMA continued ground geophysical surveys in 1993 to better outline the previously identified conductors. These and the previous surveys identified a prominent, and traceable north-northwest trending conductor termed by Dalidowicz (1993) the “Saskatoon Lake Conductor” which was traceable over several km in northern parts of the property, and which is spatially associated with the favorable drilling intercept obtained in drill hole SHE-002. Subsequent EM surveys have traced the conductor now over a strike length of more than 25 km over much of the property (Nimeck and Koch, 2008; Figure 7.1). Further geophysical surveys continued in 1994, refining and expanding the EM targets (Alexander et al., 1994).

COGEMA began systematically drill testing well defined portions of the Saskatoon Lake Conductor in northern parts of the Shea Creek property northwest of the SHE-002 mineralized drill hole in 1994. That year, 12 vertical diamond drill holes, SHE-004 to SHE-015A, totaling 9,339.5 m were completed, several of which intersected the conductor and confirmed it to be a graphitic gneiss unit (Alexander et al., 1994). More importantly, uranium mineralization was encountered in four of these drill holes (SHE-004, SHE-013, SHE-012, and SHE-015A). The best result in drill hole SHE-015A, which intersected two intervals of mineralization, including 0.126% eU_3O_8 over 9.3 m in perched mineralization hosted by Athabasca sandstone above the Athabasca unconformity, and at a depth of 719 to 724.5 m at the unconformity, intersected 6.0 m grading 0.305% eU_3O_8. This intercept is now known to lie in the Kianna south area, between the Anne and Kianna deposits. The other mineralized drill holes, SHE-004 and SHE-012 intersected lower grade mineralization at the unconformity at downhole depths of 710 and 768 m, respectively, both now known to lie on the margins of the central Anne Deposit, and thus can be considered to represent the discovery holes for this deposit.

After the successful 1994 exploration program, drilling became the principal means of exploration on the Shea Creek property. Drilling has been concentrated along a 3 km strike length of the Saskatoon Lake Conductor in northern parts of the property, outlining several areas of uranium mineralization that contain the Anne, Collette and Kianna deposits. Subsequent exploration programs are as follows, up to the signing of the option agreement with UEX Corporation in 2004:

- **1995:** 14,563.0 m of drilling in eighteen drill holes (SHE-016 to SHE-033) followed up the 1994 results (Alexander et al., 1995). The first hole of this program, SHE-016, which was drilled between the previous SHE-004 and SHE-012 intersections, encountered 4.323% U_3O_8 over 9.10 m at the unconformity in central parts of the Anne Deposit.

- **1996:** 13,189.0 m of drilling in 17 diamond drill holes (SHE-034 to SHE-050). Most holes were completed in the principal mineralized corridor in the northern Shea Creek property, and two holes (1,041 m) were completed on the SC-2 grid located on the southern Shea Creek claims (Munholland et al., 1996). Eleven holes intersected varying amounts of mineralization in the northern Shea Creek property, mainly in the Anne Deposit. The best intersection was obtained from drill hole SHE-038A which intersected 2.60 m grading 8.664% U_3O_8 located in the sandstone immediately above the unconformity between the Anne and Kianna deposits. No significant intercepts were obtained in the two drill holes which were completed to the south (holes SHE-039 and SHE-041), although a graphitic fault zone was intersected in one hole (Munholland et al., 1996).

- **1997:** 13,389.0 m of drilling in 16 drill holes (SHE-051 to SHE-066) were completed on the northern Shea Creek property (Robbins et al., 1997a). Drill hole SHE-052, which intersected 16.8 m grading 2.342% U_3O_8 at the unconformity, was the best hole of the program and is considered the discovery hole in the Colette Deposit (Robbins, 2006). Also drilled during this program was drill hole SHE-063B, now considered to be the Kianna Deposit discovery hole (Koning et al., 2007) which encountered 4.70 m grading 1.639% U_3O_8 at the unconformity. However, the full significance of this drill hole and the recognition of the Kianna Deposit were not apparent until subsequent drilling in 2004 and 2005.

- **1998:** 21,820.0 m of drilling in 27 holes (SHE-067 to SHE-093) were completed, with most concentrated in the Collette Deposit area, and six diamond drill holes were completed in the Anne Deposit, which further defined mineralization in both areas (Robbins et al., 1998). Intersections included up to 11.607% U_3O_8 over 6.00 m in hole SHE-087 at the unconformity in the Anne Deposit. In addition to the drilling, moving loop electromagnetic (31.9 line-km) and gravity surveys (28.2 line-km) provided additional data required to better locate major conductors, as well as detect new ones, and 510 line-km of airborne helicopter VLF-EM surveying was completed over various parts of the property (Robbins et al., 1998).

- **1999**: 12,157.0 m of drilling with thirty-three unconformity intersections were completed (8 vertical pilot drill holes and 25 directional cuts – 33 holes total). This was the first year wedging off pilot holes was used extensively at Shea Creek (Robbins et al., 1999), a technique which was implemented in most subsequent drilling programs. The 1999 drilling campaign focused on expanding the boundaries of mineralization in the Anne area to determine economic potential, and outlined two high-grade zones along the unconformity within the deposit. The drilling also identified the potential for significant basement mineralization below the unconformity, as exemplified by the broad intersection in drill hole SHE-096-3, which intersected 5.419% U_3O_8 over 19.00 m straddling the unconformity, and two significant intercepts in underlying basement rocks of 18.0 m grading 0.76% U_3O_8 followed by 20.80 m grading 0.92% U_3O_8.

- **2000:** 10,855.0 m of drilling with thirty-three unconformity intersections (4 vertical pilot holes and 29 directional cuts) followed up previous drilling results in the northern Shea Creek property between, and within, the Anne and Collette deposits (Robbins et al., 2000). Multiple mineralized intercepts were obtained.

- **2001:** No exploration was conducted on the property in 2001.

- **2002-2003:** No drilling was conducted on the property in 2002 or 2003, but geophysical programs were carried out in both years. Exploration comprised 158 line-km of MEGATEM electromagnetic and magnetic airborne surveys. These defined the basement geology better than previous airborne surveys, outlining alternating domains of linear magnetic highs and lows, with the latter corresponding to area of known conductors (Koning et al., 2007). In 2003, 20.0 line-km of UTEM Moving Loop survey, 24.0 line-km of gravity surveys, and 44.8 line-km of additional GPS surveys were carried out over the southern portion of the Shea Creek property (Claims S-104625 and S-104626) to refine and identify exploration targets in that area (Bingham and Koning, 2003).

- **2004, January to March (winter program):** 1,578.0 m of drilling in three diamond drill holes (SHE-106 to 108) were completed in the southern Shea Creek property, targeting conductors identified in the 2003 geophysical surveys there, and following up drill holes which had been completed in this area between 1993 and 1996 (SHE-001B, SHE-039, and SHE-041; Robbins and Williamson, 2004). Although SHE-106 was lost in the sandstone before reaching the unconformity, it intersected a significant zone of desilicification suggesting hydrothermal activity in the area (Robbins and Williamson, 2004). Drill holes SHE-107 and 108 did not intersect alteration or mineralization, and no conductive units were encountered in the drill holes, suggesting a reinterpretation of the geophysics in this area may be warranted (Robbins and Williamson, 2004).

In March, 2004, UEX and COGEMA (now AREVA) signed the Agreement, whereby UEX funded all exploration on the Shea Creek property until it earned its 49% interest in December, 2007 (see UEX's news release dated January 11, 2008). A summary of exploration activities conducted on the property since UEX initially acquired its option in 2004 and maps showing drilling locations are presented in Item 9 of this report.

6.3 Historical Resources

There are no historical resource estimates for deposits on the Shea Creek property. A previous mineral resource estimate for the Shea Creek property which was completed in compliance with CIM standards in 2010 is summarized in Item 1.5 of this report. This previous mineral resource estimate is documented in a Technical Report by Palmer (2010).

6.4 Production

No uranium mining or any other forms of metallic mineral production have occurred on the Shea Creek property.

ITEM 7.0: GEOLOGICAL SETTING

The geological setting, potential structural controls on mineralization, and style of mineralization on the Shea Creek property are described in detail in Rhys et al. (2009), which is filed on SEDAR and available for additional reference. The information presented here summarizes and updates that information.

7.1 Regional, Local and Property Geology

The Shea Creek property is in the western Athabasca Basin of Northern Saskatchewan. It is underlain by two dominant lithologic elements: (i) polydeformed metamorphic basement rocks of Archean and Proterozoic age, which are overlain by (ii) 400 to 800 m of flat lying to shallow dipping, post-metamorphic quartz sandstone of the late Proterozoic Athabasca Group, which forms an elongate, east-west 450 km long Proterozoic sedimentary basin that underlies much of northern Saskatchewan and extends into eastern Alberta. Basement rocks in the western Athabasca area that underlie the Shea Creek region comprise Proterozoic orthogneiss and paragneiss of the Lloyd Domain, which forms part of the Rae Structural Province.

On the Shea Creek property, basement lithologies trend north-northwest and dip moderately to shallowly west-southwest. They comprise an alternating sequence of granitic gneiss, diorite gneiss, and pelitic gneiss (Kareen Lake Assemblage) which are affected by amphibolite grade metamorphic assemblages. The latter includes the Saskatoon Lake Conductor, a graphite-bearing pelitic gneiss unit which is spatially associated with uranium mineralization. This pelitic gneiss unit in the northern Shea Creek property, where most mineralization discovered to date is developed, is 40-80 m thick and comprises a graphite-rich pelitic gneiss base, with alternating garnet-rich gneiss and aluminous, locally graphitic pelitic gneiss above. It is surrounded in its hanging wall and footwall by garnetiferous granitic gneiss.

The gneiss sequence at Shea Creek was affected by at least two dominant periods of deformation prior to the deposition of the Athabasca sandstone:

a) Penetrative syn-metamorphic deformation which occurred in at least two phases (D1 and D2), comprising early layer parallel gneissosity (S1) which dips west-southwest, and a second-phase, possibly progressively developed S2 foliation. S2 is axial planar to minor, dominantly southwesterly verging folds of S1, and frequently transposes S1 foliation resulting in a composite S1-S2 fabric.

b) Development of northeast-trending, right-lateral/oblique lower amphibolite to greenschist grade mylonitic shear zones (D3), which include the major Beatty River Shear zone at the southern end of the Shea Creek property, and numerous, parallel northeast trending second and third order narrow dextral mylonitic shear zones developed to the north which offset the Saskatoon Lake Conductor.

Regional relationships and geochronology suggest that D1 and D2 occurred during the 1950-1900 Ma Tahlston orogeny, while formation of D3 dextral regional shear zones occurred in several phases during regional transpressive deformation potentially related to the Hudsonian orogeny between 1900 and 1740 Ma. Offsets associated with the D3 shear zones may have a fundamental, pre-mineralization control on the later position of development of uranium mineralization.

The folded basement sequence was eroded and then unconformably overlain by flat-lying, quartz arenite dominated Athabasca Group sandstone between 1769 and 1500 Ma. Below the unconformity at base of the sandstone, regional clay alteration affects the uppermost tens of metres of the basement gneiss sequence defining a probable paleoweathering profile.

Post-Athabasca faulting is localized along the pelitic gneiss unit that is host to the Saskatoon Lake Conductor as a series of southwest dipping, carbonaceous reverse faults that are most concentrated along graphitic gneiss (R3 fault) at the base of the unit. These result in a 20 to 50 m southwest side up zone of distributed displacement of the unconformity, which in the sandstone column is manifested by a broad, open monoclinal fault-related fold. Individual fault surfaces are often localized along foliation parallel, probably D3 age, reverse shear zones in the pelitic gneiss, and are developed as a combination of semi-brittle stylolitic shear zones and clay gouge-field faults. The semi-brittle, stylolitic fault surfaces extend into the basal Athabasca sandstone where they locally overprint mineralized chlorite-matrix breccias, indicating that this fault activity may have coincided with, and locally outlasted alteration related to uranium mineralization.

Post-Athabasca faulting also includes local remobilization of the steeply dipping, northeast trending mylonites which offset the pelitic gneiss unit by further right-lateral displacement, and a series of east-west to east-northeast trending low displacement faults with apparent left-lateral shear sense. These northeast, and east-west trending steeply dipping fault sets coincide with areas of highest grade uranium mineralization at the unconformity, and are host to, or control underlying uranium mineralization in basement rocks. Their activity and probable interaction with active, foliation parallel R3 reverse faults may have generated structural permeability and extensional settings for the focus of uranium mineralization. In addition, the stylolitic fabrics and reduced assemblages along the R3 faults suggest a phase of syn-tectonic fluid flow which if coeval with uranium mineralization may have been the reduced fluid source that reacted with oxidized fluids from the Athabasca basing to form the stationary redox fronts in which uranium mineralization is localized.

The Athabasca sandstone is affected to the north of the Shea Creek property by the Paleozoic age Carswell structure, a circular, probable meteorite impact structure which results in uplift of basement rocks and significant disruption of basement rocks. It is here that the past-producing Cluff Lake uranium deposits have been exposed at surface near the disrupted Athabasca unconformity surface. No effects of the Carswell event are present in the Shea Creek area.

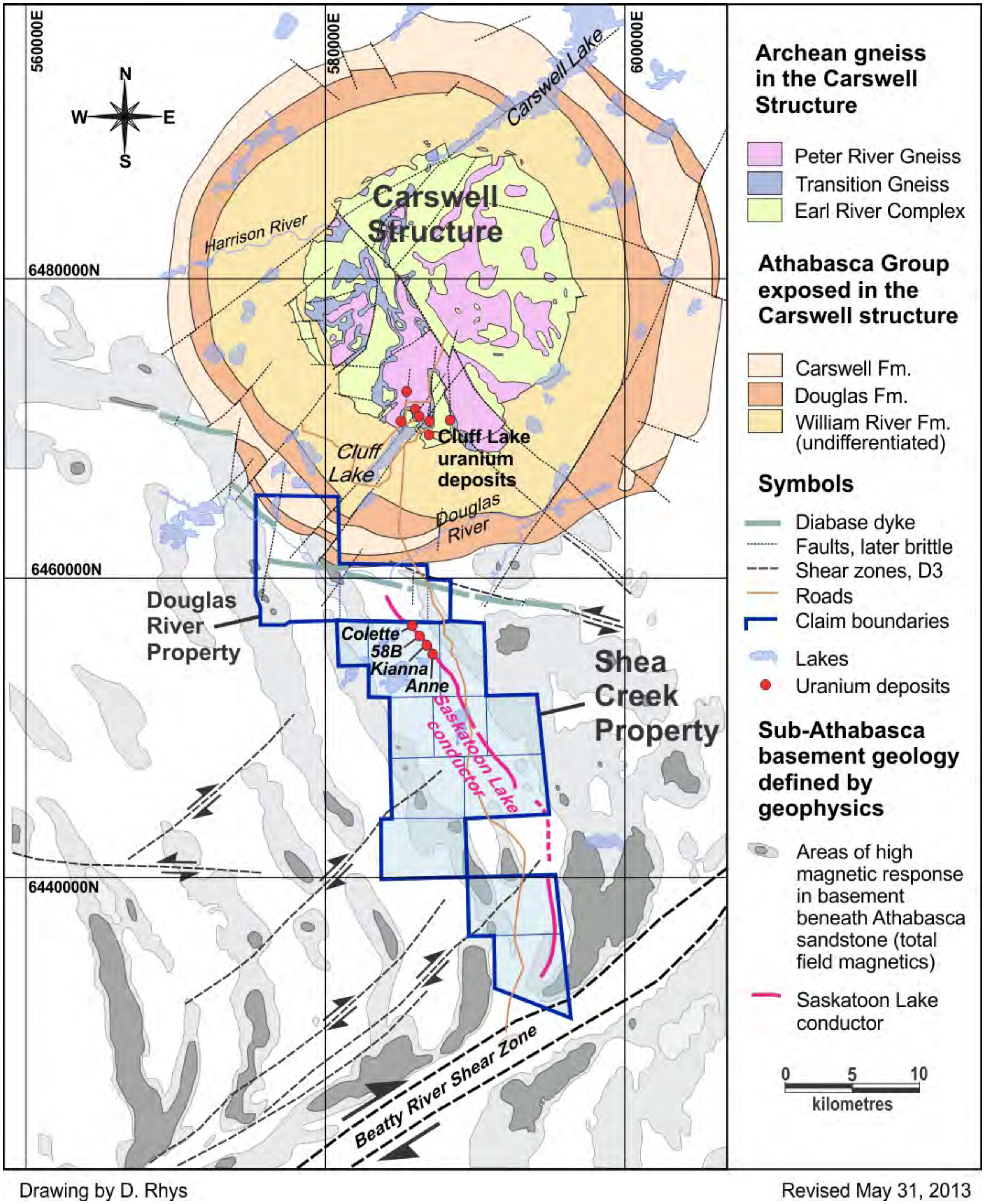


Figure 7.1: Geological setting of the Shea Creek property. Compiled from geophysical maps, with geology of the Carswell structure from Tona et al. (1985) and Koning and Robbins (2006).

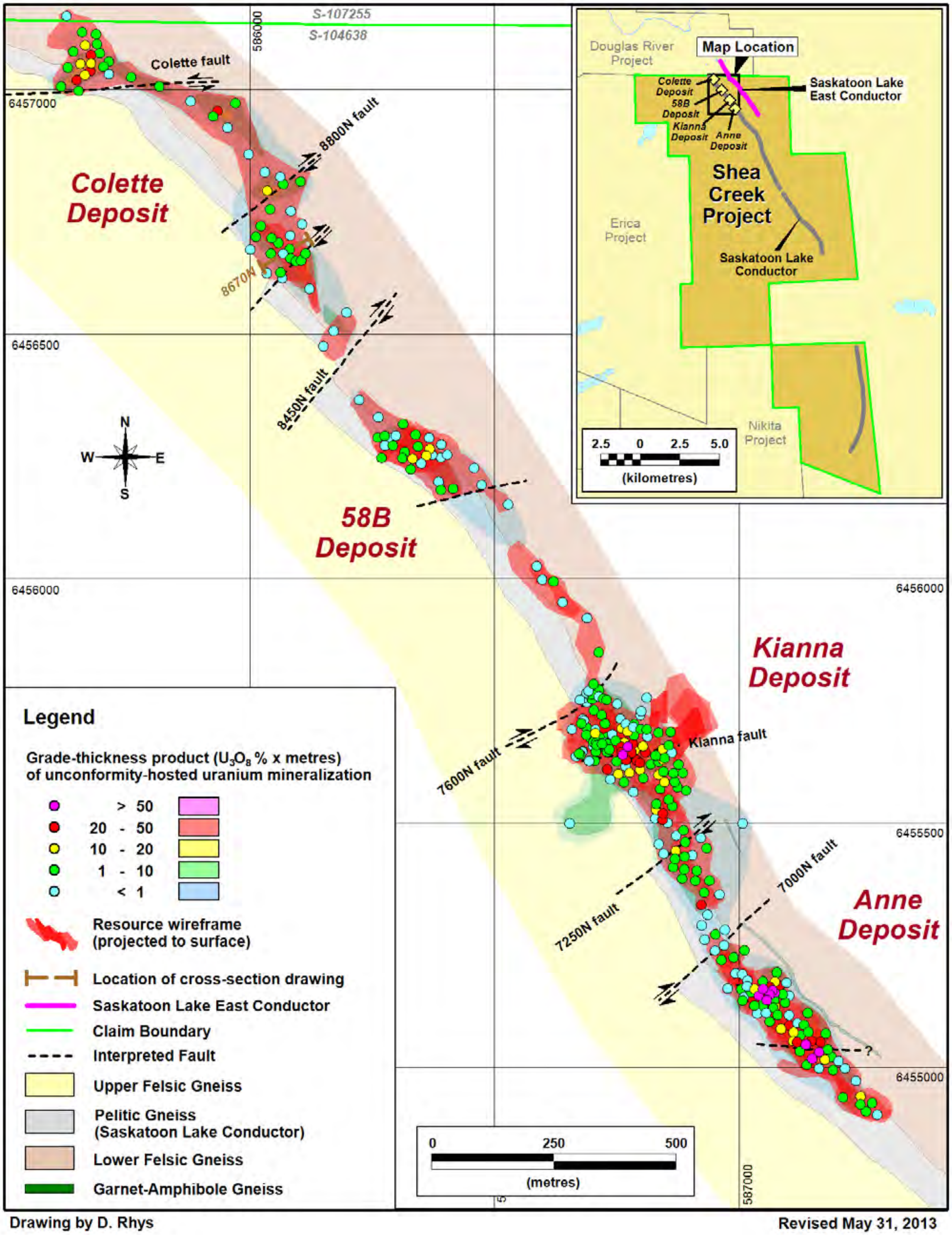


Figure 7.2: Geological setting of the northern Shea Creek property.

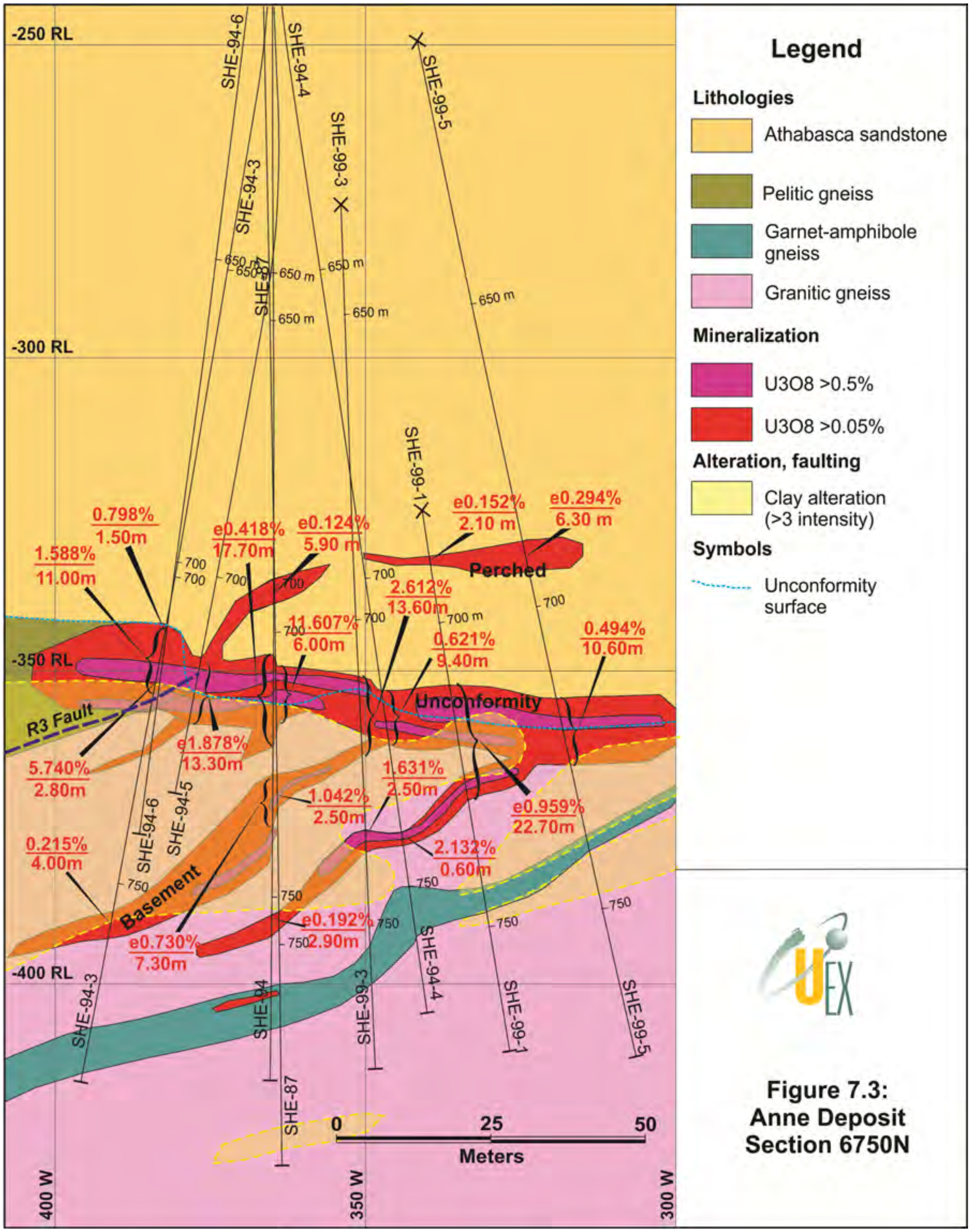


Figure 7.3: Anne Deposit Section 6750N. Cross section through the Anne Deposit looking northwest. Note the three settings of uranium mineralization: concordant basement below dipping shallow southwest parallel to the gneissosity, shallow dipping unconformity mineralization at center, and a small pod of perched mineralization in the Athabasca sandstone at upper right. See Figure 10.1 for section location.

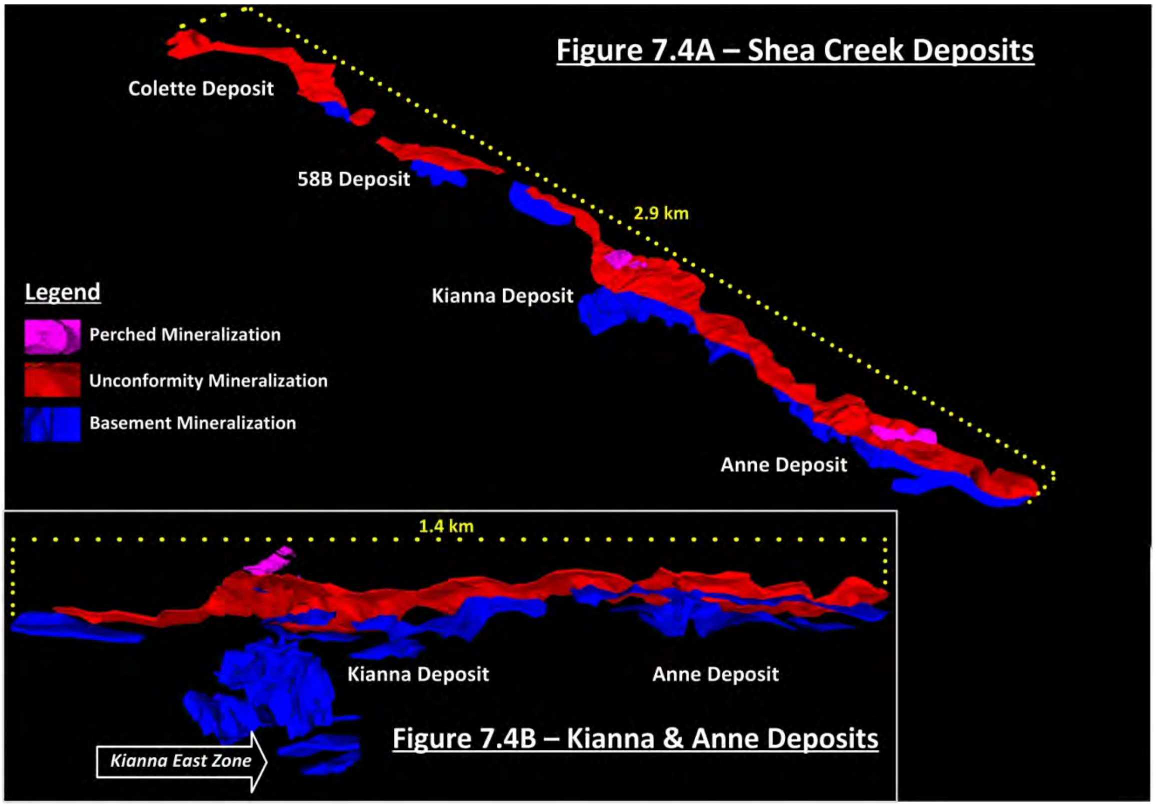


Figure 7.4A: Shea Creek Deposits. Oblique view of wireframe model of the Shea Creek deposits looking north. Distance from northwest end of Colette Deposit to southeast end of Anne Deposit is 2.9 km.

Figure 7.4B (Inset): Kianna & Anne Deposits. Longitudinal section view of wireframe model of the Kianna and Anne Deposits looking northeast. Distance of longitudinal section is 1.4 km.

7.2 Uranium Mineralization

Uranium mineralization identified to date on the Shea Creek property lies in northernmost portions of the property, comprising the Kianna, Anne, Colette and 58B deposits and intervening mineralization in between them. These deposits occur along an approximately 3 km strike length of the north-northwest trending pelitic gneiss unit (Figure 7.2, 7.4A) that is host to the Saskatoon Lake Conductor at depths of 650-800 m below current surface beneath the thick sequence of overlying Athabasca Group sandstone. Within this corridor, drilling has been focused in three areas in which semi-continuous mineralization has been traced at the unconformity (Figure 7.2): a) the Colette and Colette South areas, over a 0.9 km strike length, b) the 58B Deposit area, which occurs over a 0.4 km strike length, and c) the Kianna to Anne deposit areas, over a 1.4 km strike length (Figure 7.4B), forming the most economically significant part of the mineralizing trend known to date. Areas in between these deposits locally have limited drilling and have high potential for discovery of additional mineralization. Elsewhere on the property, drilling is limited and widely spaced, but mineralization has locally been intersected 2 km southeast of the Anne Deposit, and 300 m north of the Colette Deposit, the latter which includes an intersection in drill hole DGS-10 over 3.7 m grading 0.53% eU_3O_8 uranium mineralization at the sub-Athabasca unconformity on the adjacent Douglas River property.

Mineralization of three styles is developed within these mineralized domains at Shea Creek, based on its position with respect to the Athabasca unconformity, and overall morphology. The mineralization styles (Figure 7.3) are often developed together and may join, as is illustrated in Figure 7.3, or can occur separately. These styles comprise:

***1. Unconformity-hosted uranium mineralization (Figure 7.5)*:** This is the most widespread style of mineralization identified to date. It forms shallow dipping zones that are developed in lowermost Athabasca sandstone immediately above the sub-Athabasca unconformity, or straddling the unconformity and extending downward for several metres into the underlying basement gneisses. The mineralization typically is elongate in plan view, occurring at the unconformity over a 40 to 150 m lateral width along the trace of the northeastern margins of the pelitic gneiss unit where it intersects the unconformity, and extending over parts of the footwall granitic gneiss. Mineralization in high-grade areas may comprise massive, nodular or blebby pitchblende +/- coffinite +/- yellow U-silicates in a hematite-clay matrix (Figure 7.5). In lower grade areas, unconformity-hosted mineralization may be disseminated in chlorite-clay-dravite alteration. The mineralization of all grades is often associated with, and occurs within, chlorite-dravite dissolution breccias in the basal sandstone.

***2. Basement-hosted mineralization (Figure 7.6)*:** This is the second most extensive style of mineralization, occurring in several portions of the Anne Deposit, in a large zone at Kianna, in the Colette South area, and in parts of the 58B Deposit. Basement-hosted mineralization is developed mainly in granitic gneiss for up to 200 m below the sub-Athabasca unconformity, immediately beneath, and for up to 180 m below, the pelitic gneiss unit and associated R3 faults. It is variable in style and morphology, and is associated with areas of intense white to pale green clay-chlorite alteration. Basement mineralization can be either concordant or discordant in style, with the two styles often occurring together, or branching off one another. Interaction between concordant and discordant mineralization styles forms oreshoots within basement mineralization that plunge moderately to shallowly to the west-southwest. These two basement mineralization styles occur as follows:

Concordant basement mineralization, which occurs in the southern Anne and South Colette deposit areas and parts of Kianna, forms dominantly shallow to moderate west-southwest lenticular zones that are parallel or sub-parallel to gneissosity in the granitic gneiss. This mineralization style may form stacked zones that are separated from, or splay off unconformity-hosted mineralization, and which often follow southwest dipping fault surfaces or lithologic units. Where present, a garnet-amphibolite gneiss ("metabasite") subunit may be preferentially mineralized, the most notable example of which forms a significant pod of mineralization in the main Kianna basement zone (GAMP Zone). The Kianna East Zone represents a concordant basement mineralization style which lies along the upper contact of a deep graphitic unit that is parallel to the SLC.

Discordant basement mineralization, which is best developed in the main Kianna basement zone and in the northern Anne Deposit, is defined steeply dipping, easterly trending mineralized zones of disseminated and nodular and locally massive replacement style pitchblende +/- coffinite +/- hematite +/- U-silicates, and by sets of pitchblende +/- quartz +/- clay veinlets. Core re-orientation and oriented core drilling suggest that the veinlets trend east-northeast with moderate to steep northerly dips, parallel to the discordant zones.

3. Perched mineralization: This is the least voluminous of the three mineralization styles. It comprises flat lying, to shallow southwest dipping lenses of disseminated to massive pitchblende-coffinite-hematite-clay mineralization that are developed in Athabasca sandstone up to 60 m above the sub-Athabasca unconformity. Perched lenses may occur stacked above unconformity mineralization with no associated faulting, or may occur along, or at the termination of, southwest dipping faults where they project upward into the Athabasca sandstone form pelitic gneiss below.

Where best developed and highest grade, all three mineralization styles may be vertically stacked on top of one another. These stacked, better developed areas of mineralization may be localized in areas where steeply dipping, discordant east-west to northeast trending faults interact with, and intersect the foliation-parallel faults at the unconformity creating zones of high dilatancy and structural permeability. Pre-Athabasca basement structural architecture may play an important role in localizing these higher grade areas, since where the Saskatoon Lake Conductor is offset by northeast-trending dextral mylonitic shear zones, faults localized along the conductor may step and splay as they link across the area of offset. In addition, the older shear zones themselves may be remobilized and host, or control adjacent mineralization. Basement mineralized zones may be mantled by sheeted sets of quartz and quartz-dravite veins, although pre-mineralization veins associated with mylonites are also evident.

Mineralization is associated with extensive clay alteration which affects the lower sandstone, and extends downward into basement rocks. Principal clay minerals are illite, chlorite, kaolinite, and dravite. Often an early phase of illitization is evident, while kaolinite is generally paragenetically late. Extensive areas of chlorite-clay-dravite matrix breccias occur along the unconformity in the basal sandstone column, and are spatially associated with unconformity-hosted mineralization. Presence of both pitchblende fragments in breccia, and the overprinting of the breccia matrix by pitchblende-coffinite assemblages indicate a syn-mineralization timing, which was probably also coeval with reverse faulting along the R3 structures. In basement rocks, clay alteration envelops mineralized zones and outlines their general morphology, so modeling of these forms a targeting tool. An extensive northeast-trending and steeply dipping clay alteration zone at Kianna is open to the east and west, and contains to the north and east unbounded mineralization, providing significant room for expansion of Kianna basement mineralization, and the potential for additional, parallel basement zones.

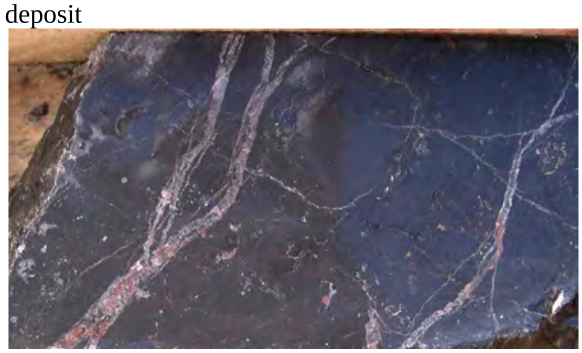
7.3 Gold Mineralization

Gold was a significant by-product for some of the historically mined Cluff Lake mineralization (Cluff Lake D zone: Koning and Robbins, 2006), and at Shea Creek locally high gold grades are also present. The high gold grades frequently, but not always, occur in areas of higher grade uranium mineralization, and can be present both in unconformity and basement mineralization in all three deposits in the northern Shea Creek property. Native gold grains both encapsulated in pitchblende, sometimes in association with Bi-tellurides, and free in the surrounding clay alteration has been identified in samples from basement and sandstone mineralization (Pacquet and Reyx, 1995 and Reyx in Robbins et al., 1998). Significant gold-bearing intercepts include 20.79 ppm Au over 2.40 m in drill hole SHE-087, 14.02 ppm Au over 3.30 m in hole SHE-115-03, 13.75 ppm Au over 2.50 m in hole SHE-079, 9.70 ppm Au over 3.50 m in hole SHE-102 and 5.95 ppm Au over 5.70 m in hole SHE-115-04. Higher grade uranium mineralization is not consistently gold-enriched, however. Future work to establish patterns of gold distribution are recommended, especially to identify if any consistent local gold-enriched domains can be identified which might enhance the potential value of parts of the deposit.

A: SHE-050, 722-724 m: Kianna South area

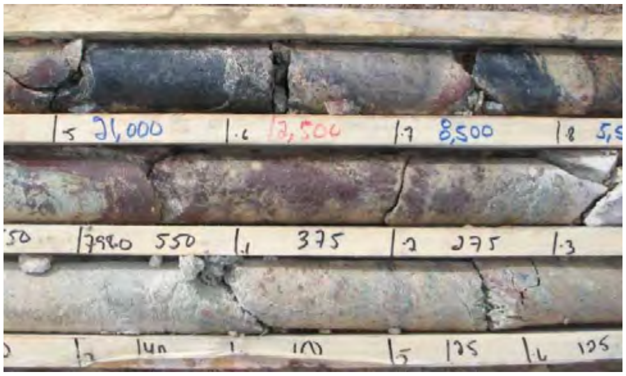
B: SHE-115-3, core from 744-746 m: Kianna deposit

C: SHE-122-1, 717 m: Anne deposit



D: SHE-95-3, 721 m: Anne deposit

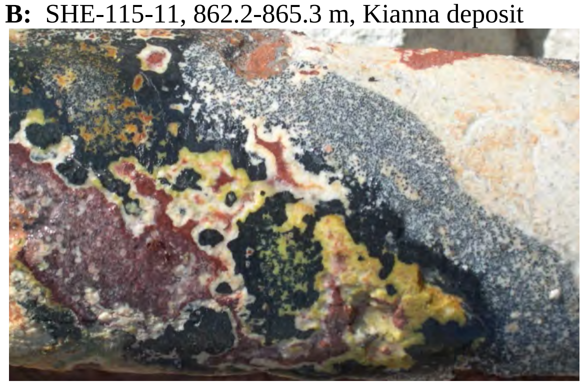
Figure 7.5: Unconformity-hosted mineralization textures. A: Center core row shows the top of a moderate grade intercept of unconformity mineralization (1.3% U3O8 over 2.7 m) with fine-grained disseminated and nodular pitchblende at the margin of the red hematite zone which is host to most of the mineralization (right). Sandstone at left is pyritic, reduced. B and C: Black primary pitchblende occurs as disseminated nodules and clots, irregularly shaped massive aggregates, and semi-pervasive replacements in an red-orange hematite-clay matrix which completely replace the basal Athabasca sandstone. D: Very high grade interval of massive pitchblende from interval grading 58.1% U_3O_8 over 0.3 m. Note late carbonate-hematite veinlets cutting mineralization.



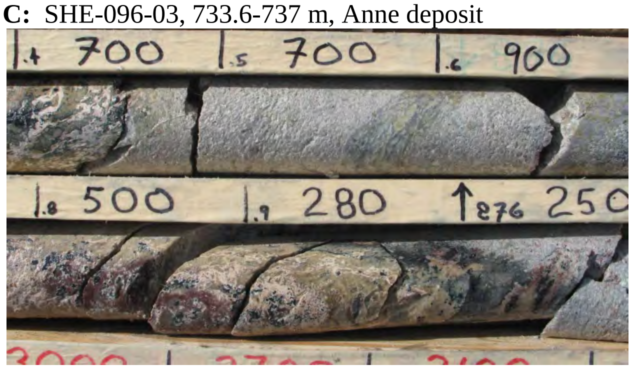
A: SHE-115-5, 794.5-795 m , Kianna deposit

B: SHE-115-11, 862.2-865.3 m, Kianna deposit

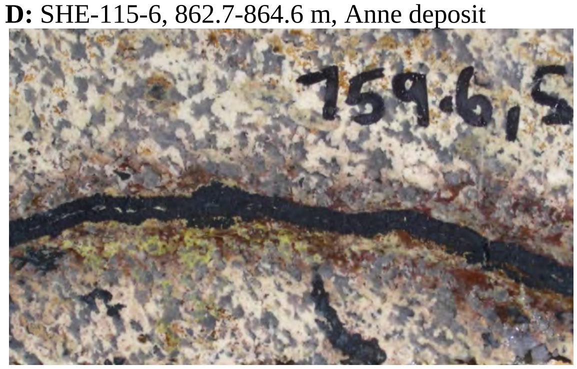
C: SHE-096-03, 733.6-737 m, Anne deposit



D: SHE-115-6, 862.7-864.6 m, Anne deposit



E: SHE-115-06, 875.8-877.6 m, Kianna deposit



F: SHE-088, 759.6 m, Anne deposit

Figure 7.6: Basement mineralization styles in the Kianna and Anne deposits. A: Irregular bands of semi-concordant high grade pitchblende- ?coffinite in the top row occur in an interval grading 30.42% U_3O_8 over 0.5 m. Note clay-hematite altered granitic gneiss below. **B:** Central parts of a high grade basement intercept (5.38% U_3O_8 over 16.5 m), showing semi-concordant, but diffuse bands of pitchblende-hematite. This forms part of a shallow southwest dipping high grade, concordant lens (west-southwest plunging oreshoot) within the overall steeply dipping, northeast-trending Kianna basement zone. **C:** Band of concordant, hematite-rich mineralization in lower row, which has lenses, and bands of pitchblende-?coffinite–hematite parallel to foliation planes. **D:** Irregular ("vermiform") textured fine-grained nodular-pitchblende-hematite replacement mineralization which occurs at a redox front. **E:** In the lower core, a steeply dipping banded pitchblende (dark bands)-hematite-clay discordant replacement vein at a shallow core axis angle cuts across the gneissosity at a high angle. The gneissosity is parallel to the fractures in the lower core row. **F:** Discrete, steeply dipping pitchblende veinlet.

ITEM 8.0: DEPOSIT TYPES

The Shea Creek property lies within the Athabasca uranium district, one of the most prolific uranium producing regions in the world, including some of the largest known uranium deposits globally. Deposits in the Athabasca Basin collectively comprise different varieties of the unconformity-associated uranium deposit type described by Jefferson et al. (2007), Ruzicka (1996) and previous workers. All are spatially related to the sub-Athabasca unconformity in the region (Figure 8.1), and are generally interpreted to result from interaction of oxidized diagenetic-hydrothermal fluids with either reduced basement rocks, and/or with reduced hydrothermal fluids along faults extending upward toward the unconformity in underlying basement rocks beneath the unconformity (e.g. Hoeve and Quirt, 1985). The common occurrence of mineralization in, and associated alteration overprinting Athabasca sandstone, indicates a post-Athabasca (<1,700 Ma) timing for uranium mineralization in the region. U-Pb age dates obtained from uraninite mineralization and dating of associated clay mineral assemblages support a widespread, primary phase of uranium mineralization in deposits throughout the Athabasca Basin at approximately 1590 Ma, with later periods of partial uranium remobilization and reworking (1400 Ma and younger episodes) during later fluid circulation induced by far-field events (Alexandre et al., 2009; Fayek et al., 2002; Cumming and Krstic, 1992).

Uranium deposits in the Athabasca Basin area form three different, although commonly spatially related, styles of unconformity type uranium deposits (e.g. Figure 8.1), the first two of which correspond with mineralization styles observed at Shea Creek:

- **A.** Deposits developed at, or just above, the Athabasca unconformity in Athabasca sandstone where basement-hosted, often graphitic faults and shear zones intersect the sub-Athabasca unconformity. These deposits occur in basal Athabasca sandstone in the footwall wedge to graphite-bearing shear zones and faults that are graphitic gneiss overthrust on Athabasca sandstone (e.g. Collins Bay A, B and D-zones; Key Lake), or in gradational drops/humps in the unconformity above graphite-rich lithologies and faults (e.g. Cigar Lake, Cluff Lake A zone; Midwest Lake; Sue A/B, West Bear, McClean Lake). Mineralization occurs in pods and disseminations in Mg-chlorite-clay-hematite alteration, locally overprinting spatially associated breccias and zones of intense clay alteration that sit directly above mineralization in sandstone (Figure 8.1). Common structural sites include bends and steps in fault systems, or humps in the unconformity that may reflect the interaction of graphitic shear zones with faults of different orientations. Deposits of this style are often characterized by assemblages of Ni and Ni-Co arsenides and sulpharsenides that accompany uranium mineralization.
- **B.** Basement-hosted deposits within or surrounding fault zones in predominantly non-calcareous gneiss. These deposits are exemplified by Eagle Point, Millennium, Dominique-Peter and Sue C. Many of these are composed of veins, disseminations and pods that link, or overprint shear zones and faults, often in or near graphitic-bearing gneiss, similar to the Shea Creek discordant basement mineralization styles. Concordant mineralization styles which are parallel to metamorphic stratigraphy are also present, often in gneiss adjacent to graphitic units, as is exemplified by the Millennium Deposit. Unlike deposits of type A above, the basement-hosted deposits generally lack arsenide and sulpharsenide minerals in mineralized zones, although basement-hosted mineralization at Shea Creek may be an exception to this pattern since locally Ni and As values are elevated.
- **C.** Basement-hosted deposits associated with hydrothermal breccias in calcareous gneiss and calc-silicate adjacent to northeast-trending faults. The only example of an orebody of this type in the region is the Rabbit Lake deposit in the eastern Athabasca Basin, although parts of the Dawn Lake deposit and other prospects are of similar style, and the largest basement-hosted unconformity deposits in the Alligator River district of northern Australia are closely comparable. This deposit style is not developed on the Shea Creek property.

Uranium deposits in the Athabasca region frequently occur in deposit clusters that comprise one or more deposit types. For example, four major uranium deposits, the Collins Bay zones (type A deposits) and the Eagle Point mine (type B), occur along a 5.5 km strike length of the Collins Bay Fault system on the Rabbit Lake property (Figure 4.1). Other deposit clusters include the Sue, McClean Lake, and Dawn Lake deposits (Figure 4.1), where deposits occur in at least two parallel trends, along which deposits may be strung out along parallel faulted graphite-bearing or calc-silicate units and spaced 100-700 m apart. More locally, the Cluff Lake deposits which lie only 13 to 16 km to the north of the Shea Creek deposits also show similar patterns, although primary relationships between deposits are disrupted by the effects of the Carswell Structure. Here, classic unconformity-hosted (A type) mineralization at the Cluff Lake D zone is spatially associated with nearby basement-hosted deposits such as Dominique-Peter (Koning and Robbins, 2006; Baudemont and Fedorowich, 1996). The spatial coincidence of unconformity and basement-hosted deposits emphasizes the importance of testing both the unconformity and basement rocks where mineralization has only been historically discovered at the unconformity. Often where unconformity-hosted and basement mineralization are spatially associated, the basement mineralization forms the larger deposit in the group (e.g. Sue, Dawn Lake, Eagle Point/Collins Bay zones, Cluff Lake). In other deposits, exemplified by Key Lake, dominant unconformity-hosted mineralization may extend downward along faults in the basement, forming "roots" to the unconformity-hosted mineralization.

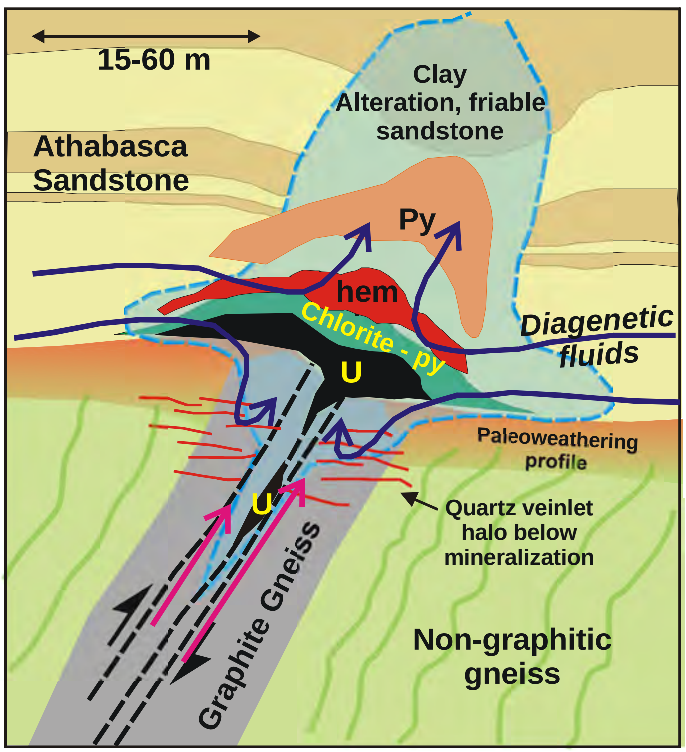


Figure 8.1: Schematic cross section through a hypothetical unconformity-hosted deposit illustrating the diagenetic-hydrothermal model for deposit formation. Uranium mineralization (U) is developed at a stationary redox front where rising reduced fluids coming up graphite-gneiss hosted, low displacement reverse basement faults (pink arrows) react with circulating diagenetic-hydrothermal fluids in the overlying sandstone column (blue arrows). Chlorite-pyrite alteration envelops the mineralization in the basal sandstone column and is overlain by a hematite cap (hem), and then a broad zone of friable, locally clay altered sandstone which rises as a plume above the deposit. Secondary pyrite (py) may occur high in the alteration zone. Note the sheeted quartz veins peripheral to the clay alteration in the basement rocks.

Deposits of all the styles described above are associated with, and generally enveloped by, intense zones of argillic alteration (Figure 8.1) that are composed predominantly of illite, chlorite and kaolinite. The influence of alteration extends over a far greater area than the dimensions of the deposits themselves, and consequently the tracking of alteration distribution, mineral zonation and associated lithogeochemical changes is an important tool in vectoring exploration (Sopuck et al., 1983; Quirt, 2002). In the Athabasca sandstone, alteration plumes may extend hundreds of metres above the unconformity-hosted uranium deposits, while in basement rocks alteration is generally more restricted to the vicinity of associated faults and veins. Mineralization frequently occurs at redox fronts marked by zones of hematization, and a change from sulphide to oxide accessory mineral assemblages (Figure 8.1).

Uranium deposits in the area are generally associated with reverse fault zones that are localized within, or cross graphitic gneiss and carbonate/calc-silicate units, often overprinting pre-Athabasca, retrograde metamorphic shear zones. Post-Athabasca faulting associated with mineralization is generally low displacement, accommodating metres to a few tens of metres of reverse displacement of the sub-Athabasca unconformity. Mineralization occurs in areas of enhanced structural permeability and/or low stress (dilatancy) along faults including fault junctions (e.g. Rabbit Lake), beneath brecciated sandstone under overthrust wedges (e.g. Collins Bay zones; McArthur River), at bends and en echelon steps in the faults (e.g. B-zone), and at dilational jogs (e.g. Eagle Point). These structural sites are in turn influenced at a broader scale by the occurrence of pre-Athabasca folds and basement shear zones, which control the distribution, continuity and morphology of the later faults. Mineralization is generally structurally late in the faulting history, and while basement-hosted mineralization is frequently localized along or adjacent to faults, both mineralization and its associated alteration may overprint fault rocks.

ITEM 9.0: EXPLORATION

Since March, 2004, when UEX and COGEMA (now AREVA) signed the Shea Creek option agreement, both drilling and geophysical programs have continued to be utilized as principal exploration methods to explore the Shea Creek property. UEX funded all exploration on the Shea Creek property until it earned its 49% interest in December, 2007. Since that time, expenditures are shared by UEX and AREVA on a pro rata basis. AREVA is the exploration manager, and all exploration activities are supervised and implemented by AREVA personnel and contractors, with exploration programs directed by Erwin Koning, P.Geo, District Geologist for AREVA and John Robbins, P.Eng., Senior Project Geologist for AREVA up to September 30, 2012 and Dwayne Morrison, P.Geo., District Geologist West Athabasca for AREVA from October 1, 2012. Exploration activities conducted on the property prior to UEX acquiring its option on the property in 2004 are summarized in Item 6 of this report.

Exploration programs which have been completed since UEX acquired its option on the Shea Creek property are summarized below. Highlights of mineralized drilling intercepts obtained during these, and prior drilling programs before UEX's involvement, are summarized in Item 10 of this report. Exploration programs that have been completed since March, 2004 are as follows:

- **2004 April to December:** 6,596.0 m of drilling with twelve unconformity intersections (6 vertical pilot holes and 6 directional cuts). Drilling was concentrated mainly in northwestern parts of the Anne Deposit (SHE-109 and SHE-112 series holes), and the southeastern Colette Deposit (SHE 110 and 111 series holes), further outlining mineralization in those areas (Robbins, 2005).
- **2004-2005 geophysical programs:** Several airborne and ground geophysical surveys were conducted over the Shea Creek area in 2004 and 2005. Fugro Airborne Surveys conducted MEGATEM airborne electromagnetic and magnetic surveys over the West Athabasca Projects including the Shea Creek property, over which 940.7 line-km were flown (Koning et al., 2007). A Falcon Airborne gravity gradiometer was also flown over the Shea Creek and surrounding AREVA-UEX Western Athabasca Projects between late December 2004 and July, 2005 (Nimeck, 2008). The airborne surveys were undertaken to improve understanding of basement geology for property scale drill targeting, and to aid in the identification of

alteration zones associated with uranium mineralization. In addition to these airborne surveys, in 2004 and 2005, Patterson Geophysics Inc. carried out a 116.7 line-km pole-pole DC resistivity survey on the northern Shea Creek and Douglas River projects. Several low resistivity zones which potentially represent hydrothermal alteration within the Athabasca sandstone were identified, including a north-northwest trending zone that is coincident with the Anne to Colette deposits, parallel areas of low resistivity near the Klark Lake Conductor, as well as several other areas west of the Saskatoon Lake Conductor (Figure 9.1; Nimeck, 2005).

- **2005:** 8,729.5 m of drilling with twenty-four unconformity intersections (1 vertical pilot hole and 23 directional cuts) were completed in 2005. Drilling was concentrated in the south Colette area drilling program (12 directional drill holes SHE-111-4 to -13) where significant basement mineralization was intersected, and in the area of previous drill hole SHE-63B. In this latter area 11 directional drill holes (SHE-114-1 to –11) and 1 vertical drill hole (SHE-115) intersected significant high grade mineralization in the basement, leading to the recognition of this area as a discrete deposit, now named Kianna (Robbins and Koning, 2006).
- **2006:** 11,696.0 m of drilling with twenty-two unconformity intersections (3 vertical pilot holes and 19 directional cuts) were completed. Most of this program was devoted to continued outlining of the Kianna Deposit in the SHE-114, SHE-115 and SHE-118 series drill holes (Robbins et al., 2007; Reddy et al., 2007).
- **2007:** 18,776.5 m of drilling with thirty-six unconformity intersections (12 vertical pilot holes and 24 directional cuts) further explored the Kianna Deposit and parts of the southeastern Colette area (Koning et al., 2008). In addition, two drill holes were completed in southern parts of the Shea Creek property (SHE-119 and SHE-120; Modeland et al., 2008).
- **2008:** 20,355.0 m of drilling with forty-four unconformity intersections (7 vertical pilot holes and 37 directional cuts) were completed in 2008. Most drilling continued to define the Kianna, and Anne deposits in 2008, including a series of holes drilled between Anne and Kianna to assess the continuity of mineralization between the two deposits (Emde et al., 2010a, 2010b). Six drill holes (one pilot hole and five directional cuts) extended mineralization southward in the south parts of the Colette deposit (Dodd and Carroll, 2009). In addition to the drilling, a 50 km ground magnetotelluric (MT) survey and a Low Temperature Superconducting Quantum Interference Device (SQUID) TEM (Time-domain Electromagnetic) survey were completed over the northern Shea Creek property to test these two techniques in refining resistivity patterns to depth (Morales, 2009). Both methods yielding promising results which could aid in drill hole targeting.
- **2009:** 22,564.5 m of drilling with fifty-four unconformity intersections (3 vertical pilot holes and 51 directional cuts) were completed in 2009. Drilling during the 2009 program concentrated on four principal areas at Shea Creek: (i) infill and step-out drill holes at the Kianna Deposit, (ii) infill drilling at the Anne Deposit, (iii) exploration drill holes between Anne and Kianna, and (iv) exploration drill holes in the 58B Deposit area between the Kianna and Colette deposits. Drill hole SHE-114-20 substantially upgraded the eastern portion of the basement mineralization in Kianna. The 109-series drill holes further outlined mineralization in the northern Anne Deposit. The SHE-131 series drill holes filled large gaps in previous drilling at the southeastern end of Anne. Drilling between the Anne and Kianna deposits in the SHE-37, 50 and 121 series drill holes better-defined the unconformity mineralization. Drilling of one new pilot hole and two directional cuts (133 series) in the 58B deposit area intersected structurally controlled mineralization in the basement (Emde et al., 2010; French et al., 2010) .

- **2010:** 19,930.0 m of drilling with thirty-nine unconformity intersections (3 vertical pilot holes and 36 directional cuts) were completed in 2010. Drilling in 2010 focused on the Kianna Deposit to test open areas of basement mineralization and test for hanging wall mineralization in new zones which lie to the north of Kianna as well as the further expansion and delineation of the 58B Deposit. Highlights of the program included the confirmation that the 58B target area represents a new uranium deposit along the Shea Creek trend, discovery of a new basement mineralized zone immediately to the northwest of the Kianna Deposit intersected by SHE-136 series drill holes, and expansion of the footprint of higher-grade areas of the Kianna unconformity mineralization (French and Robbins, 2011a; Emde et al., 2011, French et al., 2011).

- **2011:** 21,133.0 m of drilling with forty-seven unconformity intersections (5 vertical pilot holes and 42 directional cuts) were completed in 2011 The drilling program focused on expanding the Kianna Deposit and associated areas of basement mineralization, testing open areas of basement mineralization and high-grade unconformity mineralization at the Colette Deposit, and drilling of untested areas between the Kianna and 58B deposits. In the northwestern part of the Kianna Deposit, drill holes in the SHE-130 series designed to follow up mineralization encountered in 2010 holes SHE-136-1 and SHE-136-3 continued to outline a new shallow south-dipping to southeast-dipping zone of mineralization (GAMP Zone) which exploits a mafic unit within the hosting gneiss sequence. Drill hole intersections in the SHE-66 series at Colette expanded the unconformity mineralization northward (Zalutskiy and Robbins, 2012; Gerger and Robbins, 2012; French et al., 2012). In addition to the drilling, a 51.2 line-km ground Moving Loop SQUID TEM survey was carried out during 2011 to better define the southern extent and morphology of the Saskatoon Lake graphitic conductor in an area where the northwest-trending conductor may be intersected and offset by major northeast-trending faults, in a setting similar to the Shea Creek deposits.

- **2012:** 11,536.5 m of drilling with twenty-nine unconformity intersections (29 directional cuts) were completed in 2012. The drilling program focused on testing the continuity of mineralization in the northern portion of the Colette Deposit, further delineation of the 58B Deposit and testing margins of the northern and southwestern parts of Kianna as well as east of the main Kianna Deposit. Highlights of the program included definition of the higher grade unconformity mineralization in the northern portion of the Colette Deposit, further definition of the 58B Deposit, and the discovery of a new zone of basement mineralization (Kianna East Zone) that lies more than 80 m below and to the east of the main Kianna Deposit.

In total to December 31, 2012, 470 drill holes totaling 240,628.5 m of drilling had been conducted on the Shea Creek property since systematic exploration began in 1992 (Table 9.1). Since UEX initially acquired its option to earn 49% of the property in 2004, 307 drill holes totaling 141,317.0 m have been completed, in addition to the airborne and ground geophysical surveys mentioned above. Drill hole locations and significant intercepts are discussed in Item 10 below. Drill hole locations are shown in Figures 9.2 and 9.3.

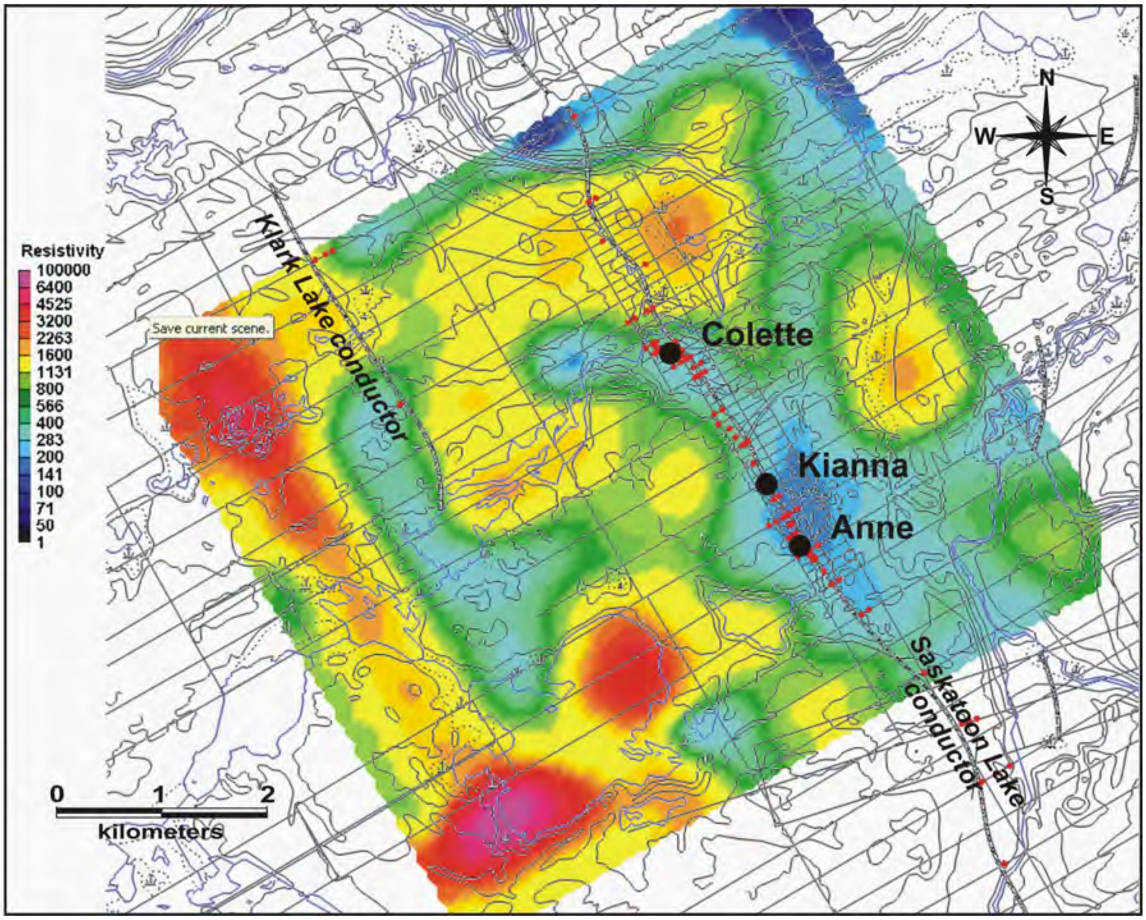


Figure 9.1: Contoured DC resistivity inverted horizontal depth slice at –350 m below sea level for the northern Shea Creek and southernmost Douglas River properties. From Nimeck (2005). The modeled elevation is approximately equivalent to the elevation of the sub-Athabasca unconformity. Note the pronounced resistivity low in the Anne and Kianna areas, and which extends from those deposits along the Saskatoon Lake Conductor northwest to Colette, potentially reflecting alteration associated with mineralization in combination with the response of the basement pelitic gneiss in contrast to the surrounding granitic gneiss. Apart from one drill hole in the north, the resistivity low associated with the Klark Lake conductor to the west is untested. Two areas of low resistivity also occur between the Saskatoon Lake and Klark Lake conductors (e.g. immediately west of Colette) which could represent alteration along west-northwest or east-west trending faults.

Table 9.1: Diamond drilling on the Shea Creek property, 1992 to 2012. Apart from five drill holes (SHE-003, SHE-007, SHE-009, SHE-041 and SHE-077), all other drill holes have been drilled along a 26 km strike length of the Saskatoon Lake Conductor.

Year	Drill Hole Series	# Vertical pilot holes	# Wedge cuts off pilot holes	Total # drill holes	Metres Drilled
1992	SHE-001, SHE-001B to SHE-003	4 (1 not completed)	0	4	2,421
1994	SHE-004 to SHE-015A	12	0	12	9,340
1995	SHE-016 to SHE-033	18	0	18	14,563
1996	SHE-034 to SHE-050	17	0	17	13,189
1997	SHE-051 to SHE-066	16	0	16	13,389
1998	SHE-067 to SHE-093	27	0	27	21,820
1999	SHE-094 to 094-06; SHE-095 to 95-04; SHE-096 to 096-04; SHE-097; SHE-098 to 098-04; SHE-099 to 099-05; SHE-100 to 100-01; SHE-101 to 101-01	8	25	33	12,157
2000	SHE-100-02 to 100-03; SHE-101-02 to 101-04; SHE-102 to 102-11; SHE-103 to 103-05; SHE 104 to 104-04; SHE-105 to 105-04	4	29	33	10,855
2004 winter	SHE-106, SHE-107, SHE-108	3	0	3	1,578
2004 fall	SHE-109, 109-01 to 109-02; SHE-110A; SHE-111, SHE-111-01 to 111-02; SHE-112, SHE-112-01 to 112-02; SHE-113; SHE-114	6	6	12	6,596
2005	SHE-111-03 to SHE111-13; SHE-113-01; SHE-114-01 to SHE-114-09; SHE-114-10A; SHE-114-11; SHE-115	1	23	24	8,730
2006	SHE-114-12 to 114-17; SHE-115-01 to SHE-115-10; SHE-116; SHE-117; SHE-118; SHE-118-01 to SHE-118-03	3	19	22	11,696
2007	SHE-115-11 to 115-15, SHE-115-15A; SHE-115-16; SHE-118-04 to 118-05; SHE-118-05A, SHE-118-06; SHE-118-06A; SHE-118-07 to SHE-118-10; SHE-119*; SHE-120*; SHE-121; SHE-121-01 to 121-03; SHE-122; SHE-122-01 to 122-03; SHE-123; SHE-123-01 to 123-02; SHE-124; SHE-125; ***HYD-07-01 to HYD-07-05	12	24	36	18,777
2008	SHE-115-17, SHE-115-17A, SHE-115-18; SHE-118-11 to 118-13, SHE-118-13A; SHE-122-04 to 122-07, SHE123-03 to 123-13; SHE-126 to 126-01, SHE-126-01A, SHE-126-02 to 126-05; SHE-127, SHE-128, SHE-129, SHE-130, SHE-130-01 to130-02; ***P08-01, P08-02	7	37	44	20,355
2009	SHE-037-01 to 037-7, SHE-037-3A; SHE-050-1 to 050-11; SHE-109-03 to 109-07; SHE-112-03 to 112-04; SHE-114-18, SHE-114-18A, SHE-114-19, SHE-114-19A, SHE-114-20; SHE-115-19 to 115-22; SHE-118-17 to 118-18; SHE-121-04 to 121-05; SHE-131; SHE-131-01 to 131-05; SHE-132; SHE-132-01 to 132-05; SHE-133; SHE-133-01 to 133-02	3	51	54	22,564.5

2010	SHE-104-5 to 104-8, SHE-118-19 to 118-21, SHE-130-3, SHE-133-3 to 133-12, SHE-134, SHE-134-1, SHE-134-1A, SHE-134-2, SHE-135, SHE-135-1 to 135-9, SHE-136, SHE-136-1 to SHE-136-6	3	36	39	19,930.0
2011	SHE-66-1 to 66-3, SHE-110-1 to 110-4, SHE-111-14 to 111-16, SHE-126-6 to 126-7, SHE-130-4 to 130-5, SHE-130-5A, SHE-130-6 to 130-13, SHE-136-7 to 136-9, SHE-137, SHE-137-1 to 137-3, SHE-138, SHE-138-1, SHE-139, SHE-139-1 to 139-6, SHE-140, SHE-140-1 to 140-5, SHE-141,SHE-141-1	5	42	47	21,133.0
2012	SHE-66-4 to 66-13, SHE-104-9 to 104-11, SHE-114-21, SHE-118-22 to 118-25, SHE-133-13 to 133-14, SHE-135-10 to 135-15, SHE-141-2 to 141-4	0	29	29	11,536.5
	Grand Totals	**149**	**321**	**470**	**240,628.5**
	Totals: 1992-March 2004 (pre-UEX)	***109***	***54***	***163***	***99,311.5***
	Totals: March 2004-2012 (UEX option)	***40***	***267***	***307***	***141,317.0***

*drill holes drilled in the SHE south area
**drill holes drilled 0.5-2 km southeast of the Anne Deposit
***HYD-series and P08 holes are piezometer/geotechnical drill holes in the Kianna-Anne areas

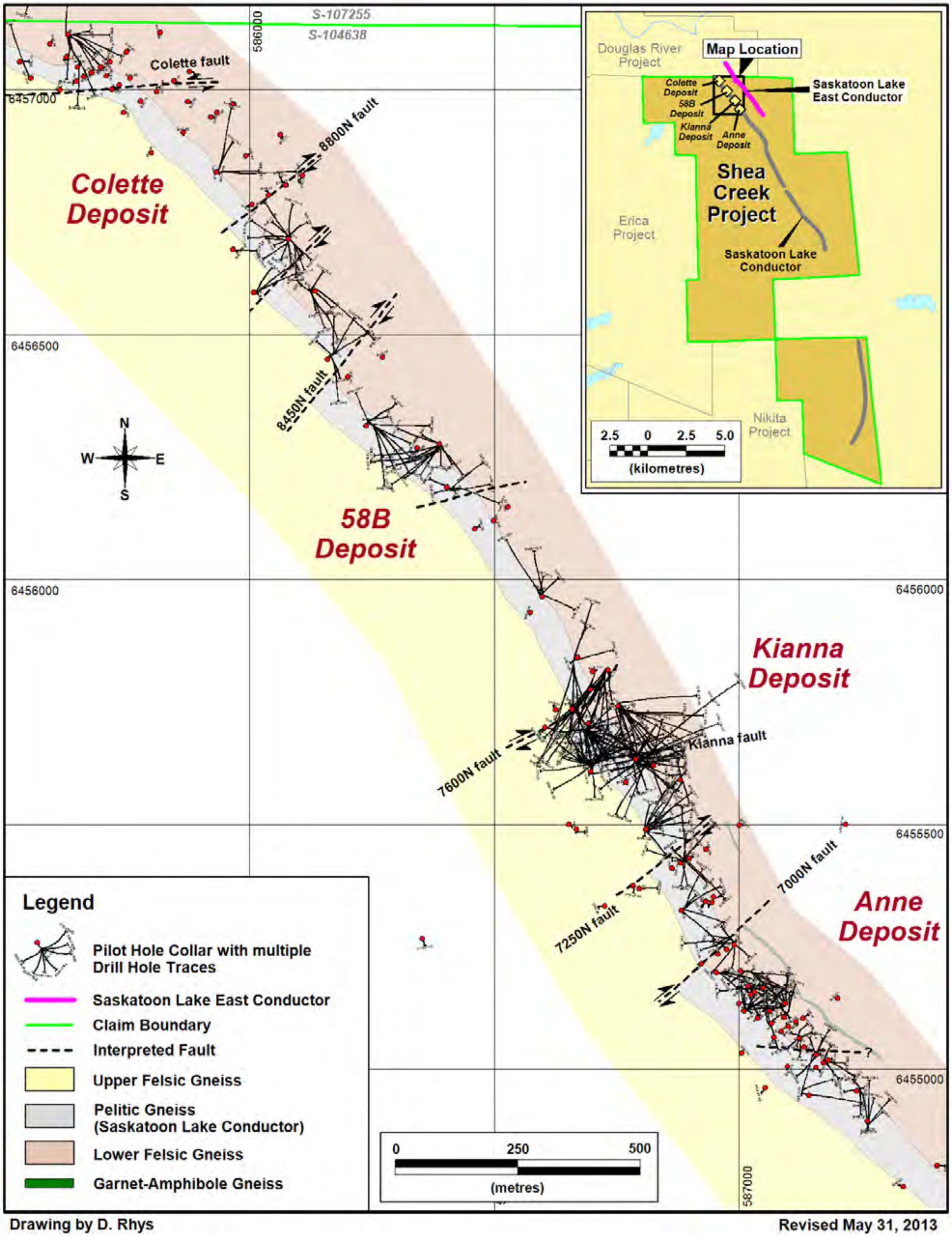


Figure 9.2: Drill hole traces in the northern Shea Creek property. See Figure 9.3 for location.

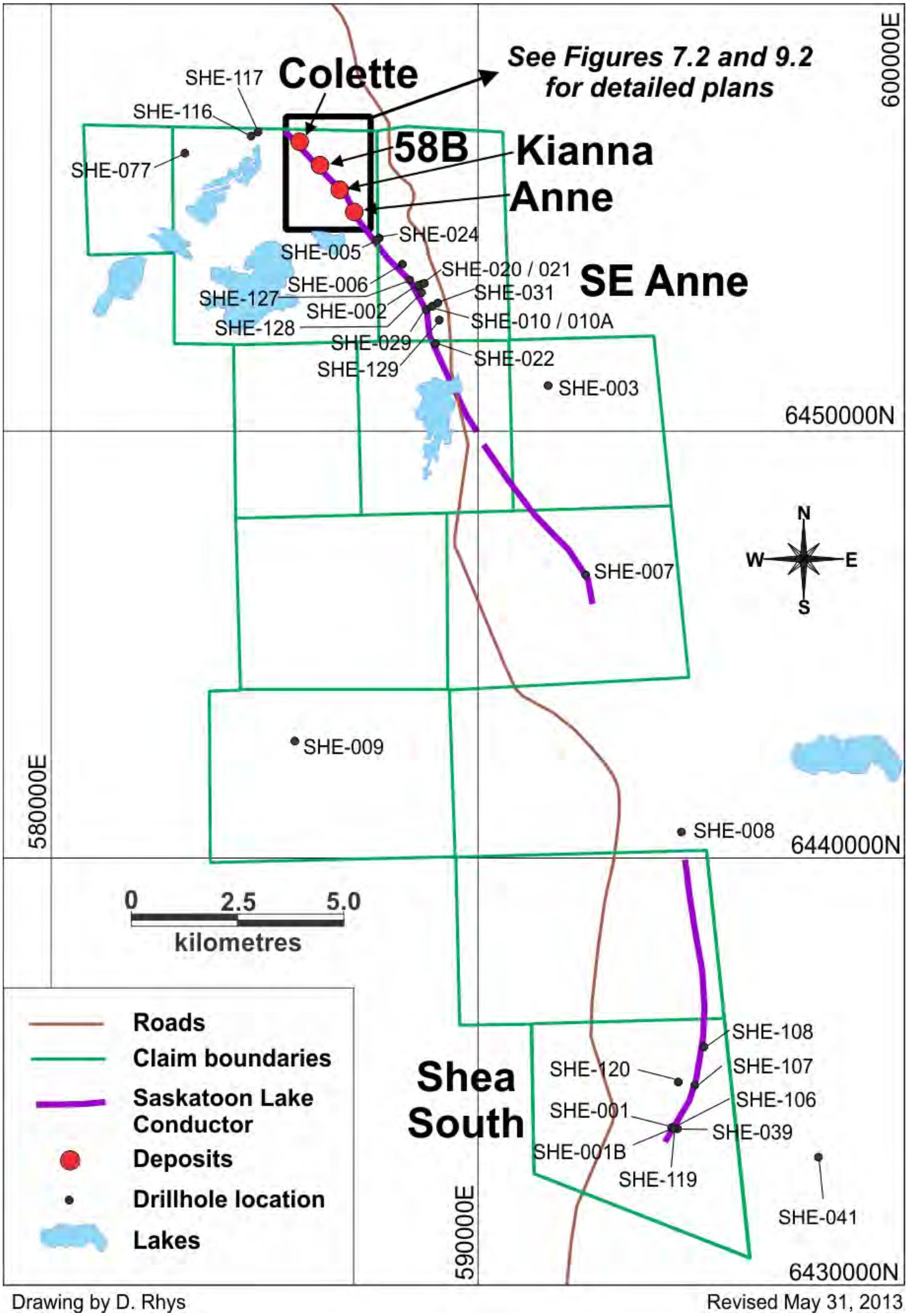


Figure 9.3: Drilling in outlying parts of the Shea Creek property.

ITEM 10.0: DRILLING

Diamond drilling on the Shea Creek property is the principal method of exploration and mineralization delineation after initial geophysical surveys. Diamond drilling since 2004 has been conducted using drilling services supplied by Longyear Canada Ltd., Boart Longyear Ltd. and Team Drilling LP under contracts with AREVA. Drilling can generally be conducted year round in northern parts of the Shea Creek property where the Anne, Colette and Kianna deposits occur due to dry ground above these areas. Drill holes on the Shea Creek Project are numbered with a prefix of the project (SHE) followed by the pilot hole number, and then if present, the cut number if wedging off the pilot hole has been completed.

10.1 Drilling Methodologies

Due to the >600 m depths to target area, drilling is generally conducted by penetrating overburden with HW diameter casing followed by HQ coring to 400 m depth. The holes are typically completed by reducing to NQ-sized core (47.6 mm core diameter) which is the typical core size testing mineralization at target depths (Koning et al., 2007). Drilling mud and polymer emulsions are added to the water to aid in freeing the drill cuttings and to help maintain stability of the walls of the drill hole so that the drill rods do not stick (Koning et al., 2007).

Prior to 1999, all drill holes were drilled vertically from surface to the target at depth. From 1999 onward, directional drilling utilizing wedge cuts off the master (pilot) drill hole have been completed in areas where closely spaced drill holes are required to define mineralization or other geological features, reducing the overall required quantity of coring required, and allowing controlled drilling of deep targets which are not easily reached from surface. New cuts are generally drilled off the pilot hole commencing 400 to 600 m below surface, depending on the position of the target with respect to the pilot hole. The directional drilling process is summarized by Koning et al. (2007) as follows:

"The directional drilling tool used up to 2004 consisted of a Sperry Sun steerable mud motor that is powered by hydraulic force that is created by a mixture of water and drilling mud pumped inside the drill string. A Bradley plug and wedge are set to initiate a directional cut. This usually achieves a 1.5° deflection off the original hole. The mud motor has a rotor–stator system that spins a non-coring cutting bit. A bent housing behind the bit allows the proposed drill hole to be deflected from a previous orientation. Additional pumps and mud tanks are required when the motor is in use. The motor uses an average of 220-250 L (50-55 gallons/min) of water when drilling (approximately 300,000 L or 66,000 gallons/day). It should be noted that the motor does not operate constantly during a 24 hour period. Some problems noted with the use of the mud motor are that it must be fixed to a BQ rod string; this hinders drill production due to the constant tripping in and out of drill steel. Another problem is that control of the motor is 6 to 12 m behind the bit and there is always a risk of pulling the motor too early or too late.

During the 2005 to 2008 drill campaigns, Devico's (DeviDrill™) directional core drilling system was utilized. This system consists of a steerable core barrel that allows continuous survey measurements ahead of the bit while drilling, and provides core samples during the steering process. No additional equipment is required since the motor operates under normal water pressures used for diamond drilling. Thus there is no need for large supply pumps and mud tanks. Also a separate drill string (BQ) is not required since the motor is fixed to an NQ drill string. This in turn reduces the need for tripping an additional set of rods."

10.2 Downhole Directional Surveys

Downhole survey methodologies have varied during exploration of the Shea Creek property. Prior to 2000, drill hole deviation was measured every 30 to 50 m with a Sperry Sun singleshot camera during normal drilling operations (Koning et al., 2007). During Sperry Sun directional operations, survey shots were taken preferably every 3 m because control of the motor is 6 to 12 m behind the drill bit. Since 2004 with the Devico system, drill hole deviation is measured every 50 m with a Reflex single-shot probe during normal drilling operations (Koning et al., 2007). During directional operations survey shots are taken every 3 to 9 m.

10.3 Radiometric Probing of Drill Holes

As is standard practice in uranium exploration, at the completion of each drill hole, downhole radiometric geophysical probing surveys are performed from the bottom of the hole up through the drill string. The radiometric probe data, when calibrated by tool and local geology, can be utilized as a method of estimating mineralization grade which can either augment, or substitute for geochemical assays when these is statistically sufficient confidence in the calibration and conversion to uranium concentrations. Koning et al. (2007) describe probe methodologies at Shea Creek as follows:

"Downhole radiometric probes are used to detect radioactivity in the diamond drill holes. All probe runs are completed up-hole. The probes used in radiometric logging conducted by AREVA include the following tools; HLP-2375 manufactured by Mount Sopris, and ST22-2T, DHT27-STD, and DHT27-HF (high flux) tools manufactured by AREVA. Radioactivity measurements obtained from the ST22-2T, DHT27-STD, and DHT27-HF are used to estimate equivalent uranium grades for mineralized intervals. The Saskatchewan Research Council (SRC) provides downhole probe calibration facilities in Saskatoon, SK, for calibration of the downhole gamma probes. The test pits consist of four variably-mineralized holes, each approximately seven metres in length. The gamma probes are tested a minimum of once per year, usually in the fall, prior to the beginning of the winter field season. Also drill holes SHE-101-4 and 105-4, located at the Shea Creek project, are cased and remain accessible for use as calibration holes on the property to confirm the reliability of the probes.

A Mount Sopris Model 2500 winch and MGX II logger (interface board) with a Mount Sopris HLP 2375 natural gamma probe were utilized to radiometrically log each drill hole. The downhole data is acquired by a computer recovery program installed on a laptop computer. If the HLP-2375 natural gamma probe encounters and registers one reading of 1000 cps or more, the operator will be required to make an additional run using either an ST22-2T or DHT27 tool. This ST22-2Tor DHT27-STD run is from 10 metres below to 10 metres above the first and last 1000 cps reading(s) recorded by the HLP-2375 natural gamma tool. In the case where very high-grade mineralization is encountered, another additional run is made using a DHT27-HF tool (high flux). The ST22-2Tand DHT27-STD use two ZP-1200 Gieger Müller tubes, whereas the DHT27-HF uses two ZP-1320 Gieger Müller tubes which count at a rate of approximately one half that of the ZP-1200 tubes. The ZP-1320 tubes are therefore able to evaluate higher uranium grades which would saturate the ZP-1200 tubes.

Prior to probing, the drill hole is flushed with water. The probes utilized for in-hole probing are tested with a low-grade radioactive source prior to the logging run and after the completion of the logging run to ensure that the equipment was functioning properly before and after the in-hole probing occurred. Total gamma flux measurements are collected at 10 cm intervals during probing. The probe data is then transferred from the field computer into the drill hole database.

The data acquired by the downhole probes is then processed by in-house developed software to estimate the in-situ equivalent uranium grade and thickness of the mineralized interval(s). Several parameters are evaluated when converting the data including; diameter of the drill hole, thickness of steel casing, probe dead time in microseconds, diameter of the probe, casing coefficient, fluid coefficient, and a reference coefficient for the type of probe. A radioactivity-to-grade correlation is then applied to calculate the equivalent uranium grades. The software used to generate the radioactivity-grade correlation is known as Sermine, which is proprietary software developed by AREVA."

10.4 Drill Hole Collar Field Locations and Surveys

Drill hole locations are measured in grid co-ordinates and later updated by UTM NAD83 coordinates surveyed by ARC personnel. Drill hole collars prior to 1998 have been located by conventional survey. Since that time drill hole locations have been surveyed using differential, base station GPS. After drilling, hole locations are marked with a tagged picket.

10.5 Summary of Drilling Results: Northern Shea Creek Property

10.5.1 Relationship of Drilling Length to True Thickness of Mineralized Intercepts

Drill holes on the northern Shea Creek property generally have steep dips of 75° or steeper. As a result, drilling generally crosses the flat-lying lenses of unconformity-hosted mineralization at a high angle that is close to, or at true thickness (e.g. Figures 7.3 and 10.2 to 10.4). Similarly lenses of perched mineralization, and of concordant basement mineralization are generally shallow dipping and crossed by drill holes at orientations which intercept mineralization at close to true thickness (e.g. Figures 7.3 and 10.3). Mineralized intercepts of discordant basement mineralization have more complex morphology, and in most cases true thickness of intercepts are as yet undetermined (e.g. Figure 10.3). These discordant basement zones can contain combinations of steeply dipping vein-like mineralization which occurs at shallow core axis angles to many drill holes, in combination with foliation parallel, shallower dipping components which may form oreshoots.

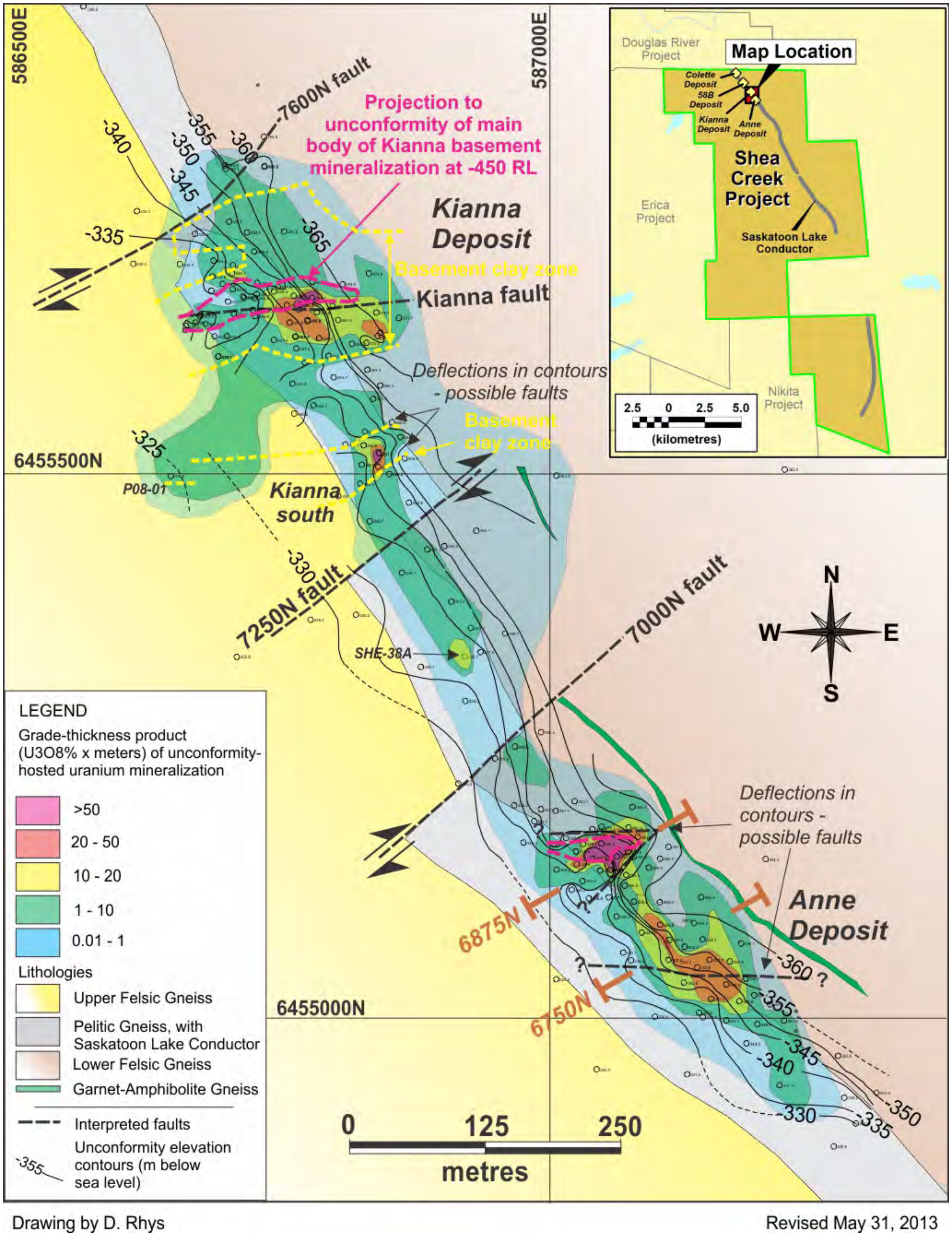


Figure 10.1: Geology between the Anne and Kianna areas showing mineralization distribution at the inconformity.

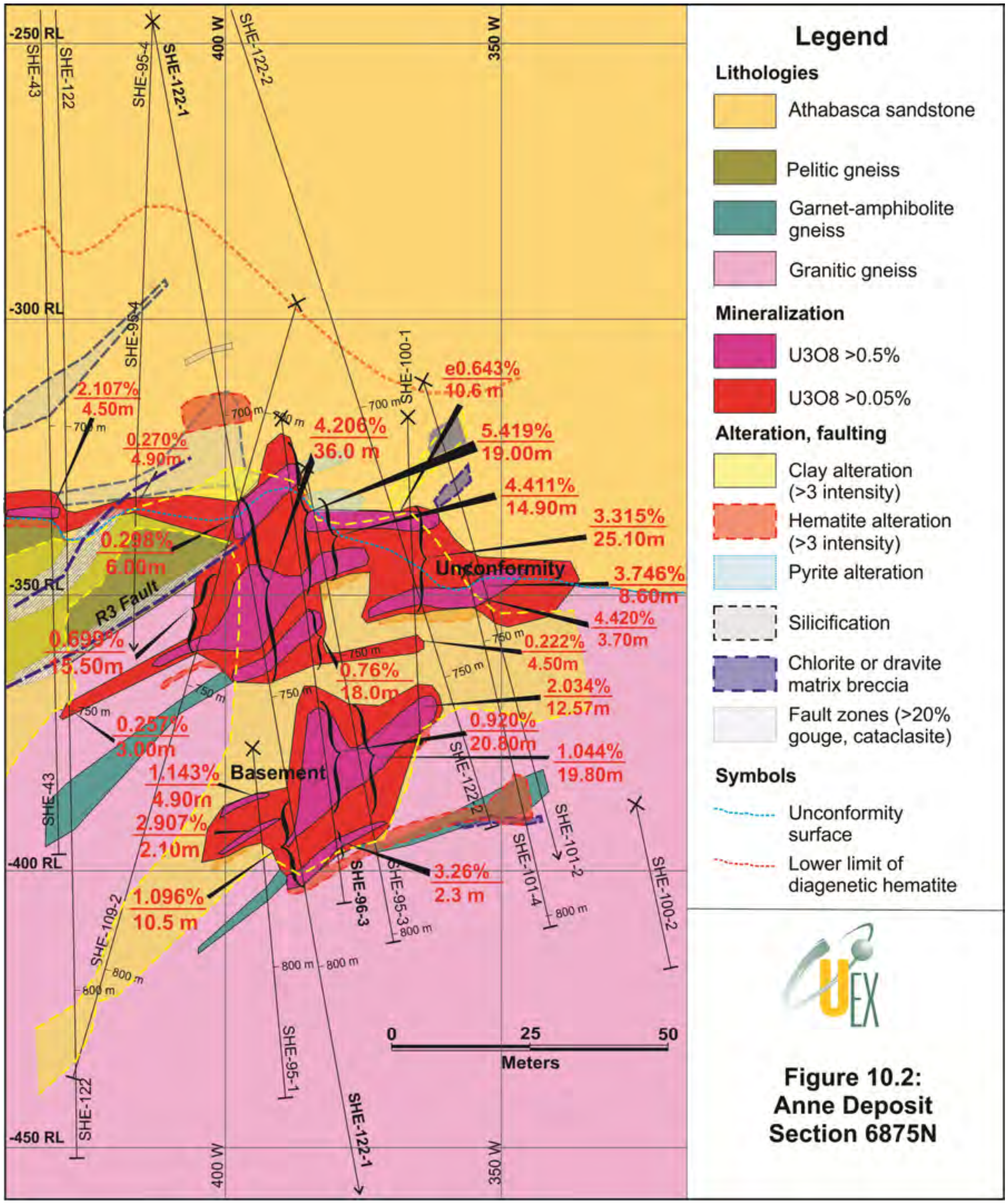


Figure 10.2: Anne Deposit Section 6875N. Cross section through the central Anne Deposit, looking northwest. The section illustrates the mineralization distribution with respect to geology, and the position and thickness of principal intercepts. Section location is shown in Figure 10.1.

10.5.2 Anne Deposit Area

Mineralization in the Anne Deposit has been traced continuously over approximately 500 m from SHE-105 series drill holes on gridline 65+50N to the vicinity of the 7000N fault (Figures 7.2 and 10.1). To date, 104 drill holes have been completed in this area, comprising both pilot drill holes and directional cuts (Figure 9.2).

Unconformity-hosted mineralization is the most extensive style identified to date at Anne. Thickest, highest grade intercepts define two pods (Figure 7.2), one in the south-central (around section 6750N) and the second in the northern parts of the Anne Deposit (around section 6875N; Figure 10.2). Highlights of the intercepts (with a grade-thickness product of greater than 5.0) in this area include the following, which are at, or close to true thickness:

- 4.324% U_3O_8 over 9.1 m, including 24.115% U_3O_8 over 1.4 m in hole SHE-016
- 5.446% U_3O_8 over 3.0 m, including 9.577% U_3O_8 over 1.5 m in hole SHE-079
- **11.607% U_3O_8 over 6.0 m, including 23.964% U_3O_8 over 2.9 m and 34.694% U_3O_8 over 1.9 m in hole SHE-087**
- 1.283% U_3O_8 over 9.4 m in hole SHE-094-01
- 1.588% U_3O_8 over 11.0 m, including 4.608% U_3O_8 over 2.6 m in hole SHE-094-03
- 1.878% eU_3O_8 over 13.3 m, including 3.841% eU_3O_8 over 5.9 m in hole SHE-094-05
- 1.796% U_3O_8 over 8.9 m, including 6.367% U_3O_8 over 2.0 m in hole SHE-095-01
- **4.411% U_3O_8 over 14.9 m, including 20.898% U_3O_8 over 2.9 m in hole SHE-095-03**
- **5.419% U_3O_8 over 19.0 m, including 29.200% U_3O_8 over 3.4 m in hole SHE-096-03**
- 2.235% U_3O_8 over 7.5 m, including 7.477% U_3O_8 over 1.4 m in hole SHE-098
- **10.027% U_3O_8 over 8.4 m, including 34.149% U_3O_8 over 2.3 m and 60.601% U_3O_8 over 1.2 m, in hole SHE-099**
- 0.959% eU_3O_8 over 22.7 m, including 4.368% eU_3O_8 over 3.4 m in hole SHE-099-01
- **5.649% U_3O_8 over 17.9 m, including 14.547% U_3O_8 over 6.5 m in hole SHE-099-02**
- 2.612% U_3O_8 over 13.6 m, including 16.661% U_3O_8 over 1.9 m in hole SHE-099-03
- **3.315% U_3O_8 over 25.1 m, including 16.866% U_3O_8 over 4.0 m in hole SHE-100-01**
- 3.746% U_3O_8 over 8.60 m, including 6.413% U_3O_8 over 4.9 m and 15.630% U_3O_8 over 1.5 m in hole SHE-101-02
- 4.420% U_3O_8 over 3.7 m in hole SHE-101-04
- 0.682% U_3O_8 over 22.2 m, including 5.789% U_3O_8 over 2.0 m in hole SHE-109-01
- 0.993% U_3O_8 over 5.5 m in hole SHE-109-03
- 8.282% U_3O_8 over 7.4 m, including 17.075% U_3O_8 over 2.0 m in hole SHE-109-05
- 3.951% U_3O_8 over 9.0 m in hole SHE-109-06
- **4.206% U_3O_8 over 36.0 m, including 13.703% U_3O_8 over 6.5 m in hole SHE-122-01**
- 2.631% U_3O_8 over 8.0 m, including 13.000% U_3O_8 over 1.5 m in hole SHE-122-04
- **3.642% U_3O_8 over 20.5 m, including 11.407% U_3O_8 over 6.0 m and 15.635% U_3O_8 over 4.0 m in hole SHE-122-05**
- 1.518% U_3O_8 over 7.6 m, including 2.947% U_3O_8 over 1.9 m in hole SHE-131-03

Note that the broad, high grade intercepts in drill holes SHE-95-03, SHE-096-3, and SHE-122-1 straddle the unconformity and extend into underlying basement rocks (Figure 10.2).

Basement mineralization at Anne is mainly concordant in style and occurs under the highest grade pods of unconformity mineralization described above (Figure 10.2). In southern parts of the Anne Deposit, it is mainly of the concordant basement style, while in the north it represents a combination of the concordant and discordant styles for which true thickness is generally undetermined. Principal intercepts (with a grade-thickness product of greater than 5.0) include the following:

- **3.244% U_3O_8 over 9.0 m, including 10.159% U_3O_8 over 2.0 m in hole SHE-088**
- 4.553% U_3O_8 over 3.9 m, including 7.925% U_3O_8 over 2.2 m in hole SHE-094-01
- 5.740% U_3O_8 over 2.8 m, including 14.089% U_3O_8 over 0.9 m in hole SHE-094-06
- 1.033% U_3O_8 over 10.7 m, and 1.854% U_3O_8 over 4.4 m in hole SHE-095-01
- 1.044% U_3O_8 over 19.8 m, including 5.511% U_3O_8 over 1.7 m in hole SHE-095-03
- 0.760% U_3O_8 over 18.0m, and 0.92% U_3O_8 over 20.8 m, in hole SHE-096-03
- 3.826% U_3O_8 over 2.5 m, including 13.132% U_3O_8 over 0.7 m in hole SHE-096-04
- 3.639% U_3O_8 over 7.5 m, including 16.954% U_3O_8 over 0.6 m in hole SHE-100-01
- 1.541% eU_3O_8 over 5.3 m in hole SHE-105-04
- 0.699% U_3O_8 over 15.5 m in hole SHE-109-02
- 1.854% U_3O_8 over 11.1 m in hole SHE-109-05
- **23.171% U_3O_8 over 3.5 m, and 3.512% U_3O_8 over 8.5 m in hole SHE-122-01 (upper basement zone)**
- 1.096% U_3O_8 over 10.5 m, including 4.025% U_3O_8 over 3.5 m in hole SHE-122-01 (lower basement zone)
- 2.071% eU_3O_8 over 4.2 m in hole SHE-122-03
- 3.569% U_3O_8 over 4.0 m, including 6.661% U_3O_8 over 1.5 m in hole SHE-122-04

Perched mineralization in the Anne Deposit area is generally low grade, with a best intercept of 0.911% U_3O_8 over 3.6 m in hole SHE-046 in northwestern parts of the Anne area. Mineralization contiguous with unconformity mineralization in the high grade north central portions of the Anne Deposit may extend upward significantly into the overlying sandstone, but is not separated from the unconformity style as with perched mineralization in other areas and is included in the composited unconformity-hosted intersections reported here.

Basement mineralization at Anne is potentially open for expansion in several areas, locally where earlier holes may have not penetrated to sufficient depth, and higher grade areas at the unconformity could be better defined by several infill drill holes. At the southeastern end of the Anne area, the SHE-105-series holes have intersected a combination of fault-hosted perched, basement and unconformity mineralization which is not bounded to the southeast.

10.5.3 Area between the Anne and Kianna Deposits (Kianna South)

The 300 m distance between the Anne and Kianna deposits is tested by 44 drill holes which are variable, but generally widely spaced. Drilling suggests that low grade mineralization at the unconformity here is contiguous between Anne and Kianna (Figure 7.2), and there is room between existing drill holes to expand some areas of higher grade mineralization. Drilling in this area has intersected significant unconformity-hosted mineralization mainly for up to 150 m south of the Kianna Deposit in the SHE-50 and SHE-123 series drill holes, which include results (with a grade-thickness product of greater than 5.0) of:

- 8.664% U_3O_8 over 2.6 m in hole SHE-38A
- 3.546% U_3O_8 over 3.1 m, including 10.205% U_3O_8 over 1.0 m in hole SHE-50-05
- 2.339% U_3O_8 over 4.1 m in hole SHE-50-08
- 1.818% U_3O_8 over 4.3 m, including 3.460% U_3O_8 over 1.5 m in hole SHE-50-11
- **11.114% U_3O_8 over 3.6 m, including 32.262% U_3O_8 over 1.1 m in hole SHE-123-06**
- 5.198% U_3O_8 over 3.3 m, including 11.491% U_3O_8 over 1.3 m in hole SHE-123-07

These intercepts define a higher-grade pod of unconformity-hosted mineralization which is underlain by a zone of east-northeast trending clay alteration that contains several significant basement intercepts, including:

- 4.841% U_3O_8 over 3.5 m, including 7.850% U_3O_8 over 2.0 m in hole SHE-123-02
- 1.668% U_3O_8 over 7.5 m, including 18.392% U_3O_8 over 0.5 m in hole SHE-123-09
- 4.231% U_3O_8 over 2.0 m in hole SHE-123-12

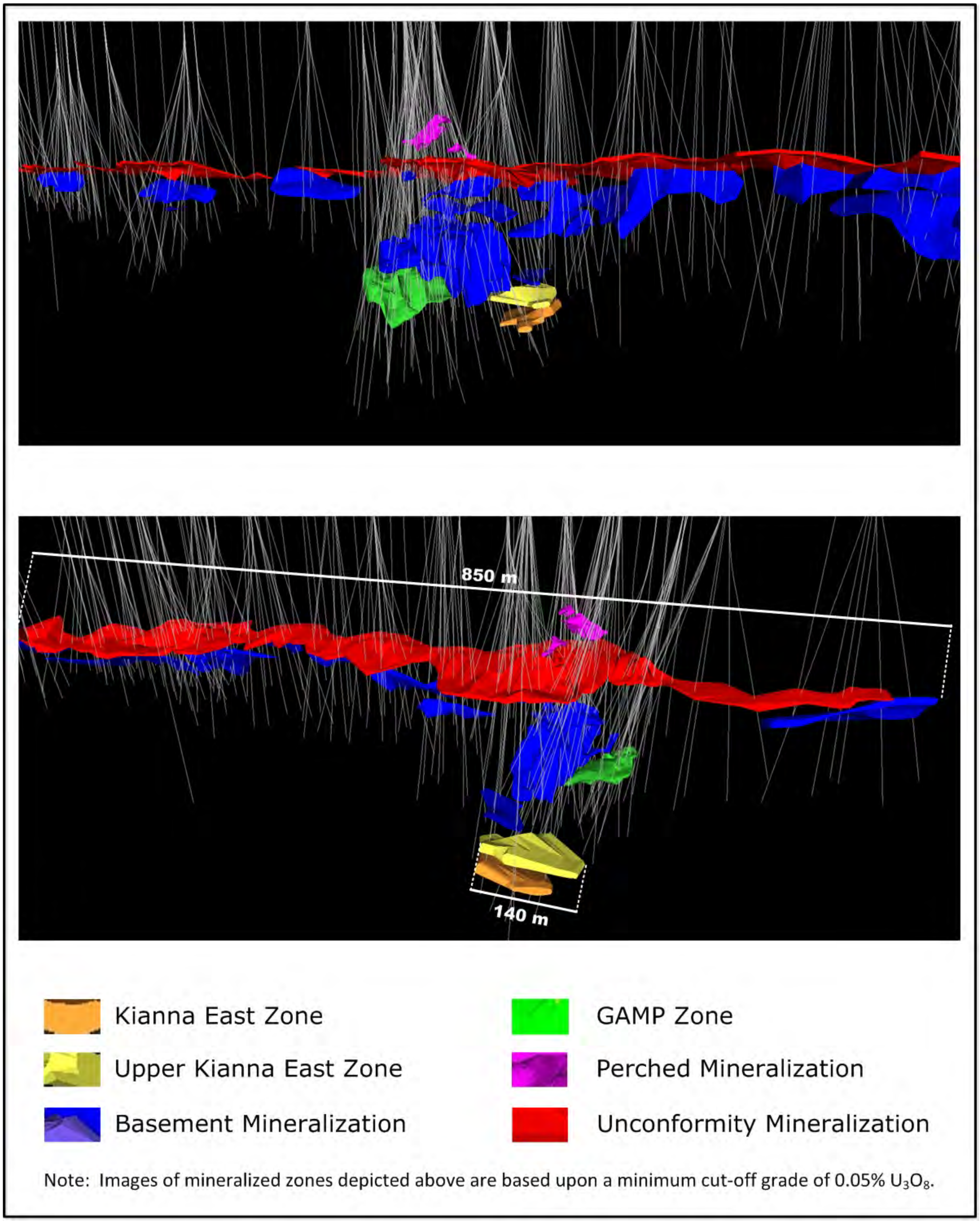


Figure 10.3: Views of the Kianna Deposit wireframe model. Top: Longitudinal section view of wireframe model of the Kianna Deposit looking northeast. Bottom: Oblique view looking downwards of wireframe model of the Kianna Deposit looking southwest.

10.5.4 Kianna Deposit Area

Kianna is probably the most structurally focused of uranium mineralization in the northern Shea Creek property (Figure 7.4B, 10.1 and 10.3). A total of 163 holes drilled in this area (this number includes geotechnical holes outside mineralization) have defined a broad east-northeast trending zone of clay alteration that is host to an overall steep northerly dipping and east-northeast trending zone of basement-hosted mineralization which extends to at least 200 m below the unconformity (Figure 10.3), which has large, associated zones of concordant mineralization which either branch off it (e.g. GAMP Zone), or occur spatially associated with it (Kianna East Zone). The main Kianna basement zone has a strike length as defined to date of 180 m. Numerous significant intercepts have been obtained in this basement zone. True thickness to many of these is highly variable; some are drilled at shallow angles to mineralization, but many high grade sub-intervals within the broader intercepts also form shallow lenses with intercepts close to true thickness within the overall steeply dipping zone, such as in the Kianna East Zone. These include results (with a grade-thickness product of greater than 5.0) of:

- **3.578% U_3O_8 over 11.8 m, including 21.143% U_3O_8 over 1.5 m in hole SHE-114-08 (upper zone)**
- **5.776% U_3O_8 over 6.5 m, including 16.793% U_3O_8 over 1.5 m in hole SHE-114-08 (lower zone)**
- 1.100% U_3O_8 over 8.5 m, including 16.270% U_3O_8 over 0.5 m in hole SHE-114-09
- **4.093% U_3O_8 over 45.0 m, including 10.300% U_3O_8 over 3.5 m and 18.073% U_3O_8 over 6.0 m in hole SHE-114-11**
- 7.719% U_3O_8 over 1.5 m in hole SHE-114-13
- **4.382% U_3O_8 over 7.8 m, including 20.023% U_3O_8 over 1.5 m in hole SHE-114-17**
- 2.600% U_3O_8 over 4.2 m, including 10.551% U_3O_8 over 1.0 m in hole SHE-114-18A
- 4.297% U_3O_8 over 1.3 m in hole SHE-114-18A
- 3.727% eU_3O_8 over 10.8 m, including 3.373% eU_3O_8 over 2.6 m and 5.035% eU_3O_8 over 5.4 m in hole SHE-114-19A
- **1.020% eU_3O_8 over 141.4 m, including 2.720% eU_3O_8 over 6.6 m , 5.553% eU_3O_8 over 15.8 m and 2.391% eU_3O_8 over 5.3 m in hole SHE-114-20**
- 6.268% U_3O_8 over 3.5 m, including 40.086% U_3O_8 over 0.5 m in hole SHE-115-01
- 1.892% U_3O_8 over 4.5 m in hole SHE-115-02
- 3.643% U_3O_8 over 4.5 m, including 30.418% U_3O_8 over 0.5 m in hole SHE-115-05
- 0.811% U_3O_8 over 16.0 m, including 5.600% U_3O_8 over 2.0 m in hole SHE-115-06
- 3.694% U_3O_8 over 2.3 m, including 16.034% U_3O_8 over 0.5 m in hole SHE-115-07
- 1.059% U_3O_8 over 15.0 m, and 2.206% U_3O_8 over 7.5 m including 7.911% U_3O_8 over 2.0 m in hole SHE-115-08
- 1.840% U_3O_8 over 22.0 m, including 15.193% U_3O_8 over 1.5 m in hole SHE-115-09
- **8.581% U_3O_8 over 15.0 m, including 12.768% U_3O_8 over 10.0m, which includes 25.938% U_3O_8 over 1.0 m, and 24.346% U_3O_8 over 2.5 m in hole SHE-115-10**
- 4.818% U_3O_8 over 2.0 m in hole SHE-115-14
- **3.731% U_3O_8 over 10.0 m, including 22.322% U_3O_8 over 1.5 m in hole SHE-115-15A**
- 0.837% U_3O_8 over 11.0 m in hole SHE-115-18
- 0.354% eU_3O_8 over 26.5 m in hole SHE-118-01
- 2.188% U_3O_8 over 9.5 m, including 7.951% U_3O_8 over 2.5 m in hole SHE-118-08
- 1.802% U_3O_8 over 5.0 m in hole SHE-118-09
- 19.244% U_3O_8 over 1.0 m in hole SHE-118-15
- 5.693% U_3O_8 over 1.0 m in hole SHE-130-03

- 1.293% U_3O_8 over 22.0 m, including 2.164% U_3O_8 over 11.0 m in hole SHE-130-04
- 1.991% U_3O_8 over 2.6 m in hole SHE-130-05A
- 1.798% U_3O_8 over 4.1 m, including 4.670% U_3O_8 over 1.5 m in hole SHE-130-07
- 0.602% U_3O_8 over 23.8 m, including 1.137% U_3O_8 over 11.5 m in hole SHE-130-11
- 0.612% U_3O_8 over 31.5 m, including 3.981% U_3O_8 over 1.5 m and 1.598% U_3O_8 over 5.0 m in hole SHE-130-12
- 1.070% U_3O_8 over 5.9 m, including 9.840% U_3O_8 over 0.6 m in hole SHE-134-02
- **1.553% U_3O_8 over 34.3 m, including 1.543% U_3O_8 over 8.8 m and 2.359% U_3O_8 over 16.2 m in hole SHE-135-04**
- 0.957% U_3O_8 over 7.0 m, including 2.073% U_3O_8 over 3.0 m in hole SHE-135-05
- 1.265% U_3O_8 over 6.5 m in hole SHE-135-07
- 2.250% U_3O_8 over 5.0 m, including 4.755% U_3O_8 over 2.0 m in hole SHE-135-07
- 1.190% U_3O_8 over 9.5 m, including 4.895% U_3O_8 over 2.0 m in hole SHE-135-08
- 1.697% U_3O_8 over 17.0 m, including 8.300% U_3O_8 over 2.5 m in hole SHE-136-01
- 3.757% U_3O_8 over 3.5 m, including 8.574% U_3O_8 over 1.5 m in hole SHE-136-01

Significant mineralization was intersected in the Kianna East Zone during 2012. The Kianna East Zone is a newly discovered southwest-dipping zone of concordant mineralization which lies approximately 80 to 110 m below and east of the main Kianna basement resource and about 200 m below the unconformity (Figure 10.3). This high-grade zone occurs parallel to and along the top of a southwest-dipping graphitic unit which forms an electromagnetic (EM) anomaly to the east of, and parallel to, the Saskatoon Lake Conductor. Given the orientation of the drill holes, the Kianna East intercepts may lie at or close to true thickness. The new zone is open to the northwest, southeast and up dip to the northeast. Future drilling will test for the potential of the new basement zone to extend upward along the graphitic unit to the unconformity and for new mineralized zones along this parallel conductive graphitic unit. Notable intercepts obtained in the Kianna East Zone during 2012 include the following results (with a grade-thickness product of greater than 5.0):

- 0.217% U_3O_8 over 32.6 m in hole SHE-118-22
- 1.949% U_3O_8 over 20.0 m, including 5.662% U_3O_8 over 3.0 m and 7.447% U_3O_8 over 2.9 m in hole SHE-118-24
- **3.876% U_3O_8 over 15.0 m, including 8.710% U_3O_8 over 6.1 m and 1.247% U_3O_8 over 4.0 m in hole SHE-135-11**
- 2.361% U_3O_8 over 7.0 m, including 4.058% U_3O_8 over 3.5 m in hole SHE-135-12
- **3.299% U_3O_8 over 19.1 m, including 6.033% U_3O_8 over 1.6 m and 13.403% U_3O_8 over 3.7 m in hole SHE-135-13**
- 1.695% U_3O_8 over 7.0 m, including 5.458% U_3O_8 over 2.0 m in hole SHE-135-14

Unconformity-hosted mineralization at Kianna forms a high-grade lens that lies above the basement mineralization (Figure 10.3). Significant intercepts, which are close to true thickness, occur over a 70 m (north-south) by 150 m (east-west) area, include results (with a grade-thickness product of greater than 5.0) of:

- 0.901% U_3O_8 over 11.9 m in hole SHE-102-01
- 3.662% U_3O_8 over 5.3 m, including 11.065% U_3O_8 over 1.7 m in hole SHE-102-02
- 3.024% U_3O_8 over 3.7 m in hole SHE-102-07
- 1.418% U_3O_8 over 11.0 m, including 7.309% U_3O_8 over 1.3 m in hole SHE-102-10
- 1.018% U_3O_8 over 12.1 m in hole SHE-114-09
- **9.335% U_3O_8 over 12.2 m, including 20.285% U_3O_8 over 0.9 m, and 21.154% U_3O_8 over 4.3 m in hole SHE-115-03**

- **2.547% U_3O_8 over 19.0 m, including 5.847% U_3O_8 over 7.0 m, which includes 11.080% U_3O_8 over 2.0 m in hole SHE-115-04**
- **7.827% U_3O_8 over 7.2 m, including 20.360% U_3O_8 over 2.7 m in hole SHE-115-05**
- 2.227% U_3O_8 over 10.6 m, including 7.263% U_3O_8 over 1.5 m in hole SHE-115-06
- **6.297% U_3O_8 over 7.9 m, including 9.394% U_3O_8 over 4.9 m, which includes 18.098% U_3O_8 over 1.0 m in hole SHE-118**
- 1.271% U_3O_8 over 16.9 m, including 4.763% U_3O_8 over 4.0 m in hole SHE-118-01
- 0.981% eU_3O_8 over 17.3 m in hole SHE-118-04
- 1.577% U_3O_8 over 13.2 m, including 5.510% U_3O_8 over 3.5 m, which includes 10.149% U_3O_8 over 1.5 m in hole SHE-118-05
- 1.475% U_3O_8 over 15.0 m, including 5.791% U_3O_8 over 3.5 m, which includes 12.556% U_3O_8 over 1.0 m in hole SHE-118-05A
- 2.609% U_3O_8 over 6.0 m, including 8.180% U_3O_8 over 1.8 m in hole SHE-118-06A
- 4.028% U_3O_8 over 6.0 m, including 11.831% U_3O_8 over 2.0 m in hole SHE-118-06B
- 2.030% U_3O_8 over 10.0 m, including 8.468% U_3O_8 over 2.3 m in hole SHE-118-08
- 2.275% U_3O_8 over 11.5 m, including 5.011% U_3O_8 over 4.3 m, which includes 8.037% U_3O_8 over 1.5 m in hole SHE-118-09
- 5.863% U_3O_8 over 3.2 m, including 24.300% U_3O_8 over 0.6 m in hole SHE-118-11
- 1.542% U_3O_8 over 6.8 m in hole SHE-118-13
- 1.254% U_3O_8 over 13.0 m in hole SHE-118-14
- 1.114% U_3O_8 over 17.5 m, including 5.124% U_3O_8 over 2.5 m in hole SHE-118-15
- 2.582% U_3O_8 over 6.4 m in hole SHE-118-18
- 11.767% U_3O_8 over 3.8 m, including 21.883% U_3O_8 over 2.0 m in hole SHE-118-19
- 1.485% U_3O_8 over 4.5 m in hole SHE-130-6
- 1.586% U_3O_8 over 8.5 m, including 10.060% U_3O_8 over 1.0 m in hole SHE-135-01
- 1.625% U_3O_8 over 9.5 m, including 2.393% U_3O_8 over 4.0 m and 1.484% U_3O_8 over 3.9 m in hole SHE-135-05

Kianna also has significant perched mineralization which forms at least two lenses above the higher grade areas of unconformity-hosted mineralization, at distances of 20 to 70 m above the unconformity (Figure 10.3). A moderate southwest dip to some of this mineralization is apparent, which may link to southwest dipping faults in the basement rocks down dip to the southwest. The most significant pod has plan view dimensions of approximately 60 by 30 m, and contains intercepts that are at close to true thickness, including results (with a grade-thickness product of greater than 5.0) of:

- **20.721% eU_3O_8 over 10.2 m, including 27.729% eU_3O_8 over 7.6 m in hole SHE-114-05**
- **7.367% U_3O_8 over 9.5 m, including 10.700% U_3O_8 over 6.5 m, which includes 21.163% U_3O_8 over 2.0 m in hole SHE-114-07**
- **4.637% eU_3O_8 over 22.2 m, including 8.001% eU_3O_8 over 3.2 m, and 7.851% eU_3O_8 over 8.8 m in hole SHE-114-09**
- **4.580% eU_3O_8 over 15.3 m, including 9.967% eU_3O_8 over 6.4 m in hole SHE-114-11**
- **3.859% eU_3O_8 over 14.2 m, including 20.629% eU_3O_8 over 1.4 m in hole SHE-114-18A**
- **5.939% eU_3O_8 over 12.0 m, including 23.145% eU_3O_8 over 2.7 m in hole SHE-114-19**
- 2.709% eU_3O_8 over 14.2 m, including 12.406% eU_3O_8 over 1.0 m in hole SHE-114-19A
- 1.815% U_3O_8 over 10.0 m, including 3.490% U_3O_8 over 4.0 m in hole SHE-115-06
- **6.165% U_3O_8 over 6.70 m, including 20.134% U_3O_8 over 2.0 m in hole SHE-115-08**
- 1.213% eU_3O_8 over 26.41 m in hole SHE-115-08 (lower zone)
- **8.420% eU_3O_8 over 12.6 m in hole SHE-115-18**

10.5.5 58B Deposit Area

A total of 39 drill holes have been completed in the 1 km strike between the Kianna and southern Colette deposits in this area, resulting in the discovery of the 58B Deposit (Figures 7.2, 7.4A), named after the initial hole which intercepted mineralization in this area. Mineralization at 58B has been traced over a strike length of 400 m and occurs over a width of up to 110 m in plan view. The mineralization displays the same stacking of basement, unconformity and perched mineralization as is seen at the Kianna Deposit.

Notable unconformity intercepts at 58B (with a grade-thickness product of greater than 5.0), which are close to true thickness, include the following:

- 2.261% U_3O_8 over 7.5 m, including 3.668% U_3O_8 over 4.2 m in SHE-133-03
- 5.043% U_3O_8 over 2.4 m in SHE-133-04
- 3.135% U_3O_8 over 3.0 m, including 4.010% U_3O_8 over 2.0 m in SHE-133-05
- 1.898% U_3O_8 over 10.4 m in SHE-133-07
- 0.840% U_3O_8 over 6.1 m in SHE-133-11

The basement intercepts occur in both concordant, and high-grade discordant east-northeast-trending vein style, resulting in variable and often low core axis angles. Significant basement intercepts (with a grade-thickness product of greater than 5.0) include:

- 2.213% U_3O_8 over 2.6 m in SHE-058B
- 1.917% U_3O_8 over 3.5 m, including 10.300% U_3O_8 over 0.5 m in SHE-133-02
- 9.514% U_3O_8 over 0.8 m, including 19.000% U_3O_8 over 0.4 m in SHE-133-03
- 8.097% U_3O_8 over 1.5 m in SHE-133-06

Overall style of mineralization and the open nature of the mineralization particularly in the basement at 58B suggest the potential for additional mineralization here and in the intervening areas between Kianna and Colette.

10.5.6 Colette Area

Drilling in the Colette area includes 95 drill holes distributed between the main portions of Colette to the north and the area of Colette South. The two areas have different styles. Main portions of Colette, northwest of the 8800N fault (Figure 7.2) are of dominantly unconformity-hosted mineralization, with best intercepts occurring along the projected traces of the northeast trending 8800N and Colette faults, particularly in a thick pod in the northwestern portion of the deposit (Figure 7.2). Best unconformity intercepts (with a grade-thickness product of greater than 5.0), which are at or close to true thickness, include:

- 1.432% U_3O_8 over 12.2 m, including 2.916% U_3O_8 over 5.6 m in hole SHE-45
- **2.342% U_3O_8 over 16.8 m, including 4.294% U_3O_8 over 7.8 m and 7.547% U_3O_8 over 2.7 m in hole SHE-52**
- **4.099% U_3O_8 over 6.6 m, including 6.493% U_3O_8 over 3.9 m in hole SHE-59**
- 1.732% U_3O_8 over 11.9 m, including 3.476% U_3O_8 over 4.6 m in hole SHE-65
- 1.058% U_3O_8 over 18.7 m, including 1.020% U_3O_8 over 8.3 m and 1.518% U_3O_8 over 7.4 m in hole SHE-66-02
- 1.218% eU_3O_8 over 27.9 m, including 1.409% eU_3O_8 over 10.3 m in hole SHE-66-03
- 0.625% U_3O_8 over 19.0 m, including 1.136% U_3O_8 over 2.5 m in hole SHE-66-04

- 0.429% U_3O_8 over 11.8 m in hole SHE-66-09 (Perched?)
- 1.720% U_3O_8 over 10.5 m in hole SHE-66-10 (Perched?)
- 1.122% U_3O_8 over 11.0 m in hole SHE-78
- 1.517% U_3O_8 over 8.9 m in hole SHE-91

The Colette South area's most significant drilling intercepts are from basement mineralization, occurring in association with unconformity mineralization above (Figure 10.4). Here, drilling in the SHE-111, SHE-126 and SHE-139 series drill holes defines a series of stacked concordant style zones of basement mineralization (Figure 10.4) over a strike length of at least 250 m. These intercepts (with a grade-thickness product of greater than 5.0) include:

- 0.907% eU_3O_8 over 10.8 m, including 3.91% eU_3O_8 over 1.2 m in hole SHE-111-02
- 0.343% eU_3O_8 over 6.6 m in hole SHE-111-03
- 0.582% eU_3O_8 over 16.2 m, and 2.458% U_3O_8 over 1.0 m in hole SHE-111-05 (two stacked basement zones)
- **3.227% U_3O_8 over 8.0 m, including 12.380% U_3O_8 over 0.5 m and 23.934% U_3O_8 over 0.5 m in hole SHE-111-06**
- 1.429% U_3O_8 over 6.0 m, and 0.633% U_3O_8 over 4.5 m in hole SHE-111-11 (two stacked basement zones)
- 0.879% U_3O_8 over 11.5 m, including 4.810% U_3O_8 over 1.0 m in hole SHE-111-12
- 0.402% U_3O_8 over 13.8 m in hole SHE-126
- 0.700% U_3O_8 over 10.2 m, including 4.521% U_3O_8 over 1.0 m in hole SHE-126-01A
- 0.855% U_3O_8 over 7.5 m, including 4.047% U_3O_8 over 1.5 m in hole SHE-139-01

Mineralization is open down dip to the southwest on several sections. Presence of the adjacent 8800N fault to the northwest (Figure 7.2), and deflections in the pelitic gneiss, that may represent prospective east-west fault development, make this area a high priority target for additional, and potentially higher grade Kianna style uranium mineralization in basement rocks.

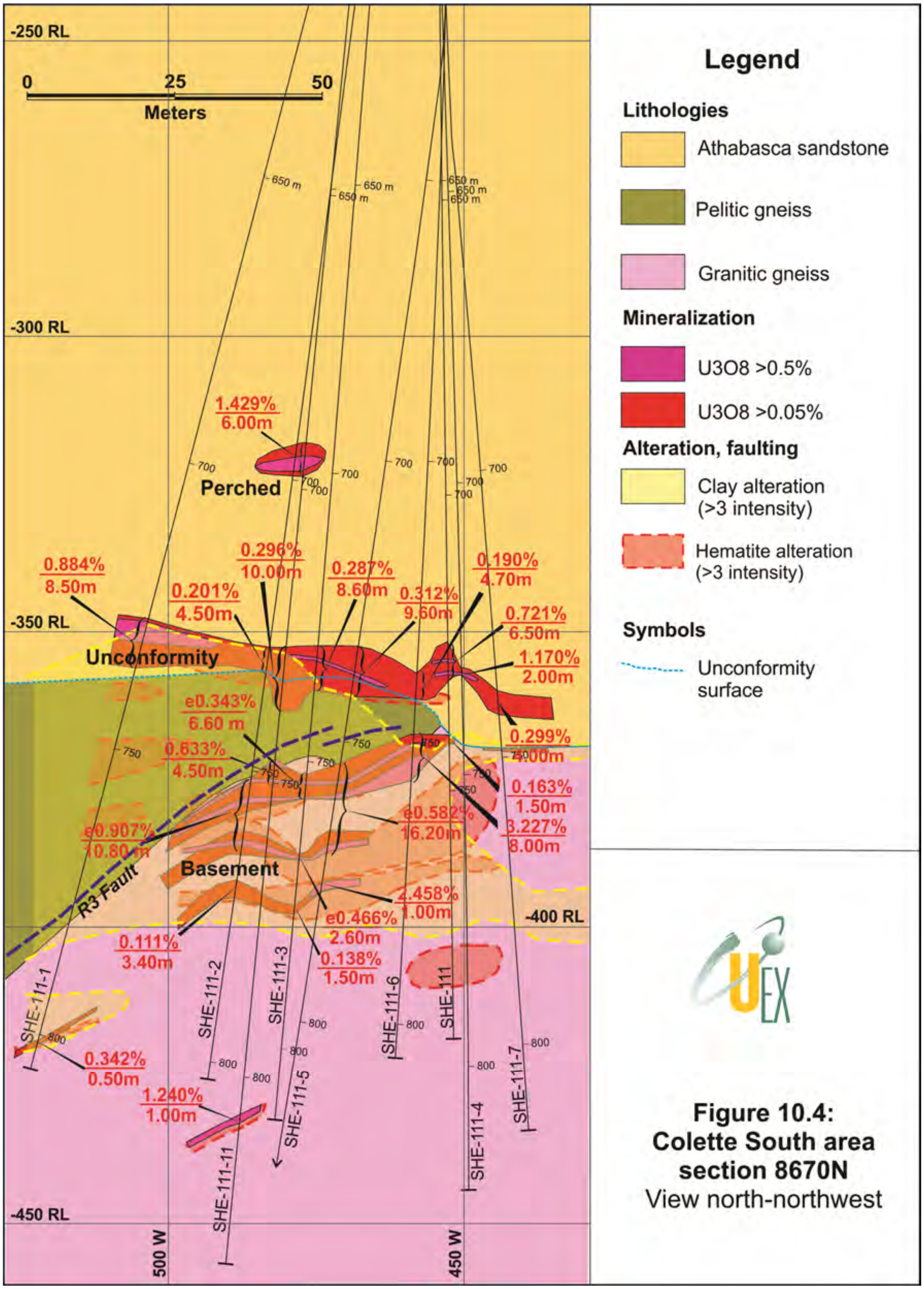


Figure 10.4: Colette South area section 8670N. Colette South area cross section, looking north-northwest, showing geology and mineralization morphology.

10.6 Drilling in other Areas on the Shea Creek Property

Outside the northern 3 km of the Shea Creek property where exploration has been focused on the Anne, Kianna, Colette and 58B deposits, only 26 drill holes test other parts of the Shea Creek property. These are focused in three mains areas (Figure 9.3): (i) along the Saskatoon Lake Conductor for approximately 3 km southeast of the Anne Deposit, (ii) in southernmost portions of the Shea Creek property along extensions of the Saskatoon Lake Conductor, and (iii) several holes which have tested EM and resistivity anomalies west of the Colette Deposit. Drilling in these three areas is briefly reviewed below. Outside of these areas, three isolated drill holes have been drilled mainly to test EM and resistivity targets, drill holes SHE-007, SHE-003 and SHE-009 (Figure 9.3), none of which intersected any significant alteration or mineralization. Two drill holes, SHE-008 and SHE-041 have been drilled on claims that are no longer part of the Shea Creek property (Figure 9.3). Given the sparseness of drilling on most of the property, including significant portions of the strike length of the Saskatoon Lake Conductor, and the high frequency of mineralization in the region, exploration potential is considered to be high. Future expansion of existing DC resistivity survey coverage (Figure 9.1), and/or other technologies such as magnetotelluric (MT) surveys and Low Temperature Superconducting Quantum Interference Device (SQUID) TEM (Time-domain Electromagnetic) surveys, are recommended to identify targets in other parts of the property.

Southeast of the Anne Area

For up to 3 km southeast of the Anne Deposit, fourteen holes have been drilled on widely spaced cross sections have tested the Saskatoon Lake Conductor and its margins (Figure 9.3). The earliest drill holes in this area include several holes from the initial 1992 drill program prior to the discovery of the Anne and Colette deposits. The most significant result in the area to date is SHE-002 drilled in 1992 which intersected a shallow dipping brecciated fault zone grading 0.34% U_3O_8 over 0.4 m from 706.8 to 707.2 m. The mineralization occurs in a zone of significant hydrothermal alteration and structural disruption of the basal Athabasca sandstone below the unconformity (Alonso et al., 1992) which is associated with green/black graphite-rich breccia. Minor mineralization was also intersected in drill hole SHE-127, which was drilled 200 m northwest of SHE-002, and anomalous radioactivity and alteration are also present in several further drill holes. All of these features continue to suggest that this area is highly prospective for uranium mineralization.

Shea South

Drilling in the Shea South target area has targeted the southernmost extensions of the Saskatoon Lake Conductor on the Shea Creek property, where it trends north to north-northeast near the Beatty River shear zone (Figure 9.3). Eight drill holes have tested an approximately 2 km strike length of the conductor on three widely spaced sections in this area, where the depth to the sub-Athabasca unconformity ranges from 400 to 500 m. Drilling has intersected up to 25 m of locally faulted garnet bearing pelitic and graphitic gneiss beneath locally altered sandstone, particularly in SHE-001B where it is strongly faulted and block tilted with intense argillization, silicification (drusy and vein quartz) and bleaching (Alonso et al., 1992). Although no mineralization has been intersected here, the alteration, anomalous geochemistry and basement faulting are favorable, and additional drill testing of this area will be required.

Outlying Areas

Three drill holes have been drilled in the Klark Lake target area up to 2.4 km west of the mineralization intersected in the Colette area (Figure 9.3). Anomalous results were obtained in one of the three holes, SHE-117, where above the unconformity, the sandstone column is bleached and silicified, with intervals of brecciation and dravite, silica and fragmental rich matrices from 650 m to 670 m. Brecciated areas are associated with elevated radiometrics where a peak of 200cps in the SPP2 is associated with a quartz - ?coffinite filled fracture (Robbins et al., 2007). No graphitic basement has yet been intersected in the Klark Lake area.

10.7 Relationship between Sample Length and True Thickness

Since the orientations of drill holes in the deposits vary, and the morphology of mineralized zones has variable orientation, the relationship of geochemical sample length and probe composited lengths in drill holes to the true thickness of mineralization is also variable. For mineralization developed at the unconformity in the Anne, Kianna and Colette deposits, the steep orientation of most drill holes crosses the flat-lying mineralization in intercepts which are at or close to true thickness. For basement-hosted mineralization, in many areas thickness has not yet been determined since the morphology and orientation of mineralization is still interpretive so thickness is apparent, although in some areas in the southern Anne Deposit where basement mineralization is parallel to the metamorphic stratigraphy and a higher confidence level of its morphology has been determined, intercepts are close to true thickness. Perched mineralization at Kianna has been intersected by multiple closely spaced drill holes which indicate it has a lens-shaped shallow southwesterly dip, resulting in drill hole intercepts which are also generally close to true thickness.

10.8 Core Recovery Factors

In general, core recovery, which as described above is noted per metre in core logging, is very good and typically greater than 95%. However, there are areas within the lower sandstone column and near the unconformity where core recovery is poor in areas of desilicified sandstone and clay alteration that sometimes will overlap with mineralized intervals. Locally in such areas, low, or no core recovery, may occur over intervals of up to several metres. Such issues are rarer in the underlying basement gneiss sequence. It is AREVA's policy not to sample a mineralized interval if there is less than 75% recovery of the core over a 50 cm sample width (Koning et al., 2007). In such cases, downhole radiometric probe data can be substituted in place of radiometric grades, since as described in Item 12.3, probe data correlates positively with uranium grade, and probe data are calibrated in areas of good recovery to geochemical values.

ITEM 11.0: SAMPLE PREPARATION, ANALYSIS AND SECURITY

11.1 Drill Core Handling and Logging Procedures

At the drill rig, core is removed from the core barrel by the drillers and placed directly into three row NQ wooden core boxes with standard 1.5 m length and a nominal 4.5 m capacity. Individual drill runs are identified with small wooden blocks, onto which the depth in metres is recorded. Diamond drill core is transported at the end of each drill shift to an enclosed core-handling facility at the Cluff Lake camp.

Drill holes are logged at the Shea Creek Exploration core logging facilities located on the Cluff Lake mine site. At the core logging facilities, the core is then measured to determine core recovery on a per metre basis and then scanned for radioactivity using a shielded SRAT SPP2 scintillometer to identify anomalously radioactive intervals (Koning et al., 2007). Along with other geological parameters, these reading form the basis for the selection of geochemical sampling intervals.

Once the core is radiometrically scanned, geologists log the drill core by recording their observations on field logs, including descriptions of: lithologies, mineralized intervals, friability, grain size in the sandstone, fracture density, alteration, color, structure, and a descriptive log of the core. In addition to the geological log, all core is routinely wet down and digitally photographed prior to geochemical sampling with a digital camera as a permanent record. Once each core box is logged and sampled, it is clearly identified with a metallic embossing tape and stored in the core storage compound. Beginning with the last 100 m above the unconformity to the bottom of the hole, the core boxes are placed in core racks within a fenced compound. The upper part of the drill hole core is stacked in perpendicular rows outside the fenced compound. All drill core is stored at the northeast end of Cluff Lake, on the Cluff Mining surface lease.

11.2 Drill Core Sampling

11.2.1 Geochemical Sampling

Several types of samples are collected routinely from drill core at Shea Creek. These include: 1) systematic composite geochemical samples of both Athabasca sandstone and sub-Athabasca metamorphic basement rocks to characterize clay alteration and geochemical zoning associated with mineralization, 2) selective grab samples and split-core intervals for geochemical quantification of geologically-interesting material and mineralized material, respectively, 3) samples collected for determination of specific gravity – dry bulk density, and 4) non-geochemical samples for determination of mineralogy to assess of alteration patterns, lithotypes and mineralization characteristics. Selective samples form a quantitative assessment of mineralization grade and associated elemental abundances, while the systematic and mineralogical samples are collected mainly for exploration purposes to determine patterns applicable to exploration. These sampling types and approaches are typical for uranium exploration and definition drilling programs in the Athabasca Basin.

Selective sampling for geochemistry and mineralogy includes split-core sampling of all of the mineralized intervals and unsplit grab sampling. Sample lengths of the mineralized split-core samples are from 20 cm to 50 cm, but are generally 50 cm. Selective samples less than 50 cm in length are taken to represent the presence of narrow mineralized zones, such as veinlets. Selective samples over 50 cm in length are rarely taken, and only in zones of low radioactivity or zones having a homogenous radioactivity. The barren wall rock on either side of the mineralized intervals is also sampled. The minimum field radiometric value above which samples are regarded as 'mineralized' is 200 cps using a SPP2 or SPPγ scintillometer. After sampling, half core is retained in core boxes for potential future inspection or check sampling.

On site, after sampling from drill core, plastic bags containing the individual geochemical samples (systematic and selective) are grouped according to lithology (sandstone or basement) and radioactivity. Non-radioactive samples are placed in white plastic pails while the radioactive samples are placed in black painted metal "IP3" containers (Koning et al., 2007). The radioactive samples are shipped within Canada in compliance with pertinent federal and regulations regarding their transport and handling.

11.2.2 Dry Bulk Density Sampling

In order to obtain accurate bulk density estimates for the Shea Creek deposits, UEX carried out a program of dry bulk density sampling from diamond drill core in January 2010 at the Cluff Lake core storage facility. The samples were systematically selected from the main mineralized zones to represent local major lithological units, mineralization styles and alteration types, including different intensities of clay alteration. All samples were re-logged by UEX personnel according to UEX standard codes for rock type and intensity of alteration. The majority of the dry bulk density samples had been previously assayed for uranium. This paired data allowed for the establishment of a density-grade model. Some unsplit samples with no prior uranium analysis (80 total) were taken from fresh or less altered core outside the mineralized zones. Dry bulk density samples were collected from half split core which has been previously retained in the core box after geochemical sampling. An approximately 10 cm to 18 cm piece of half split core was submitted for each analysis. Samples were tagged and placed in sample bags on site, then shipped to the SRC in Saskatoon, Saskatchewan.

Dry bulk density sampling was conducted to represent the full range of mineralization styles and positions throughout the deposits. Their representative distribution enabled construction of a density-grade model demonstrating correlation between dry bulk density, clay alteration intensity, and uranium grade (U_3O_8 %); see Figure 13-4 in Palmer (2010) for further discussion. A total of 678 samples from 80 holes were collected during this program and were subject to dry bulk density testing. These included 306 samples from 37 Kianna drill holes, 268 samples from 29 Anne drill holes and 104 samples from 14 Colette drill holes. Based on the entire sample suite, mean dry bulk density for Shea Creek lithologies is 2.48 g/cm^3.

11.3 Sample Security

The Shea Creek core facility is on the former Cluff Lake mine site to which only AREVA or other authorized personnel have access. As such, all on site sampling is conducted in a secure setting. The mineralized bagged samples are placed into sealed IP-3 pails, while the barren bagged samples are placed in plastic pails which are temporarily stored outside of the sample preparation room until shipped by truck to the SRC Geoanalytical Laboratory in Saskatoon (Koning et al, 2007). Samples are shipped directly in sealed containers by truck to Saskatoon, and once in the SRC laboratory are processed within laboratory facilities which are restricted to SRC personnel. The potential for tampering is limited, and could be detected by comparison to probe and scintillometer readings which are obtained independently from the geochemical results.

11.4 Laboratory Analytical Procedures

The sample pails/containers are shipped to the Saskatchewan Research Council (SRC) Geoanalytical Laboratories in Saskatoon for analysis, which is located at 125-15 Innovation Blvd, Saskatoon, Saskatchewan. The laboratory has an ISO/IEC 17025:2005 accredited quality management system (Scope of Accreditation # 537), from the Standards Council of Canada (SRC, 2007), and is accredited by the Canadian Association for Laboratory Accreditation Inc. After the analyses which are described below, analytical data are securely sent by SRC to AREVA through use of electronic transmission of the results and secured through the use of encryption and password protection.

SRC is an independent laboratory, and no associate, employee, officer or director of UEX is, or ever has been, involved in any aspect of sample preparation or analysis on samples from Shea Creek, or any other properties.

11.4.1 Geochemical Sample Preparation *[sourced from Koning et al. (2007), and SRC (2007)].*

On arrival at the SRC lab, all samples are received and sorted into their matrix types (sandstone verses basement) and received radioactivity levels. Sample preparation (drying, crushing, and grinding) is done in separate facilities for sandstone and basement samples to reduce the probability of sample cross-contamination. Crushing and grinding of radioactive samples is done in another separate, Canadian Nuclear Safety Commission ("CNSC") licensed radioactive sample preparation facility. Radioactive material is kept in a CNSC-licensed concrete bunker until it can be transported by certified employees to the radioactive sample preparation facility. Sample drying is carried out, with the samples in their original bags, overnight in large low temperature (80° C) ovens. Following drying, the samples are crushed to 60% <2 mm using a steel jaw crusher. A 100-200 g split is taken of the crushed material using a riffle splitter.

This split is then ground to 90% <106 microns (<150 mesh) using a Cr-steel puck-and-ring grinding mill (for mineralized samples) or a motorized agate mortar & pestle grinding mill (for all non-mineralized samples). The resulting pulp is transferred to a clear plastic snap-top vial with the sample number labeled on the top. All grinding mills are cleaned between sample runs using steel wool and compressed air, with a between-sample grind of silica sand if the previous samples were clay-rich. Prior to the primary geochemical analysis, the sample material is digested into solution. A total tri-acid digestion, on a 250 mg aliquot of the sample pulp, uses a mixture of concentrated $HF/HNO_3/HClO_4$ acids to dissolve the pulp in a Teflon beaker over a hotplate and the residue, following drying, is dissolved in 15 ml of dilute ultrapure HNO_3.

For fluorimetric analysis of U, an aliquot of either total digestion solution or partial digestion solution is pipetted into a Pt-Rh dish and evaporated. A NaF/LiK pellet is placed on the dish and the sample is fused for 3 minutes using a propane rotary burner, then cooled to room temperature before fluorimetric analysis. Another digestion used is a Na_2O_2 fusion in which an aliquot of pulp is fused with a mixture of Na_2O_2 and $NaCO_3$ in a muffle oven. The fused mixture is subsequently dissolved in deionized water. Boron is analyzed by ICP-OES on this solution.

11.4.2 Analytical Procedures, Quality Control Measures and Security

The current primary geochemical analytical methods used for uranium analysis on the Shea Creek samples are ICP-MS (Inductively Coupled Plasma Mass Spectroscopy) for samples lower grade than 1,000 ppm U, and U_3O_8 uranium assay by ICP-OES (Inductively Coupled Plasma Optical Emission Spectroscopy) for samples determined by ICP-MS to contain uranium concentrations higher than 1,000 ppm U. The reader is referred to the SRC's website (http://www.src.sk.ca/) and McCready (2007) for details regarding the analytical techniques and sample handling procedures; techniques and procedures are summarized below.

Initially, samples are digested using an aliquot of sample pulp. The aliquot is digested to dryness on a hotplate n a Teflon beaker using a mixture of concentrated $HF:HNO_3:HClO_4$. The residue is dissolved in dilute HNO_3 (SRC, 2007). Fluorimetry is used on low uranium samples (<100 ppm) as a comparison for Inductively Coupled Plasma – optical emission spectrometry ("ICP-OES') uranium results.

In the case of uranium assay by ICP-OES where uranium concentrations are determined to exceed 1,000 ppm U, a pulp is already generated from the first phase of preparation and assaying. A 1,000 mg of sample is digested for 1 hour in an HCl: HNO_3 acid solution. The totally digested sample solution is then made up to 100 mls and a 10 fold dilution is taken for the analysis by ICP-OES. Instruments are calibrated using certified commercial solutions. The instruments used are a Perkin Elmer Optima 300DV, Optima 4300DV or Optima 5300DV. The detection limit for U_3O_8 by this method is 0.001%.

For dry bulk density samples, SRC performed the density measurements on a dry basis (drying 24 hours at 110°C to 130°C) utilizing the wax-immersion method. Initially, all individual pieces were weighed for a dry weight, and then each individual piece was carefully wax coated to remove trapped air from the wax and reweighed. Wax coated samples were completely immersed in room temperature water and reweighed to determine the volume of the sample. After the immersion volume was determined, wet and dry bulk density was calculated and reported to ±0.01 g/cm3.

SRC management has developed quality assurance procedures to ensure that all raw data generated in-house is properly documented, reported and stored to meet confidentiality requirements. All raw data is recorded on internally controlled data forms. Electronically generated data is calculated and stored on computers. All computer generated data is backed up on a daily basis. Access to samples and raw data is restricted to authorized SRC Geoanalytical personnel at all times. All data is verified by key personnel prior to reporting results. Laboratory reports are generated using SRC's LIMS.

11.5 Qualified Person's Opinion on Sampling, Preparation, Security and Procedures

The core handling and logging procedures were actively observed by the authors at the Cluff Lake core logging facility. Selective sampling of drill core is collected to industry standards by splitting half core, with retention of half in the core box. No inherent sampling biases were observed in the longitudinal splitting of the core and sample processes. The correlation of downhole radiometric probing, detailed radiometric SPP2 or RS120/125 readings, as well as assay comparison and the quality assurance/quality control ("QA/QC") program (Item 12) provide further levels of confidence.

In the authors' opinion, the core sizes, procedures for logging, recording of core recoveries, and sampling are standard industry practices. In conjunction with calibrated probe data in areas of poor recovery, they will provide an acceptable basis for the geological and geotechnical evaluation of the deposits. In addition, the procedures employed at Shea Creek during sampling, shipping, sample security, analytical procedures, inter-lab assay validation, validation by different laboratory techniques (uranium ICP-MS partial, ICP-MS total and ICP-OES; uranium by DNC analysis), QA/QC protocol (see below), and use of probe data conversion comply with industry standard practices. UEX personnel, including the authors, have also directly reviewed laboratory procedures and practices on site at SRC through two laboratory audits in which no significant issues were identified.

11.6 Conversion of Radiometric Probe Data to Equivalent Uranium Grade

In addition to the geochemical procedures, mineralized sections of drill holes are radiometrically logged downhole using either an ST22-2T or DHT27-STD low flux probe, as well as with an DHT27-HF (high flux) probe when very high grade mineralization is encountered. The probe intervals are collected at 0.1m interval lengths and stored in the drill hole database as raw counts per second ("c/s"; Koning et al., 2007).

As is standard practice in uranium exploration in the Athabasca Basin, downhole radiometric probe data can be used to estimate uranium grade when sufficient comparative geochemical and probe data are available to calibrate the probe data specifically to individual deposits or mineralized areas. The converted probe data then form a check for the geochemical data, and allow estimation of uranium grade of mineralized intervals in areas of poor core recovery where representative sampling is not possible. When sufficient correlation between probe and geochemical data has been established, often in mining settings where additional reconciliation to mill recoveries are available, probe data are often used in place of geochemical data.

The conversion formula from probe data to equivalent uranium grades (denoted as "eU" or "eU_3O_8") on an exploration project is periodically modified for different deposits and zones as new geochemical data is received. This is the case at Shea Creek, where probe data reported in UEX disclosures prior to 2008 utilized a modified conversion coefficient which had been developed by COGEMA in its operations at the Dominique-Peter Deposit at the Cluff Lake Mine (E. Koning, pers. comm., 2009). In early 2008, AREVA calculated specific probe conversion coefficients for the Kianna and Anne deposits based on geochemical data received up to that time, which replaced the earlier Cluff Lake coefficient. Consequently, the probe equivalent grades and the geochemical grades differ from, and supercede, composited intervals reported in 2004 to 2007 joint AREVA-UEX news releases.

Where sufficiently calibrated, the converted probe data when used in place of geochemistry forms an alternative sampling method to determine the grade and distribution of uranium mineralization on the Shea Creek property. No employee, officer director or associate of UEX has been involved in the calculation of probe equivalent coefficients, and the resulting equivalent uranium concentrations, for the Shea Creek property. All probe equivalent calculations and conversions reported here were provided to UEX by AREVA as eU converted data, and subsequently converted to eU_3O_8 (conversion factor of 1.17922).

Data obtained from downhole probe results are converted to equivalent uranium grades utilizing a two-step process:

1) Conversion of probe counts into Appareillage Volant de Prospection counts per second ("AVP" described further below), taking into account the type of probe used (ST22-2T, DHT27-STD or DHT27-HF), the drill conditions (hole diameter, drilling fluid, steel thickness of rod) and the counts themselves (correction for dead time). In the Anne and Kianna deposits, the average ratio of cps AVP to raw CPS varies from 40 to about 71.
2) Calibration of cps AVP into equivalent uranium grade (%eU or eU_3O_8) based on the correspondence between grade-thickness product of corrected AVP radiometrics with geochemical data in selected, representative mineralized intercepts of the same deposit or mineralized zone for which probe data is to be converted.

Details of these two steps and the conversion coefficients are outlined below, and are largely extracted with minor modification from Koning et al. (2007):

11.6.1 AVP Conversion

Radiometric data obtained from low flux (i.e. ST22-2T and DHT27-STD) and high flux (DHT27-HF) gamma probes are converted into equivalent uranium (eU) values by first converting the raw probe counts per second ("c/s") into AVP c/s, a uranium mining standard developed by the French Atomic Energy Commission defined as:

1 AVP c/s = 1 ppm Uranium (in equilibrium)

The conversion of raw c/s to AVP c/s adjusts the downhole radiometric profile for drill hole size, fluid type, casing parameters and probe correction factors. Deposit specific correlations for the Anne and Kianna deposits were generated by Koning et al. (2007) to convert AVP c/s into eU.

These takes into account possible disequilibrium between recorded gamma counts from downhole probe data and in-situ uranium content, which vary the AVP value from the ideal 1 ppm U conversion.

Disequilibrium, as defined by the *CIM Definition Standards for Uranium*, is; a*n imbalance between the uranium content and the radioactivity emitted by a given volume of mineralized rock. This imbalance is caused by either differential mobilization of the more soluble uranium from the deposition site, relative to its daughter isotopes, or by a lack of time for the accumulation of the daughter isotopes to reach a state of equilibrium after the uranium has been deposited. Generally when the decay series is in equilibrium the gamma plus beta radiation is proportional to the amount of uranium present.*

11.6.2 Radiometric-Grade Correlation

The radiometric–grade correlation was generated by comparing geochemical sample results from mineralized samples to their corresponding probe data. Geochemical sample intervals used by Koning et al. (2007) for these correlations required a minimum core recovery of 75% in each assay interval. AREVA's proprietary software Sermine USURA was used to calculate the mathematical formula for conversion of radiometric data into equivalent uranium values. The correlations are first calculated on a grade interval support size and then adjusted to a 10 cm support size to apply against the raw probe data intervals (Koning et al., 2007).

Anne Deposit Radiometric-Grade Correlation

The radiometric-grade correlation for the Anne Deposit (Figure 11.1) was based on 119 mineralized intervals from 47 drill holes located within the Anne area (Koning et al., 2007), the drill holes and mineralized intervals used for the correlation are provided in Koning et al. (2007), and based on a review of this information, are in the opinion of the authors, representative of the mineralization in the Anne Deposit. The conversion formula used to transform radiometric data into eU values (10 cm support) defined by Koning et al. (2007) was expressed, in permil, as:

$$eU\ ‰ = 0.7563 * (AVP/1000)1.0178$$

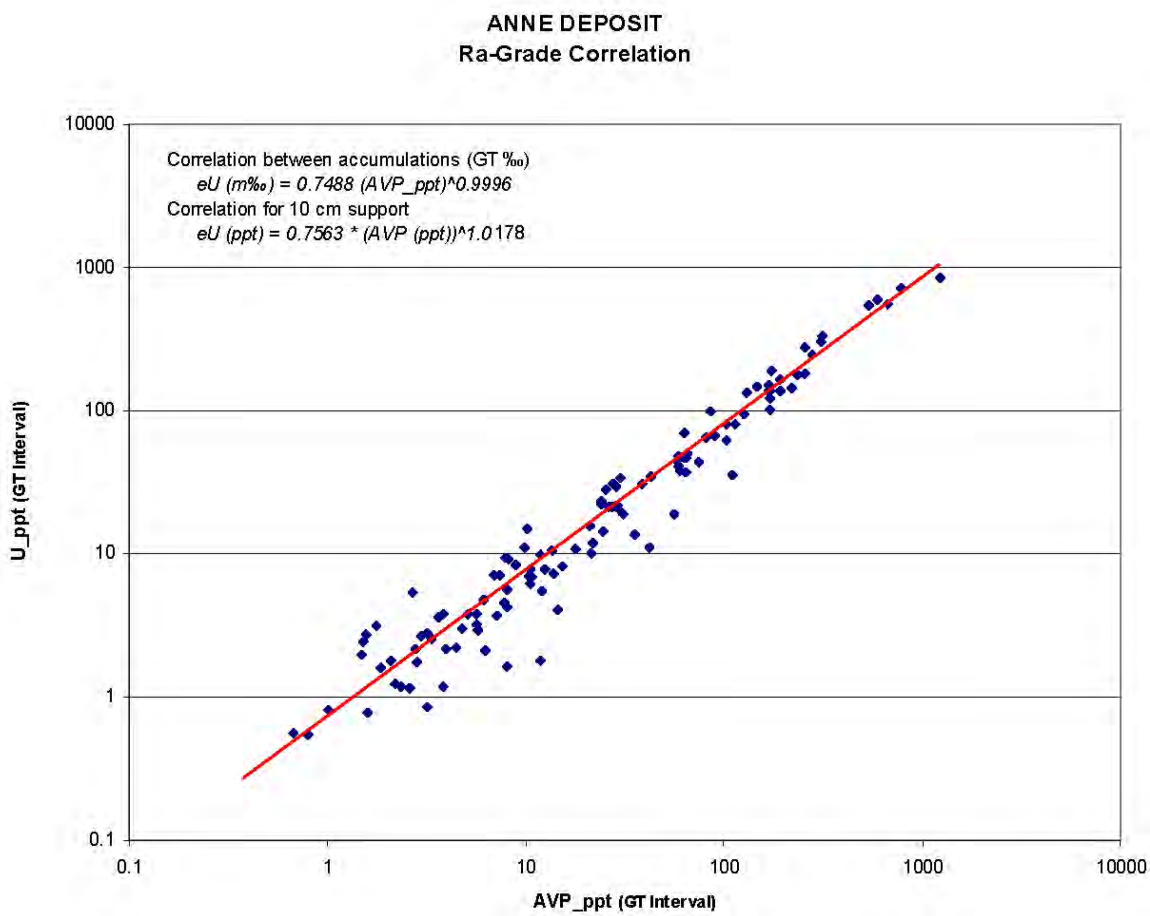


Figure 11.1: Anne Deposit - Sermine USURA correlation of uranium grade and AVP from representative composited intervals using the 2007 Anne radiometric-grade correlation. Graph is from Koning et al., 2007.

Kianna Deposit Radiometric-Grade Correlation

The radiometric-grade correlation for the Kianna Deposit (Figure 11.2) was based on 107 mineralized intervals from 45 drill holes located within the Kianna area (Koning et al., 2007). The drill holes and mineralized intervals used for the correlation are provided in Table F-2 of Appendix F. The conversion formula used to transform radiometric data into eU values (10 cm support) defined by Koning et al. (2007) is expressed, in permil, as:

eU ‰ = 0.8706 * (AVP/1000)1.0011

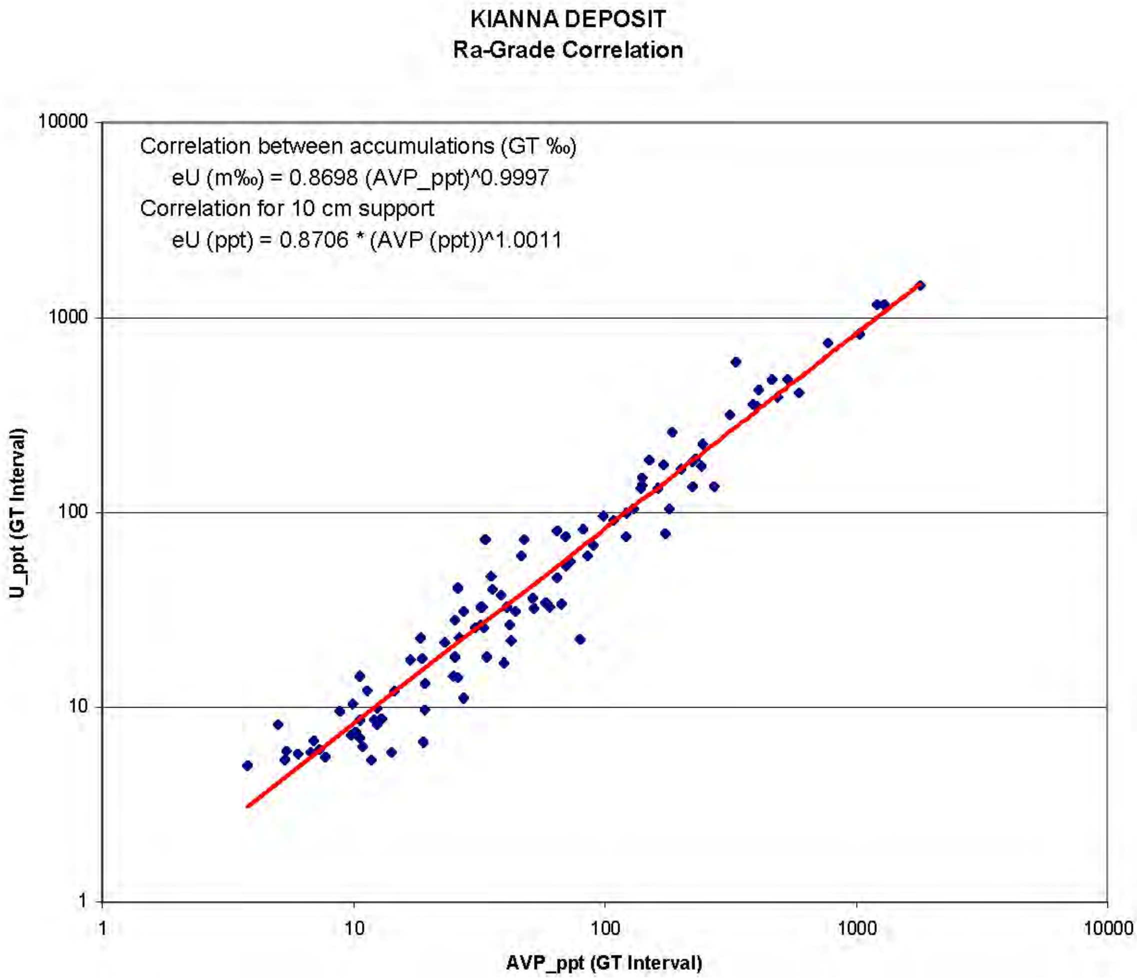


Figure 11.2: Kianna Deposit - Sermine USURA correlation of uranium grade and AVP from representative composited intervals using the 2007 Kianna radiometric-grade correlation. Graph is from Koning et al. (2007).

Colette Deposit and 58B Area Radiometric-Grade Correlation

The radiometric-grade correlation for a combined dataset from the Colette Deposit and 58B Area (Figure 11.3) was based on 48 mineralized intervals from 29 drill holes located within the Colette area and 14 mineralized intervals from 6 drill holes located within the 58B Area (Revering, 2010). The drill holes and mineralized intervals used for the correlation are provided in Revering (2010), and based on a review of this information, are in the opinion of the authors, representative of the mineralization in the Colette Deposit and 58B Area. The conversion formula used to transform radiometric data into eU values (10 cm support) defined by Revering (2010) is expressed, in permil, as:

eU ‰ = 0.8057 * (AVP/1000)1.0397

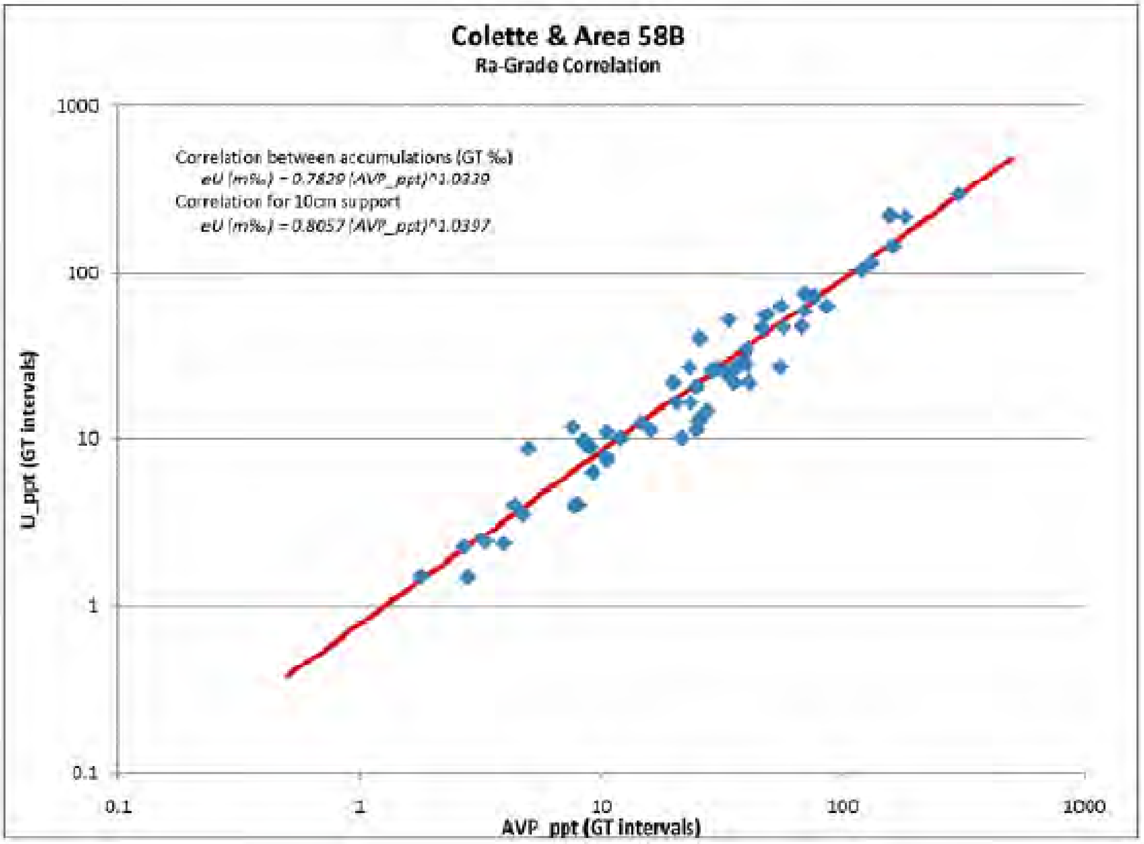


Figure 11.3: Colette and Area 58B - Sermine USURA correlation of uranium grade and AVP from representative composited intervals using the 2010 Colette and 58B radiometric-grade correlation. Graph is from Revering (2010).

Berthet (2011) Radiometric-Grade Correlation

Recently Berthet (2011) presented a radiometric-grade correlation computed for the entire Shea Creek mineralized trend: Anne, Kianna, 58B and Colette. It was verified that those four populations may be considered as one unique one. It resulted in a correlation based on 222 drill holes: 90 drill holes belonging to Anne, 80 drill holes belonging to Kianna and 52 drill holes belonging to 58B and Colette. The best 500 intervals (in terms of core recovery, sampling of background values surrounding the radiometric peak, consistency between radiometric and geochemical measurements) were used to perform the radiometric-grade correlation.

Considering the similarity of the Anne, Kianna, 58B and Colette GT populations, a global radiometric-grade correlation was computed. The conversion formula used to transform radiometric data into eU values (10 cm support) defined by Berthet (2011) is expressed, in permil, as:

$$eU \text{ ‰} = 0.7851 * (AVP/1000)1.0318$$

The report by Berthet (2011) recommends using this global correlation as it is consistent for the entire trend and is more robust than local ones as calculated on 500 mineralized intervals. Radiometric-grade calculations for drilling at Shea Creek in 2012 were based on this global radiometric-grade correlation.

ITEM 12.0: DATA VERIFICATION

Several levels of data verification are utilized at Shea Creek, including (i) internal SRC laboratory quality assurance and quality control ("QA/QC"), (ii) comparison of the results of the different geochemical analytical techniques for uranium which are routinely received (uranium partial and total by ICP-MS, U_3O_8 assay by ICP-OES), (iii) comparison to probe results, and (iv) external laboratory check analysis of selected samples. Radiometric probes used in drill holes are regularly calibrated using the SRC gamma-probe calibration facility in Saskatoon, although repeat probe logging of the drill holes has not been done (Koning et al., 2007). As part of AREVA's quality improvement programs, a more rigorous QA/QC program was implemented in 2006 which continues to be followed.

UEX has conducted two lab audits on the primary lab, SRC laboratories, in Saskatoon, Saskatchewan. The lab audit covers all aspects of the sample preparation and analytical process, as apply to all of UEX's projects, and which are also applicable to samples submitted by AREVA as part of the Joint Venture. Minor recommendations were made regarding methodologies and equipment condition, but no deficiencies were noted.

A significant level of validation of geochemical results comes from the results of downhole radiometric probe data, from which calibrated conversion factors allow cross checking, and where necessary in areas of poor core recovery, substitution for geochemical data. The authors have reviewed the probe use and methodologies, and find these and the currently utilized coefficients that were calculated in 2008 conform to industry standards, and form a reasonable estimation of uranium grade in the Kianna and Anne deposits.

12.1 Comparison of Analytical Techniques

Comparison of analytical pairs for analyses at Shea Creek by ICP-MS (total and partial U) and ICP-OES (U_3O_8 uranium assay) is presented as scatter plots in Figure 12.1 for 2006 and 2007 samples and Figure 12.2 for 2009 to 2012 samples. The plots show a high degree of correlation of the individual techniques, and the lack of outliers suggest minimal evidence for any significant transcription or accidental sample substitutions. Several data points which previously lay outside tolerance were checked, and data transcription errors were identified which have now been corrected in the database (D. Quirt, pers. comm., 2009).

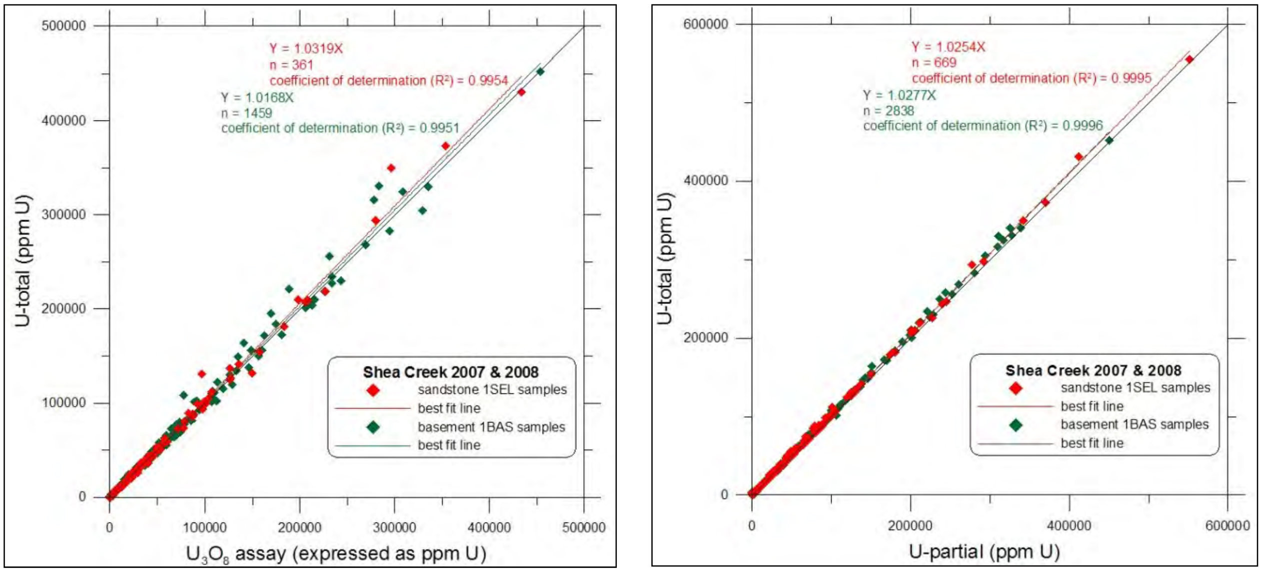


Figure 12.1: Scatter plots illustrating correlation between different uranium analytical techniques for 2007 and 2008 geochemical data from sandstone- (red) and basement- (green) hosted samples. All data are in ppm U. At left, U total by ICP-MS versus uranium assay (ICP-OES). At right, U total (ICP-MS) versus U partial (ICP-MS). In both cases, sandstone and basement samples show strong positive correlations (R^2 = 0.9951 to 0.9996).

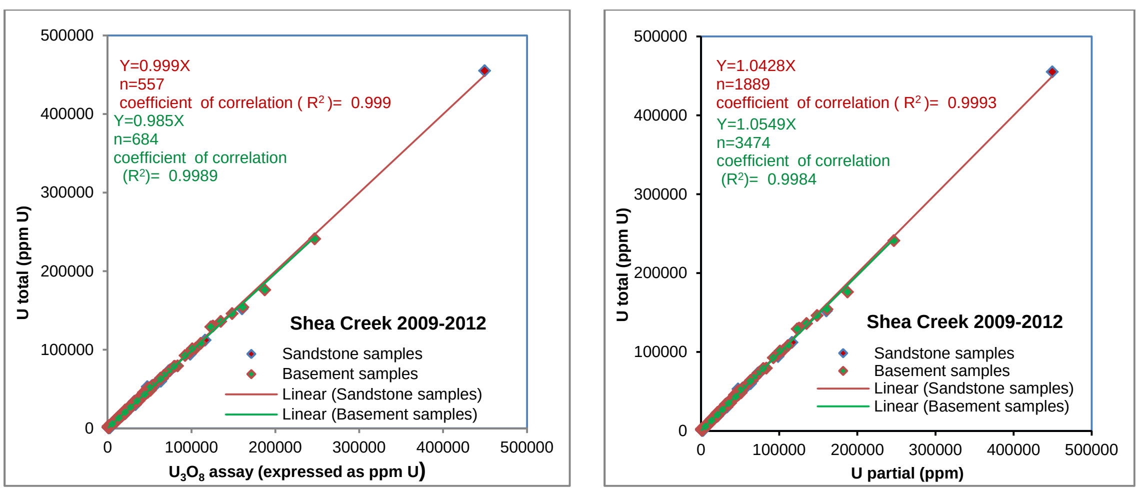


Figure 12.2: Scatter plots illustrating correlation between different uranium analytical techniques for 2009 to 2012 geochemical data from sandstone- (red) and basement- (green) hosted samples. All data are in ppm U. At left, U total by ICP-MS versus uranium assay (ICP-OES). At right, U total (ICP-MS) versus U partial (ICP-MS). In both cases, sandstone and basement samples show strong positive correlations (R^2 = 0.9989 to 0.9993).

Since 2006, AREVA has used two special Quality Control samples that are inserted in the geochemical analysis stream: (1) an instrumental blank, and (2) an AREVA standard sample representing "background" sandstone (Koning et al., 2007). This latter control sample comprises a composite of 150 low-U (background) Athabasca sandstone samples taken from several different projects from across the Athabasca Basin (Koning et al., 2007). These Quality Control samples are inserted approximately every 25-30 regular samples (i.e. for each sample batch). A Field Duplicate sample is also taken approximately every 25-30 samples for both non-mineralized and mineralized materials. The data for the Quality Control samples and from the duplicate sampling program are examined for deviations from acceptable levels, which are from ± 5-10%, depending on the parameter in question (Koning et al., 2007). Data verification includes reviewing the geochemical data as found in the AREVA database with the original results reported by the geochemical laboratory.

12.2 Laboratory Internal Quality Assurance and Quality Control (from Koning et al., 2007)

The SRC Geoanalytical laboratory uses a Laboratory Management System (LMS) for Quality Assurance. The LMS operates in accordance with ISO/IEC 17025:2005 (CAN-P-4E) “General Requirements for the Competence of Mineral Testing and Calibration laboratories” and is also compliant to CAN-P-1579 “Guidelines for Mineral Analysis Testing Laboratories”. The laboratory continues to participate in proficiency testing programs organized by CANMET (CCRMP/PTP-MAL).

The Quality Control measures carried out by the laboratory (SRC, 2007) include a minimum of one of the following measures that can be applied to each batch of samples to assure the quality of the results generated: (i) sample preparation QC checks, (ii) analysis of Certified Reference Standards, (iii) analysis of in-house reference materials and standards, (iv) traceable calibration standards for instrumentation, (v) analysis of duplicate samples, (vi) analysis of blind QC samples, (vii) spiking of samples to monitor process recoveries, (viii) proficiency testing and inter-laboratory comparisons, and (ix) QC monitoring.

The Quality Control measures applied to all methods within the laboratory have been established to ensure that they are compliant with the requirements of ISO/IEC 17025:2005. The Quality Control measures which are applied may vary from method to method and are selected on their suitability. All Quality Control measures applied at the laboratory are checked by supervisory and Quality Assurance personnel prior to reporting results. If results are found to be outside Quality Control limits, actions are taken to ensure that the samples are reprocessed and the required quality limits are met. Analytical blanks, replicates, and certified rock standards are systematically inserted in each group of samples and their results are reported to the client (SRC, 2007). An analytical replicate (“repeat”) is inserted after every 25 samples (i.e. one per batch). This repeat sample is a repetition of the analytical measurement from the same solution. It is not a true replicate sample with analysis of a different solution made from a different aliquot of the same sample pulp.

Certified standard materials are analyzed routinely with results for a standard appearing approximately every 15 samples. The standards used for the ICP-OES package include in-house standards CG515 and LS4, both of which are in pulp form and which are prepared in the same manner as the other samples. There is no trace of results for internal blank samples in the assay reports that we have compiled.

The authors have directly reviewed with SRC representatives these laboratory procedures, and confirm that they meet industry standards.

12.3 External Laboratory Check Analyses

As an external check of the SRC uranium assay and ICP results, UEX selected pulps from geochemical samples collected from drill core at Shea Creek ranging from trace to >10% U_3O_8 for additional check analyses at other laboratories. Check analyses were performed at two independent labs, as is documented below, on a representative selection of original pulps. The pulps, which are stored at the SRC lab, were pulled and sent to the independent labs by SRC, at the request of AREVA.

12.3.1 Assay by Delayed Neutron Counting

A total of 258 samples were analyzed at SRC's Delayed Neutron Counting ("DNC") laboratory, a separate lab facility located at SRC Analytical Laboratories, 422 Downey Road, Saskatoon, Saskatchewan. Of these, 52 samples from this selected set had previously returned analyses from SRC grading >1,000 ppm uranium by Total Digestion, so the reanalyzed set comprises 20.2% of the total 258 samples grading >0.1% U_3O_8.

SRC (2008) documents the method summary for the DNC technique as follows. Samples have been previously prepared as pulps for ICP Total Digestion and the pulps are used for the DNC analysis. The pulps are irradiated in a Slowpoke 2 nuclear reactor for a given period of time. After irradiation, the samples are pneumatically transferred to a counting system equipped with 6 helium-3 detectors. After a suitable delay period, neutrons emanating from the sample are counted. The proportion of delayed neutrons emitted is related to the uranium concentration. For low concentrations of uranium, a minimum of 1 gram of sample is preferred, and larger sample sizes (2 to 5 g) will improve precision. Several blanks and certified uranium ore standards are analyzed to establish the instrument calibration. In addition, control samples are analyzed with each batch of samples to monitor the stability of the calibration. At least one in every 10 samples is analyzed in duplicate. The results of the instrument calibration, blanks, control samples and duplicates must be within specified limits otherwise corrective action is required.

There are 258 assay pairs that used both ICP-MS Total Digestion and the DNC assay techniques. Similar to the ICP-MS Total Digestion versus ICP-OES uranium assay comparison (Figure 12.1 left), the DNC results show a strong positive correlation (R^2 = 0.9974) with the ICP-MS Total Digestion results, (Figure 12.3, left). The DNC technique is not used in any estimation but as a check between assay techniques and labs.

A Thompson-Howarth plot reveals that 234 assay pairs between ICP-MS Total Digestion and DNC are within 10% precision (Figure 12.3, left). A total of three samples have a precision greater than 50% (Figure 12.4). In addition, the DNC results show a strong positive correlation (R^2 = 0.999) with the ICP-OES uranium assay results (Figure 12.3, right).

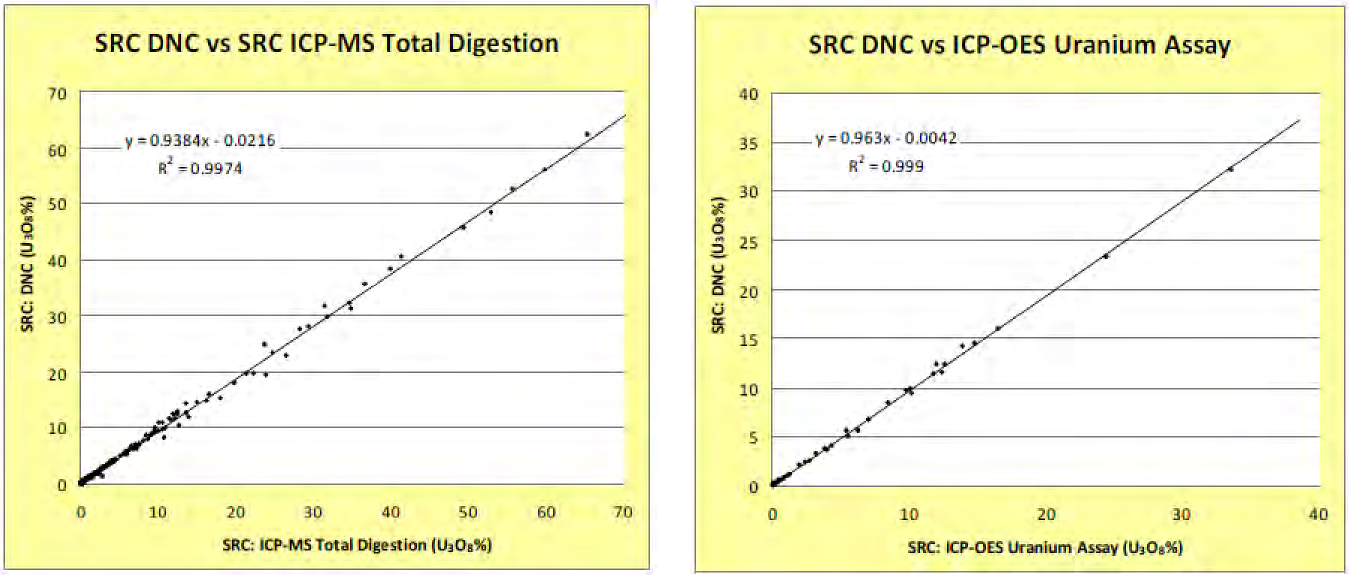


Figure 12.3: Thompson-Howarth plots of SRC versus DNC analyses from SRC. Left: Scatter plot of SRC DNC assay technique versus SRC ICP-MS total digestion in corresponding geochemical samples. **Right:** Scatter plot of SRC DNC assay technique versus SRC ICP-OES uranium assay in corresponding geochemical samples.

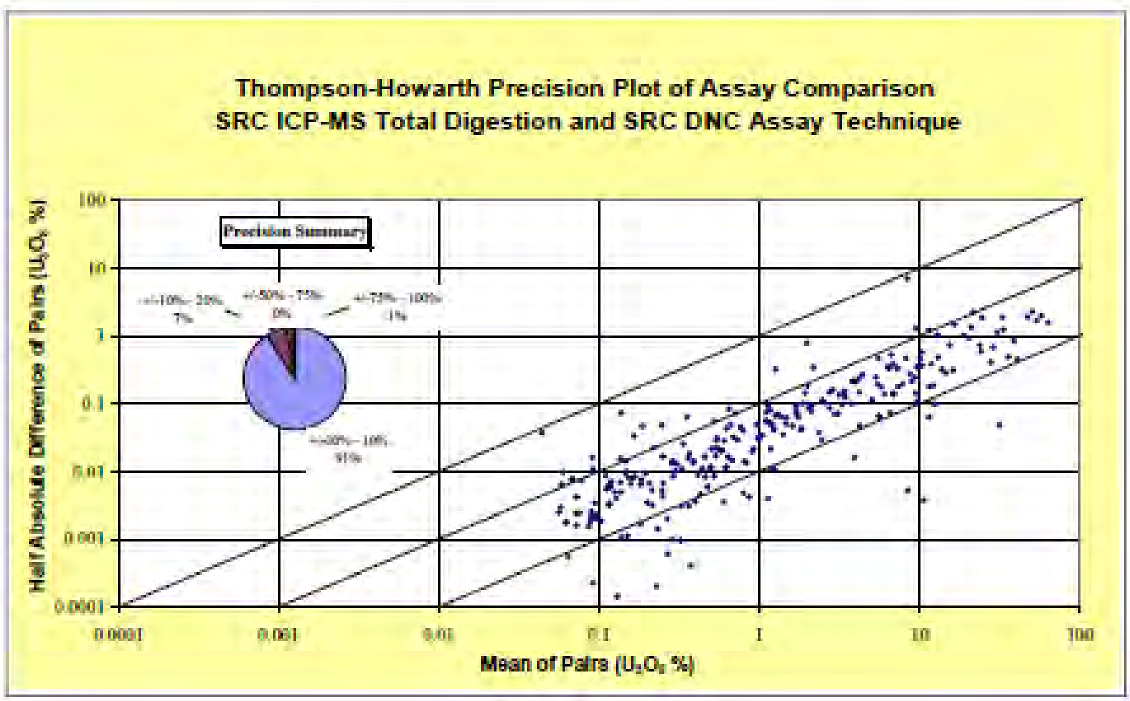


Figure 12.4: Thompson-Howarth precision plot of assay comparison between SRC ICP-MS total digestion and SRC DNC assay technique. The three diagonal lines represent 100%, 10% and 1% precision (left to right).

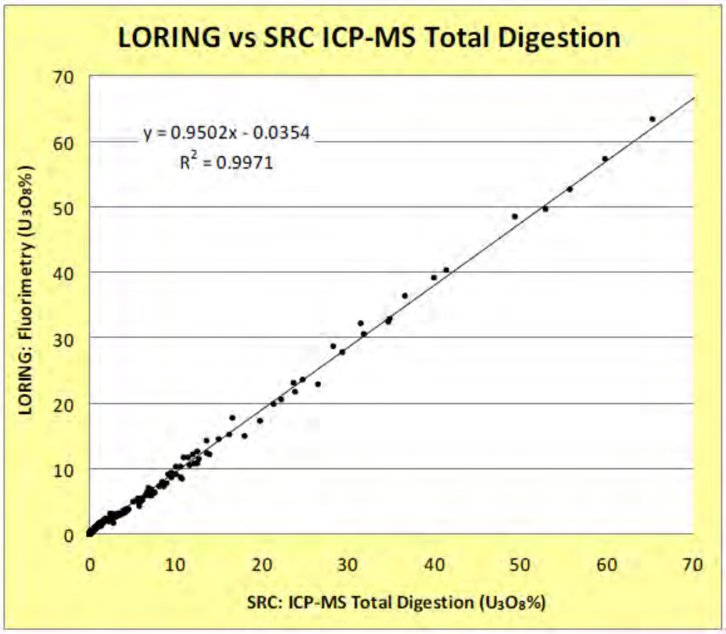


Figure 12.5: Scatter plot of Loring fluorimetry versus SRC ICP-MS total digestion in corresponding geochemical samples

12.3.2 Loring Laboratories Ltd. Check Analyses

A total of 258 sample pulps previously analyzed by SRC were submitted to Loring Laboratories Ltd., of Calgary, Alberta ("Loring") for uranium analysis by fluorimetry. The population of samples analyzed by Loring represents a wide range of grades from 0.001% to >10% U_3O_8. Figure 12.5 reveals a strong positive correlation (R^2 = 0.9971) with negligible scatter of sample pairs.

12.5 Geochemical and Drill Hole Collar Coordinate Verification by Palmer (2010)

In addition to the quality control assessments documented above, Palmer (2010) reports results of independent geochemical sampling, GPS validation of drill hole collar coordinates, and database validation, all of which were deemed to be satisfactory. See Palmer (2010) for documentation.

12.6 Conclusion: Qualified Person's Opinion on Data Verification and Validity

The author's review of the data verification indicates that the logging, sampling, shipping, sample security assessment, analytical procedures, inter-laboratory assay validation and validation by different techniques are comparable to industry standard practices.

ITEM 13.0: MINERAL PROCESSING AND METALLURGICAL TESTING

No representative mineral processing or metallurgical testing studies have yet been completed on the Shea Creek deposits. Cazakoff and Tennant (2008) report results of a limited scoping leach trial on uranium recovery from a small sample suite of quartered drill core from the Kianna basement, Kianna unconformity, Anne basement and Anne unconformity mineralization which was performed at AREVA's McClean Lake mining facility. Although high recoveries were obtained, this study cannot be considered representative as the selection of samples for this suite was severely skewed to intervals with highly anomalous Ni-As-Mo concentrations that are atypical of the mineralization, particularly for the Kianna composites. Future studies should be selected from suites with representative typical uranium and other elemental concentrations.

Mineralogical studies (e.g. Reyx, 1995) and review of the geochemical database suggest that uranium mineralization is dominantly in pitchblende with associated secondary uranium minerals and low Ni-arsenide abundance, which has very similar mineralogical and paragenetic characteristics to mineralization in other deposits in the region, including Cluff Lake, which have been, or are currently being mined.

ITEM 14.0: MINERAL RESOURCE ESTIMATES

14.1 Previous Mineral Resource Estimates

No historical resources have been completed on the Shea Creek property.

In May 2010, UEX released an initial mineral resource estimate for the Kianna, Anne and Colette deposits on the Shea Creek property, which is documented in a Technical Report with an effective date of May 26, 2010 (Palmer, 2010) which was filed on SEDAR at *www.sedar.com* on July 9, 2010. The 2010 Shea Creek resource estimate was prepared by K. Palmer, P.Geo., of Golder Associates Ltd. ("Golder"), an independent Qualified Person as defined by N.I. 43-101. The resource estimate utilized 361 diamond drill holes (totaling 292,100 m) which were drilled from 1992 to 2009, and was based on mineralized wireframe models from the deposits that were constructed using a minimum cut-off grade of 0.05% U_3O_8. The resource estimate was by ordinary kriging using the DATAMINE Studio 3 software package. The resource database utilized primarily uranium geochemical analyses from the Saskatchewan Research Council (SRC) Geoanalytical Laboratories in Saskatoon, Saskatchewan. In cases where geochemical analyses were not available due to incomplete sampling or core recovery issues, downhole gamma probe data were used to calculate equivalent uranium grades based on correlation of assays with previous probe results. A total of 678 dry bulk density samples, representing all rock types and mineralization styles from the three Shea Creek deposits, form a comprehensive basis for the density component of the resource estimate.

The 2010 uranium mineral resource estimate for the three Shea Creek deposits, Kianna, Anne and Colette, at a cut-off grade of 0.30% U_3O_8 total:

- **63.57 million pounds of U_3O_8** in the Indicated mineral resource category comprising 1,872,600 tonnes grading 1.54% U_3O_8
- **24.53 million pounds of U_3O_8** in the Inferred mineral resource category comprising 1,068,900 tonnes grading 1.04% U_3O_8

The updated, current resource utilizing drilling results to December 31, 2012 is documented below.

14.2 Current Mineral Resource Estimate

14.2.1 Introduction

This report documents an updated mineral resource estimate for the Shea Creek deposits, supporting a UEX news release dated April 17, 2013. This current mineral resource estimate was completed by James N. Gray, P.Geo., of Advantage Geoservices Limited, who is responsible for this section of the report. This resource estimate is an update of the resource by Golder that was reported in May of 2010 (Palmer, 2010). It is based on the results of 477 diamond drill holes and directional cuts received to December 31, 2012. The previous report documented resources in three deposit areas at Shea Creek. In addition to new drill results at Colette and Kianna, this resource includes the 58B Area for the first time; the Anne Deposit has been updated, but has seen no additional drilling since the 2010 resource.

14.2.2 Available Data

This resource update includes results from 477 diamond drill holes to December 31, 2012. Figure 14.1 shows drill hole locations as well as the limits of the resource model and the relative locations of the four Shea Creek deposit areas. The block model geometry is listed in Table 14.1.

Figure 14.1: Available drilling, resource model limits and deposit areas

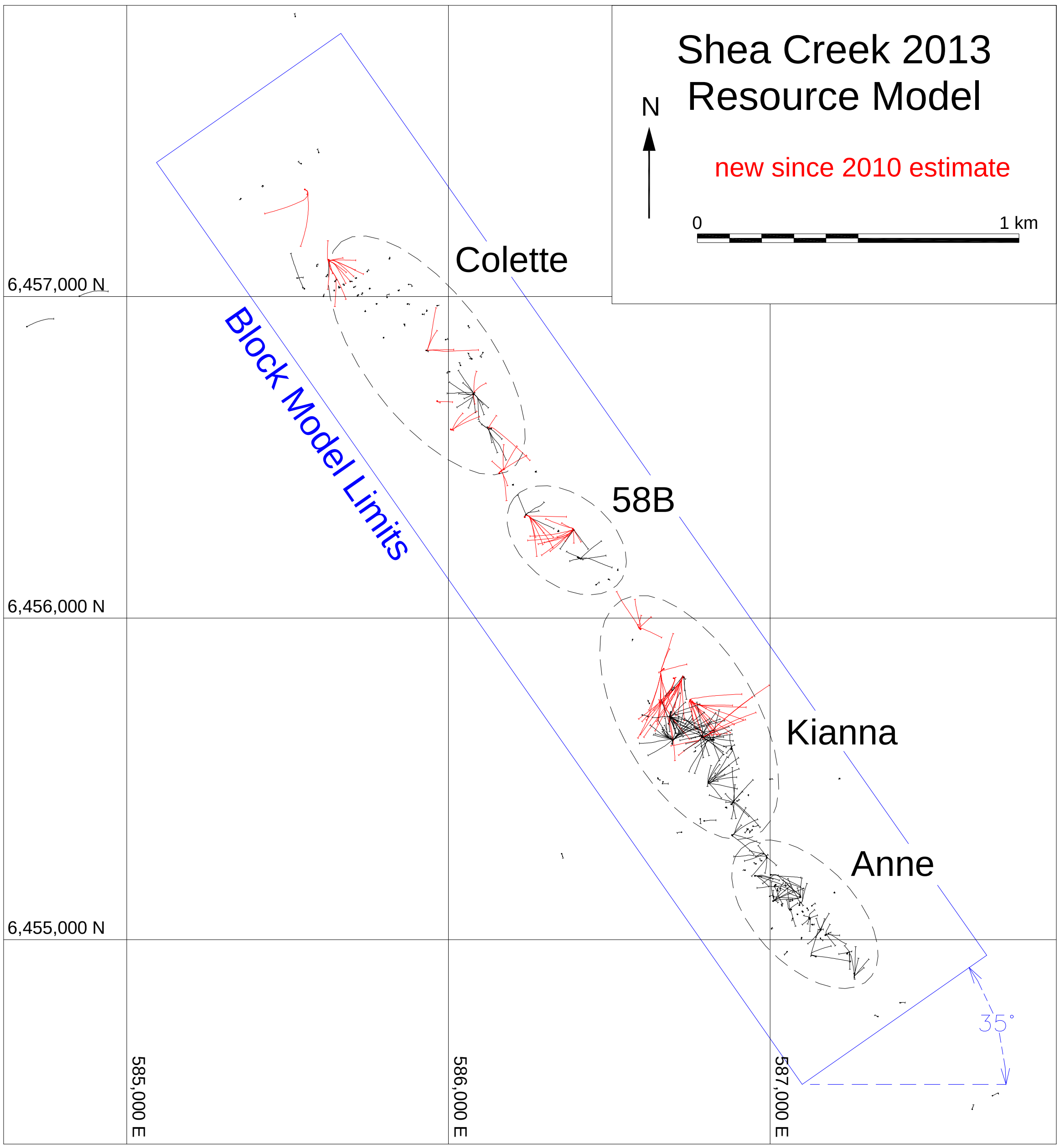


Table 14.1: Resource block model setup

Block:	X	Y	Z
origin[1]	587,100	6,454,550	-250
size	5	5	5
n blk	140	700	80

Rotation: 35° counter-clockwise about origin

7,840,000 blocks

(1) SW model top, block edge

The mineral resource estimate primarily utilized uranium geochemical analyses from the Saskatchewan Research Council (SRC) Geoanalytical Laboratories in Saskatoon, Saskatchewan. The principal geochemical analytical methods used for uranium analysis on the Shea Creek samples are ICP-MS (Inductively Coupled Plasma Mass Spectroscopy) for samples with grades lower than 1,000 ppm U, and U3O8 uranium assay by ICP-OES (Inductively Coupled Plasma Optical Emission Spectroscopy) for samples determined by ICP-MS to contain uranium concentrations higher than 1,000 ppm U. In cases where geochemical analyses were not available due to incomplete sampling or core recovery issues, downhole gamma probe data were used to calculate equivalent uranium grades obtained using a DHT27-STD gamma probe which collects continuous readings along the length of the drill hole. Probe results are calibrated using an algorithm calculated from the comparison of probe results against geochemical analyses in previous drill holes in the Shea Creek area. Table 14.2 summarizes analyses used and mean grades, by data source.

Table 14.2: Analysis type summary

Source	Outside Wireframes		Inside Wireframes		Total
	Length (m)	%U_3O_8	Length (m)	%U_3O_8	Length (m)
ICP-OES	230	0.360	1,770	1.575	2,000
ICP-MS	2,160	0.026	4,320	0.667	6,480
Probe	21,550	0.011	1,960	0.297	23,520
Total	**23,940**	**0.016**	**8,050**	**0.776**	**32,000**

14.2.3 Geological Model

Controls for grade interpolation were based on solids prepared by UEX personnel. These wireframes were generated to bound zones, above a 0.05% U_3O_8 cut-off grade, within the geologic context of perched, unconformity and basement style mineralization. This technique is consistent with industry practice for this deposit type. A total of 41 wireframes were used for this resource estimate; zones were referenced based on the coding system outlined in Table 14.3.

Nine of the wireframe volumes were excluded from resource tabulation due to their weak drill support. These zones were intersected by three or four holes over generally short intersection lengths and would be logical targets for future exploration drilling.

Table 14.3: Geological model and drill support

Area	Min. Type	Block Code	Volume (1,000s m^3)	Holes	No. of Composites
Colette	Perched	110	18.5	3	31
	Unconformity	121	453.9	60	608
		122	18.7	2	36
	Basement	131	107.3	17	263
		132	12.8	3	30
58B	Unconformity	221	140.6	32	223
	Basement	232	69.2	13	117
		233	12.1	10	29
		234	5.8	3	16
		235	0.8	4	4
		236	3.4	5	16
		237	4.6	4	9
Kianna	Perched	311	23.3	21	267
		312	2.4	6	37
		313	3.7	5	43
	Unconformity	222	43.9	8	50
		320	418.8	152	1,330
	Basement	231	79.0	6	48
		331	494.4	56	2,406
		332	91.9	17	182
		333	27.9	23	181
		334	40.2	8	78
		335	19.0	21	77
		336	12.1	5	18
		337	1.1	8	22
		338	5.3	5	38
		339	1.9	4	5
		340	1.2	3	8
		341	112.2	8	129
		342	133.0	6	105
		343	165.9	26	573
Anne	Perched	410	8.7	7	27
	Unconformity	420	308.3	89	822
	Basement	431	50.1	13	368
		432	84.1	33	213
		434	4.6	4	8
		435	8.7	6	53
		436	33.7	12	99
		437	16.4	5	28
		438	49.0	21	110
		439	8.4	9	39
Zone not included in resource due to lack of drill support.					8,746

14.2.4 Bulk Density

A total of 678 dry bulk density samples, representing all rock types and mineralization styles from the Shea Creek deposits, form the basis for the density component of the mineral resource estimate. This is the same dataset as was used for the 2010 mineral resource estimate.

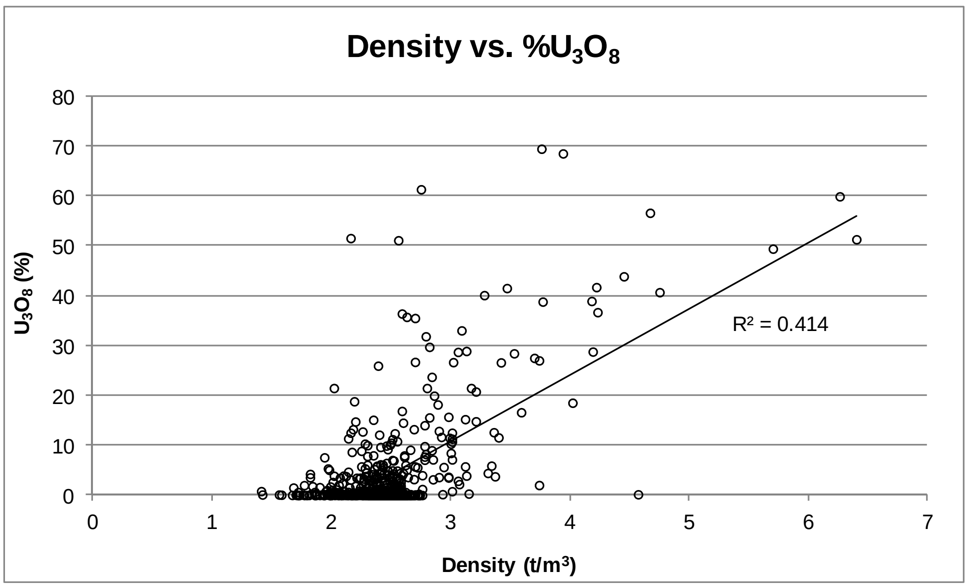
The strong correlation between density and U_3O_8 grade dictated that a density weighted interpolation was appropriate (see Figure 14.2).

Correlation developed for the 2010 estimate recognized the grade-density relationship as a function of degree of clay alteration logged in the drill core. Density values were calculated for all sample intervals based on the 2010 parameters as listed in Table 14.4.

Table 14.4: Density calculation per sample interval

Clay Ateration Index		Density (t/m^3)
Low-Med	≤ 2.5	0.0305 * %U_3O_8 + 2.4472
High	> 2.5	0.0111 * %U_3O_8 + 2.1997

Figure 14.2: Density-grade correlation



14.2.5 Interval Compositing

Sample data was composited to a downhole length of 1.0 m within intervals of intersection with the 0.05% U_3O_8 grade wireframes. Essentially all assay intervals were less that 1.0 m in length; 82% were 0.5 m. The choice of a 1.0 m composite interval removed some of the variability of shorter samples while being better suited to estimation of some of the thin zones of unconformity mineralization, than would a longer interval. A total of 135 composites shorter than 0.25 m were removed from the estimation dataset once it was determined that this did not fundamentally affect grade statistics by wireframe zone.

Table 14.5 lists statistics by zone for the DU and U_3O_8 variables; both show a high degree of variability as indicated by the high coefficients of variation (CV) and the large difference between mean and median values. This variability illustrates the need for restriction on interpolation at the high end of the DU population.

Table 14.5: Composite statistics

Area	Min. Type	Block Code	Count	DU (Density x %U_3O_8) Mean	Q_1	$Q_{2\ (median)}$	Q_3	Max	CV	U_3O_8 (%) Mean	Q_1	$Q_{2\ (median)}$	Q_3	Max	CV
Colette	Perched	110	31	1.046	0.040	0.077	0.676	8.041	2.0	0.416	0.016	0.031	0.274	3.152	2.0
	Unconformity	121	608	1.321	0.089	0.347	1.295	28.710	2.1	0.523	0.037	0.144	0.527	10.333	2.0
		122	36	0.530	0.030	0.088	0.300	4.469	1.9	0.212	0.012	0.036	0.123	1.781	1.9
	Basement	131	263	0.786	0.023	0.077	0.451	23.128	2.9	0.315	0.009	0.033	0.193	7.468	2.7
		132	30	0.835	0.020	0.065	0.283	13.258	3.0	0.321	0.009	0.029	0.116	4.894	2.9
58B	Unconformity	221	223	1.170	0.046	0.207	0.686	30.171	2.6	0.453	0.019	0.085	0.281	10.095	2.4
	Basement	232	117	1.049	0.015	0.122	0.840	28.474	3.1	0.424	0.007	0.053	0.338	9.962	2.9
		233	29	1.807	0.039	0.178	0.760	23.059	2.5	0.665	0.016	0.079	0.309	7.613	2.4
		234	16	0.212	0.040	0.055	0.269	1.477	1.7	0.096	0.018	0.025	0.122	0.669	1.7
		235	4	0.541	0.211	0.305	0.636	1.432	1.1	0.220	0.086	0.124	0.258	0.580	1.1
		236	16	0.267	0.084	0.219	0.303	1.354	1.2	0.110	0.034	0.089	0.124	0.548	1.2
		237	9	0.825	0.123	0.281	0.897	4.248	1.6	0.328	0.050	0.115	0.365	1.613	1.5
Kianna	Perched	311	267	10.459	0.089	0.539	6.838	301.764	2.9	3.400	0.036	0.220	2.862	67.077	2.4
		312	37	4.293	0.124	0.226	0.867	95.982	3.9	1.244	0.051	0.092	0.352	24.546	3.6
		313	43	1.781	0.030	0.144	0.981	16.862	2.0	0.680	0.012	0.059	0.397	5.910	2.0
	Unconformity	222	50	0.404	0.090	0.162	0.328	4.456	1.9	0.163	0.037	0.068	0.134	1.741	1.9
		320	1,330	2.412	0.074	0.273	1.018	171.685	4.0	0.854	0.032	0.113	0.417	41.048	3.3
	Basement	231	48	0.269	0.000	0.057	0.206	2.791	2.3	0.109	0.000	0.023	0.091	1.108	2.2
		331	2,406	1.282	0.011	0.045	0.239	183.566	5.2	0.513	0.005	0.020	0.106	59.255	4.7
		332	182	0.453	0.007	0.048	0.391	6.957	2.2	0.186	0.003	0.022	0.169	2.635	2.1
		333	181	0.283	0.022	0.072	0.188	7.989	2.7	0.122	0.009	0.031	0.085	3.551	2.7
		334	78	1.378	0.010	0.055	0.272	23.772	3.3	0.537	0.004	0.023	0.120	9.161	3.3
		335	77	1.657	0.032	0.238	0.910	38.790	3.1	0.666	0.015	0.108	0.369	15.281	3.0
		336	18	0.236	0.000	0.158	0.340	0.940	1.2	0.104	0.000	0.069	0.152	0.426	1.2
		337	22	0.094	0.031	0.086	0.112	0.446	1.0	0.040	0.014	0.038	0.049	0.182	1.0
		338	38	0.555	0.008	0.131	0.442	5.799	2.1	0.225	0.003	0.057	0.184	2.290	2.0
		339	5	0.587	0.278	0.664	0.726	1.060	0.6	0.239	0.114	0.270	0.296	0.431	0.6
		340	8	0.392	0.057	0.177	0.265	2.166	1.8	0.158	0.023	0.072	0.108	0.867	1.8
		341	129	4.026	0.043	0.197	1.214	126.764	3.5	1.255	0.017	0.080	0.492	32.087	3.1
		342	105	1.434	0.017	0.101	0.378	56.723	4.3	0.478	0.007	0.041	0.154	15.796	3.8
		343	573	0.859	0.001	0.051	0.340	71.004	4.7	0.359	0.000	0.023	0.154	27.354	4.4
Anne	Perched	410	27	0.432	0.132	0.244	0.700	1.438	1.0	0.175	0.054	0.100	0.283	0.583	1.0
	Unconformity	420	822	4.987	0.141	0.442	1.590	233.365	4.0	1.579	0.060	0.189	0.676	50.859	3.2
	Basement	431	368	1.677	0.010	0.058	1.191	43.406	2.5	0.708	0.004	0.026	0.493	17.356	2.4
		432	213	0.779	0.015	0.135	0.522	28.025	3.7	0.323	0.006	0.059	0.223	11.687	3.5
		434	8	0.398	0.089	0.255	0.302	1.853	1.5	0.179	0.041	0.113	0.134	0.839	1.5
		435	53	0.303	0.017	0.080	0.401	3.576	2.0	0.135	0.008	0.035	0.182	1.606	2.0
		436	99	0.605	0.007	0.018	0.222	15.307	3.0	0.263	0.003	0.008	0.101	6.432	2.9
		437	28	0.258	0.057	0.148	0.256	1.685	1.5	0.110	0.026	0.067	0.113	0.680	1.4
		438	110	1.481	0.021	0.225	1.589	30.567	2.5	0.590	0.009	0.097	0.679	10.972	2.3
		439	39	0.637	0.013	0.058	0.407	9.323	2.7	0.273	0.005	0.026	0.175	4.139	2.7

Zone not included in resource due to lack of drill support.

14.2.6 Spatial Analysis

Variography was completed on the DU variable by mineralized zone. The number of composites was insufficient in many zones to calculate meaningful experimental semi-variograms. In those cases data was grouped and the resultant variogram model was rotated to best fit, and applied to each zone in the group. Variogram models are listed in Table 14.6

Table 14.6: Variogram models

Wireframe Zone		Direction (dip/azimuth)	Nugget Effect	Spherical Component 1		Spherical Component 2	
				Sill	Range(m)	Sill	Range(m)
110		00/068	0.10	0.56	3	0.34	5
		6/338			3		10
		-84/338			4		16
121		00/148	0.14	0.46	33	0.40	40
		-6/058			17		28
		84/058			3		7
122		00/163	0.14	0.46	33	0.40	40
		-11/073			17		28
		79/073			3		7
221		00/129	0.14	0.46	33	0.40	40
		-18/039			17		28
		72/039			3		7
222		00/155	0.14	0.46	33	0.40	40
		-10/065			17		28
		80/065			3		7
311		00/000	0.10	0.56	3	0.34	5
		-33/270			3		10
		57/270			4		16
312		00/112	0.10	0.56	3	0.34	5
		26/022			3		10
		-64/022			4		16
313		00/161	0.10	0.56	3	0.34	5
		-19/071			3		10
		71/071			4		16
320		00/135	0.14	0.46	33	0.40	40
		-15/045			17		28
		75/045			3		7
331		08/079	0.38	0.29	5	0.33	15
		54/338			5		11
		35/175			3		7
343		-72/124	0.28	0.5	2	0.22	11
		-10/003			22		33
		15/090			8		18
410		00/115	0.10	0.56	3	0.34	5
		06/025			3		10
		-84/025			4		16
420		00/136	0.14	0.46	33	0.40	40
		-16/046			17		28
		74/046			3		7
431		-10/043	0.47	0.17	11	0.36	19
		-76/270			11		12
		10/315			7		11
Basement1 Colette & 58B	131, 132, 232, 233, 234, 235, 236, 237	05/150	0.45	0.24	46	0.31	65
		85/330			5		12
		00/240			28		55
Basement2 Kianna	231, 332 to 342	35/140	0.30	0.36	18	0.34	37
		55/320			3		5
		00/230			15		30
Basement3 Anne	431 to 439	20/135	0.38	0.32	19	0.30	41
		70/315			3		11
		00/225			12		23

14.2.7 Grade Capping

Grade capping is used to control the impact of extreme, outlier high-grade samples on the overall resource estimate. Due to variability in sample lengths, especially the very short (10 cm) probe sample intervals, the decision was made to cap composite data as opposed to assays.

Capping was applied to the composited DU variable by wireframe zone. Cap levels were determined through analysis of histograms and log-probability plots. Table 14.7 summarizes the capping process listing cap levels ('Max' column on right hand side), the number of composites capped in each zone as well as the impact in terms of reducing CVs.

Table 14.7: Capped composite statistics

Area	Min. Type	Block Code	Count	DU (Density x $\%U_3O_8$)			Capped: DU			
				Mean	Max	CV	*n* Cap	Mean	Max	CV
Colette	Perched	110	31	1.046	8.041	2.0	2	0.974	6.000	1.9
	Unconformity	121	608	1.321	28.710	2.1	3	1.303	20.000	2.0
		122	36	0.530	4.469	1.9	0	0.530	4.469	1.9
	Basement	131	263	0.786	23.128	2.9	7	0.582	5.000	1.9
		132	30	0.835	13.258	3.0	4	0.203	0.800	1.3
58B	Unconformity	221	223	1.170	30.171	2.6	5	1.035	10.000	2.1
	Basement	232	117	1.049	28.474	3.1	4	0.668	5.000	1.8
		233	29	1.807	23.059	2.5	1	1.357	10.000	2.0
		234	16	0.212	1.477	1.7	0	0.212	1.477	1.7
		235	4	0.541	1.432	1.1	0	0.541	1.432	1.1
		236	16	0.267	1.354	1.2	0	0.267	1.354	1.2
		237	9	0.825	4.248	1.6	0	0.825	4.248	1.6
Kianna	Perched	311	267	10.459	301.764	2.9	4	8.696	90.000	2.1
		312	37	4.293	95.982	3.9	3	0.642	3.000	1.4
		313	43	1.781	16.862	2.0	2	1.487	8.000	1.8
	Unconformity	222	50	0.404	4.456	1.9	2	0.329	2.000	1.4
		320	1,330	2.412	171.685	4.0	4	2.324	100.000	3.6
	Basement	231	48	0.269	2.791	2.3	2	0.237	2.000	2.0
		331	2,406	1.282	183.566	5.2	2	1.241	100.000	4.7
		332	182	0.453	6.957	2.2	3	0.422	4.000	1.9
		333	181	0.283	7.989	2.7	2	0.251	3.000	2.1
		334	78	1.378	23.772	3.3	4	0.689	7.000	2.5
		335	77	1.657	38.790	3.1	2	1.331	15.000	2.4
		336	18	0.236	0.940	1.2	0	0.236	0.940	1.2
		337	22	0.094	0.446	1.0	0	0.094	0.446	1.0
		338	38	0.555	5.799	2.1	1	0.508	4.000	1.9
		339	5	0.587	1.060	0.6	0	0.587	1.060	0.6
		340	8	0.392	2.166	1.8	0	0.392	2.166	1.8
		341	129	4.026	126.764	3.5	3	3.286	50.000	2.8
		342	105	1.434	56.723	4.3	1	1.370	50.000	4.1
		343	573	0.859	71.004	4.7	0	0.859	71.004	4.7
Anne	Perched	410	27	0.432	1.438	1.0	0	0.432	1.438	1.0
	Unconformity	420	822	4.987	233.365	4.0	5	4.673	130.000	3.6
	Basement	431	368	1.677	43.406	2.5	0	1.677	43.406	2.5
		432	213	0.779	28.025	3.7	6	0.448	3.000	1.6
		434	8	0.398	1.853	1.5	0	0.398	1.853	1.5
		435	53	0.303	3.576	2.0	0	0.303	3.576	2.0
		436	99	0.605	15.307	3.0	6	0.428	3.000	2.0
		437	28	0.258	1.685	1.5	0	0.258	1.685	1.5
		438	110	1.481	30.567	2.5	3	1.124	7.000	1.6
		439	39	0.637	9.323	2.7	5	0.209	0.700	1.2
Zone not included in resource due to lack of drill support. Distance resriction applied to high-grade interpolation.			**8,746**	**2.015**	**301.764**	**5.0**	**86**	**1.831**	**130.000**	**4.4**

In some of the volumetrically significant zones, capping alone did not reduce CVs to a low enough level to be comfortably used for grade estimation. In these cases a further step of restricted distance interpolation was imposed to reduce the impact of anomalously high values. The DU value at which a restricted interpolation distance was imposed was also based on the log-probability plots. In most cases there is a break at the upper end of the distribution where continuity on the curve is apparent but there is a break from the lower-grade portion. The range over which these high grades were interpolated was determined by examining histograms of the number of sample pairs versus sample separation for composites above each high-grade transition value. Parameters are listed in Table 14.8.

Table 14.8: High-grade interpolation restriction

Block Code	DU_Cap	High-Grade Transition	
		DU	Range (m)
311	90	60	30
320	100	40	40
331	100	50	55
335	15	4	35
341	50	16	35
342	50	16	20
343	--	16	25
420	130	100	40
431	--	20	10

The impact of capping and high-grade restriction was quantified by comparing results against an uncapped model. In total, 11% U_3O_8 was removed when high DU values were capped/restricted as outlined in and Table 14.7 and Table 14.8. While this level may seem high in comparison to other commodities, it is reasonable given the skewed nature of the grade distribution at Shea Creek.

14.2.8 Grade Interpolation

The correlation between density and %U_3O_8 necessitated the estimation of two block model variables: density x %U_3O_8 product (DU) and density (D). Capping and high-grade distance restriction was applied to the DU variable. To ensure consistency, blocks impacted by the removal of high-grade samples (past limits of high-grade interpolation range) also had corresponding samples removed for the interpolation of density. Also, density was interpolated using the same variogram model as was used in kriging DU.

DU and D were estimated by ordinary kriging (OK). Sample search in the perched and basement zones was spherical with a 75 m radius. Search in the unconformity units was anisotropic and oriented to best fit each zone. Search details are provided in Table 14.9. Search parameters were established iteratively through examining plans and sections through interpolated blocks as well as through comparison to nearest neighbor models.

All zone contacts were treated as hard boundaries. Grades were not interpolated across gaps between the various wireframes. U_3O_8 block grades were calculated by dividing the two interpolated variables; U=DU/D.

Table 14.9: Interpolation parameters

Min. Type	Samples Used			Search Radii (m)		
	Min	Max	mph[1]	X	Y	Z
Perched	3	15	5	75	75	75
Unconformity	3	15	5	*anisotropic see below*		
Basement	3	15	9	75	75	75
Unconformity	**Direction (dip/azimuth)**			**Search Radii (m)**		
Zone	**X**	**Y**	**Z**	**X**	**Y**	**Z**
121	00/148	-06/058	84/058	100	35	20
122	00/163	-11/073	79/073	50	100	25
221	00/130	-18/040	72/040	125	40	20
222	00/155	-10/065	80/065	100	70	15
320	00/145	-15/055	75/055	100	25	15
420	00/136	-16/046	74/046	100	35	15

(1)mph=maximum number of samples per hole

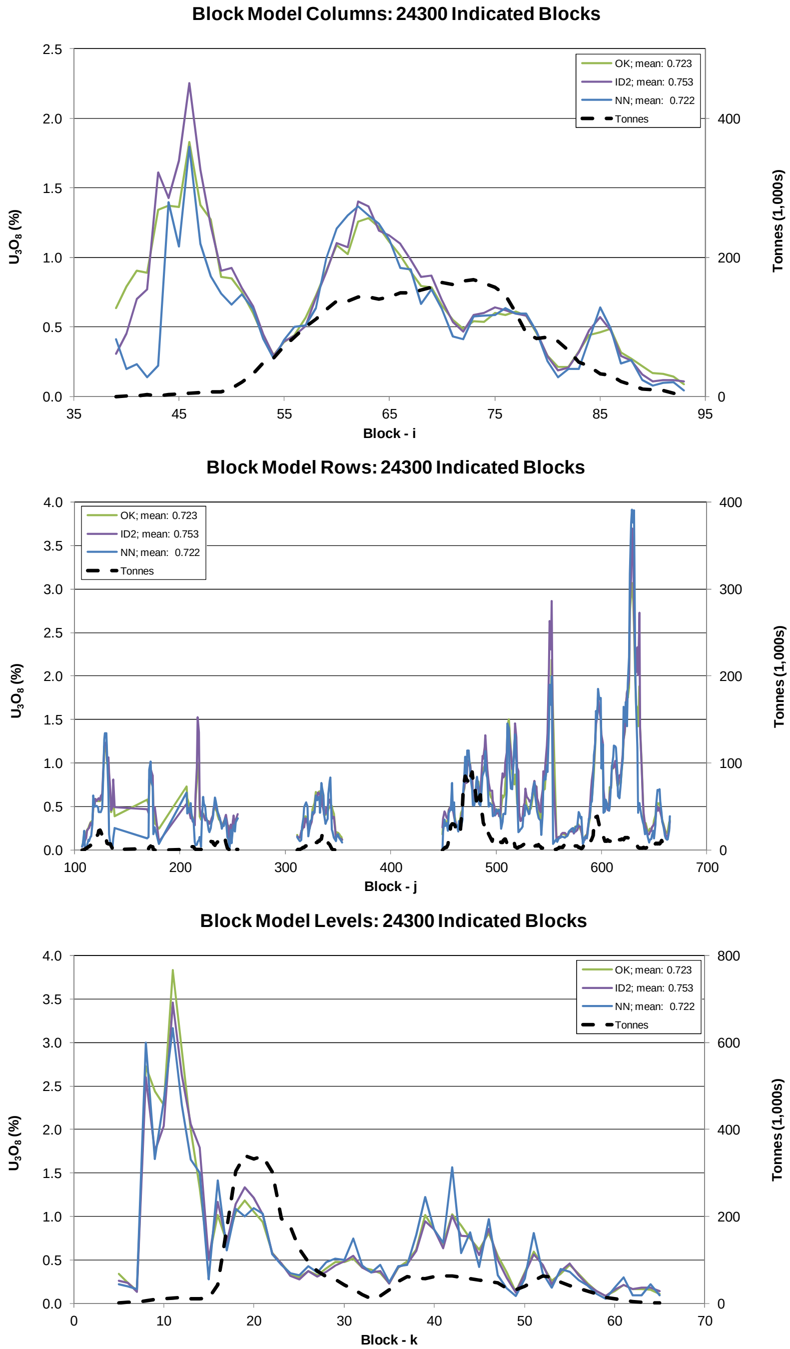
14.2.9 Model Validation

Two additional models were estimated for the purpose of validation of the OK results. A nearest neighbor (NN) and an inverse distance squared (ID2) model were interpolated using the same zone matching, capping and high-grade restriction as the OK estimate. The NN model used a 1 m block height reflecting the composite length. The NN model was re-blocked to the resource model grid (5:1) and used to check various aspects of the estimation process.

Estimated grades were validated to ensure consistency with supporting composite data. Visual checks, comparing sample points and block grades on plans and sections, showed good correlation.

More quantitative validation was made by generating swath plots along block model rows, columns, and levels to spatially compare the resource model against NN results. Plots were generated globally, by mineralization type, by deposit and by resource class. Plots of all Indicated blocks, presented in Figure 14.3, show good spatial correlation between estimated blocks and the underlying composite data.

Figure 14.3: Swath plots comparing Indicated OK, ID2 and NN estimates



14.2.10 Resource Classification and Tabulation

This estimate was classified based on spatial parameters related to available composite data. These parameters include the minimum number of holes used to estimate grade; the maximum average distance to samples used to estimate grade; and the distance first, second and third closest points used to estimate grade. Blocks were classified as Indicated or Inferred Mineral Resource.

Classification criteria were established iteratively by visually assessing the impact of parameter adjustment on resultant maps of classified blocks. The goal was to have reasonably cohesive volumes rather than a scattered patchwork of indicated and inferred blocks, while assigning the indicated category in a justified pattern among and beyond sample locations.

The application of classification parameters is listed in Table 14.10. Blocks were initially coded as indicated if they were: estimated by at least two holes, the first within 10 m of the block and the second within 20 m; estimated by at least three holes, the closest within 10 m and the third closest within 30 m or within an average of 30 m of at least four holes.

Blocks were then potentially reclassified based on proportion of resource class in each zone. If less than 10% of a wireframe zone was of one class (indicated of inferred), the entire zone was assigned the other class. This step had very minor impact; 49 blocks in five zones were reclassified as indicated and 273 blocks in six zones as inferred.

Table 14.10: Resource classification criteria

Category	No. Holes	Max. Distance to (metres)			Avg. Distance
	min.	closest	2nd closest	3rd closest	max. (metres)
Indicated	2	10	20		
	3	10		30	
	4				30
Inferred	remainder estimated				

The Shea Creek Mineral Resource estimate is presented in Table 14.11.

A cut-off of 0.3 %U_3O_8 is felt to be reasonable in terms of sustaining underground production and processing costs at realistic uranium price assumptions. The resource is tabled by deposit area in Table 14.12.

Table 14.11: Shea Creek Mineral Resource Estimate - by cut-off grade

Cut-off (% U_3O_8)	Indicated			Inferred		
	Tonnes	U_3O_8 (%)	U_3O_8 (lbs)	Tonnes	U_3O_8 (%)	U_3O_8 (lbs)
0.1	3,227,300	1.018	72,458,000	2,601,600	0.586	33,616,000
0.2	2,546,400	1.252	70,253,000	1,802,900	0.781	31,053,000
0.3	**2,067,900**	**1.484**	**67,663,000**	**1,272,200**	**1.005**	**28,192,000**
0.4	1,714,100	1.719	64,952,000	996,700	1.188	26,101,000
0.5	1,464,800	1.935	62,492,000	784,500	1.388	23,999,000
0.6	1,273,200	2.144	60,178,000	618,000	1.615	22,001,000
0.7	1,109,700	2.364	57,838,000	517,000	1.804	20,562,000
0.8	981,700	2.575	55,726,000	442,600	1.982	19,339,000
0.9	885,800	2.762	53,931,000	386,000	2.148	18,281,000
1.0	795,800	2.966	52,047,000	340,100	2.310	17,323,000
1.5	521,300	3.883	44,625,000	215,600	2.937	13,961,000

Table 14.12: Shea Creek Mineral Resource Estimate - by deposit area at 0.3% U_3O_8 cut-off grade

Property (@ 0.3% U3O8)	Indicated			Inferred		
	Tonnes	U_3O_8 (%)	U_3O_8 (lbs)	Tonnes	U_3O_8 (%)	U_3O_8 (lbs)
Colette	327,800	0.786	5,680,000	493,200	0.716	7,780,000
58B	141,600	0.774	2,417,000	83,400	0.505	928,000
Kianna	1,034,500	1.526	34,805,000	560,700	1.364	16,867,000
Anne	564,000	1.992	24,760,000	134,900	0.880	2,617,000
Total	**2,067,900**	**1.484**	**67,663,000**	**1,272,200**	**1.005**	**28,192,000**

ITEMS 15.0 THROUGH 22.0: ADDITIONAL REQUIREMENTS FOR ADVANCED PROPERTY TECHNICAL REPORTS

These items are not applicable to the Shea Creek property.

ITEM 23.0: ADJACENT PROPERTIES

As previously discussed, the northern boundary of the Shea Creek property lies 13 km to the south of the past producing Cluff Lake uranium camp, which produced 64.2 million lbs U_3O_8 between 1980 and 2002 (Koning and Robbins, 2006). The authors have been unable to verify the information and this production is not necessarily indicative of the mineralization on the Shea Creek property. While much of the mining infrastructure has now been reclaimed, excellent all weather road access, and a year round camp for accommodation are still retained on site. The area also has a long record of environmental study through the mining and reclamation work. Geologically, the Cluff Lake deposits have similarities to the Shea Creek mineralization and further underscore this area as a significant uranium district.

The northern portions of the Colette Deposit extend nearly to the northern boundary of the Shea Creek property with the adjacent Douglas River Property. The Douglas River Property, shown on Figure 4.2, like Shea Creek, forms part of the UEX-AREVA joint venture in which UEX has earned a 49% interest. Geophysical surveys and drilling indicate that the Saskatoon Lake Conductor and its hosting pelitic gneiss unit continue northward of this boundary. Several widely spaced drill holes have tested the conductor on the Douglas River property. These include drill hole DGS-10, drilled 300 m north-northwest of the Colette Deposit, which intersected 3.7 m grading 0.53% eU_3O_8 uranium mineralization at the sub-Athabasca unconformity at a vertical depth of approximately 690 m, consisting of sooty pitchblende and coffinite along fracture planes and within the matrix of a hematized tectonic breccia (Robbins et al., 1997b; Koning et al., 2007). Base metals mineral such as pyrite, galena, sphalerite, and arsenopyrite accompany the mineralization. Other drill holes on this line (L96+00N): DGS-9 (210m east of DGS-10) and DGS-11 (80m west of DGS-10) display anomalous U partial, Pb, and Ni at the unconformity (Robbins et al., 1997b), which are positive geochemical indicators of potential nearby mineralization. Drill holes are widely spaced in this area, and exploration potential of this area is high for extensions of Shea Creek mineralization. A diamond drilling program was completed in 2011 consisting of one pilot drill hole (DGS-16) and two directional cuts (DGS-16-1 and SGS-

16-2) for a total of 1,775 metres. The holes tested the southeast trend from previous drill hole DGS-10. No significant mineralization was intersected (French and Robbins, 2011b).

The Shea Creek property is also continuous with the Erica property to the west (Figure 4.2), which also forms part of the UEX-AREVA Joint Venture. Drilling of conductive features on this property has confirmed the presence of graphitic conductors with associated faults. Weak mineralization of 442 ppm U was intersected within a fault zone in hole ERC-03.

ITEM 24.0: OTHER RELEVANT DATA AND INFORMATION

No other significant information concerning the Shea Creek deposits and their local area is considered relevant to the report at this time. As is documented in Rhys et al. (2009), initial geotechnical hydrological and environmental studies were commenced in 2007 to initiate potential for advanced exploration and preliminary economic assessment of the Shea Creek project. These studies are still underway. Future preliminary assessments, pre-feasibility and feasibility studies will address environmental, economic and cultural aspects of potential future development of the deposits.

ITEM 25.0: INTERPRETATION AND CONCLUSIONS

Exploration at the Shea Creek property both prior to and since UEX's involvement has successfully accomplished the objective of discovery of new uranium mineralization and has demonstrated the high exploration potential of other areas. Since the beginning of UEX's involvement in 2004, the Kianna Deposit has been discovered and outlined, areas between Kianna and Anne found to contain significant mineralization, additional high grade mineralization has been intersected at the Anne Deposit, basement mineralization has been intersected in the South Colette area, and the 58B Deposit has been discovered and partially delineated between Kianna and Colette. To date, drilling has identified a 3 km strike length of the Saskatoon Lake Conductor in the northern Shea Creek property in which at least four uranium deposits are developed.

The updated uranium mineral resource estimate for the four Shea Creek deposits, Kianna, Anne, Colette and 58B, at a cut-off grade of 0.30% U_3O_8 total:

- 67.66 million pounds of U_3O_8 in the Indicated mineral resource category comprising 2,067,900 tonnes grading 1.48% U_3O_8
- 28.19 million pounds of U_3O_8 in the Inferred mineral resource category comprising 1,272,200 tonnes grading 1.01% U_3O_8

This estimate confirms that Shea Creek remains the largest undeveloped uranium resource in the Athabasca Basin. Mineral resources at Shea Creek are open in many areas and have excellent potential to expand significantly as drilling continues.

The majority of the resources are from the Kianna and Anne deposits, where a significant portion of the resources lie in basement rocks beneath the Athabasca unconformity. Breakdowns of the resources by deposit at cut-off grades of 0.3% U_3O_8 and 1.0% U_3O_8 are provided in Tables 25.1 and 25.2, respectively.

Table 25.1: Breakdown of the contribution of each deposit at Shea Creek to the total mineral resource estimate at a 0.3% U_3O_8 cut-off grade

Deposit		Tonnes	Grade U_3O_8 (%)	U_3O_8 (lbs)		Tonnes	Grade U_3O_8 (%)	U_3O_8 (lbs)
Kianna	Indicated	1,034,500	1.526	34,805,000	Inferred	560,700	1.364	16,867,000
Anne		564,000	1.992	24,760,000		134,900	0.880	2,617,000
Colette		327,800	0.786	5,680,000		493,200	0.716	7,780,000
58B		141,600	0.774	2,417,000		83,400	0.505	928,000
TOTALS		**2,067,900**	**1.484**	**67,663,000**		**1,272,200**	**1.005**	**28,192,000**

Table 25.2: Breakdown of the contribution of each deposit at Shea Creek to the total mineral resource estimate at a 1.0% U_3O_8 cut-off grade

Deposit		Tonnes	Grade U_3O_8 (%)	U_3O_8 (lbs)		Tonnes	Grade U_3O_8 (%)	U_3O_8 (lbs)
Kianna	Indicated	446,800	2.796	27,544,000	Inferred	233,700	2.530	13,036,000
Anne		242,500	3.890	20,795,000		19,100	3.308	1,392,000
Colette		70,700	1.684	2,624,000		85,800	1.508	2,852,000
58B		35,900	1.370	1,084,000		1,500	1.280	43,000
TOTALS		**795,800**	**2.966**	**52,047,000**		**340,100**	**2.310**	**17,323,000**

Note that at the 1.0% cut-off grade, most of the contained uranium mineralization that is reported at the lower cut-off grade is retained, and is in particular largely focused in the Kianna and Anne deposits.

The changes in the mineral resource since the 2010 estimate reflect substantial increases in the basement mineral resources of the Kianna Deposit and new mineral resources from the recently defined 58B Deposit. However, these are also partly offset by mineral resource losses at Colette due to the restriction of mineralization in central and southern parts of that deposit based on new infill drilling there. The project to date has been successful in that the drilling carried out to date has defined a significant mineral resource which merits ongoing exploration. The new resources estimate reflects the following changes at each deposit since the 2010 resource estimate:

Kianna Deposit: Discovery of new zones, including the Kianna East Zone, and drilling expansion of other zones has resulted in a very substantial increase in the Indicated basement-hosted resources at Kianna. Most of the current resource at Kianna is now in basement rocks. Areas of basement mineralization, particularly on the north side of Kianna and in the Kianna East Zone are still open and will be targeted by ongoing drilling.

Anne Deposit: No new drilling was conducted at Anne since the 2010 resource estimate. The small drop in the Anne resource base reflects a more restricted approach to the interpolation of high grade mineralization due to a high coefficient of variation of uranium grade distribution in parts of the deposit. Further geological interpretation and potential infill drilling, particularly in the Anne basement mineralization where the widely spaced drilling restricts the ability to interpret the continuity of higher grades, may be undertaken to address this issue. Review of the basement mineralization here has also identified additional areas for potential expansion.

Colette Deposit: Since the previous resource, infill and step-out drilling was conducted throughout the Colette area. While this drilling identified a thick unconformity-hosted pod in the north part of the Colette Deposit that now represents much of the Colette resource base, infill drilling in parts of the central and southern parts of the deposit failed to establish continuity of mineralization in some of the higher grade parts of the central Colette unconformity mineralization and restricted distribution of some of the previously interpreted basement zones there. Basement mineralization in the southern parts of Colette still has potential for expansion, and continuations of the Shea Creek trend to the north of Colette on the Douglas River property are still open.

58B Deposit: The new resource here adds to the total Shea Creek inventory. Basement mineralization there has only been tested by widely spaced drill holes, and the mineralization remains open in several areas.

Other Considerations

Through most of the Shea Creek deposits, where flat lying unconformity mineralization or shallow dipping concordant basement mineralization are developed, interpretation and drill hole placement provide representative cuts of the mineralization. However, in steeper dipping areas of mineralization in the Kianna basement zone, there is some difficulty in tracing the continuity of higher grade mineralization internal to the zone. This may require additional future drilling, but given the steep dips required for holes to these depths, such issues may only be addressed through future underground drilling where shallower drill hole angles and accurate closely spaced drilling can be achieved.

ITEM 26.0: RECOMMENDATIONS

The Shea Creek property is highly prospective for discovery of additional uranium mineralization. Several levels of exploration potential are apparent. In known deposits, potential exists to expand the dimensions of high grade pods between, or outward from previous drill holes. The high grade Kianna East zone of basement mineralization which was discovered in 2012 is open in many directions, and will form a principal target for future follow-up drilling. Exploration potential exists for step-out drilling into open areas of mineralization, for example to expand the Kianna basement zone and to test open mineralization down dip in the Colette area. Gaps in drilling still lie along the main prospective corridor between Anne and Kianna, and between Kianna and Colette also have high potential for new discoveries for both mineralization at the unconformity and in basement rocks. Outside of the 3 km strike length hosting the know deposits, drilling along the Saskatoon Lake Conductor is sparse and widely spaced, despite previous intersections of mineralization and anomalous alteration in several areas to the southeast of the Anne Deposit and to the northwest of the Colette Deposit.

Elsewhere on the Shea Creek property, with little or no drilling, exploration is at early stages and targets are mainly geophysical (EM conductors and resistivity). Prospective areas of low resistivity with similar signature to the area around the Anne, Kianna and Colette deposits occur along the Klark Lake conductor in northwestern parts of the property. Low resistive zones lying between the Saskatoon Lake and Clark Lake conductors also form prospective targets that could represent alteration along discordant fault zones. Expansion of resistivity surveys to other parts of the property is recommended to further identify other low resistivity targets.

An exploration program at the Shea Creek property for 2013 is proposed to explore two principal areas:

1) To the southeast of the Anne Deposit, where initially a 50.4 km geophysical Tensor Magnetotelluric ("MT") survey to further refine the position and potential areas of offset along northeast-trending faults crosscutting the SLC that may control the position of mineralized zones. This is proposed to be followed by drilling totaling approximately 5,000 m to test for up to 2 km southeast of the Anne Deposit where there are only four previous drill holes in this area, including drill hole SHE-24 which intersected low grade uranium mineralization. The drilling will assess untested gaps between existing drill holes, some of which are more than 800 m apart, and also test areas where initial drill holes intersected only the margins of the prospective corridor. Costs for this program, are estimated at approximately C$3.1 million, of which UEX, as 49% partner, is responsible for C$1.52 million.

2) Drill testing of basement targets proximal to the Kianna Deposit, including testing of open areas of mineralization in the Kianna East Zone. A budget of C$2.0 million is proposed for this program, which will be funded by UEX under the terms of the Additional Expenditure agreement that was announced in a news release dated April 10, 2013. Approximately seven drill holes are proposed for this program, which could test lateral and up dip extensions of the Kianna East Zone, as well as the potential for new zones and extensions of known zones in the northern portions of the Kianna basement mineralization.

These recommendations represent only part of ongoing, future programs as numerous targets both in the areas of mineralization, where near mineralization targets and open areas of mineralization are apparent along the northern part of the property, and at a property scale, where much of the extent of the Saskatoon Lake Conductor and parallel conductive units remain untested.

ITEM 27.0: REFERENCES

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Dates and Signatures Page

Name of Report:

Technical Report on the Shea Creek Property, Northern Saskatchewan, with an Updated Mineral Resource Estimate

Commissioned by:

UEX Corporation

SIGNED	May 31, 2013
R. Sierd Eriks	Date
SIGNED	May 31, 2013
David Rhys	Date
SIGNED	May 31, 2013
James Gray	Date
SIGNED	May 31, 2013
S. Hasegawa	Date

Certificates of Qualified Persons

R. Sierd Eriks
295 Huckleberry Lane, Qualicum Beach, B.C. V9K 2N3

Certificate of Author

I, R. Sierd Eriks, P.Geo., as an author of this report, titled "Technical Report on the Shea Creek property, northern Saskatchewan, with an updated mineral resource estimate", prepared for UEX Corporation and dated May 31, 2013, do hereby certify that:

1. I am the Vice President of Exploration, employed by UEX Corporation with its principal office at Suite 1007 – 808 Nelson Street, Vancouver, BC, V6Z 2H2, Canada.
2. I am a member in good standing of the Association of Professional Engineers and Geoscientists of British Columbia, Saskatchewan and Manitoba.
3. I am a graduate of Boston University with a B.A. (1976) in geology.
4. I have practiced my profession continuously since 1980, and have been involved in mineral exploration in Canada.
5. As a result of my experience and qualification, I am a qualified person as defined in N.I. 43-101.
6. I am not independent of the issuer applying the test set out in section 1.5 of N.I. 43-101.
7. The foregoing report is based on my personal knowledge of the geology of the property gained through on site investigation of diamond drill core, and review of exploration results and documentation. I last visited the project area on July 21 and 22, 2012.
8. I have read N.I. 43-101 and Form 43-101F1, and the technical report has been prepared in compliance with both.
9. As of the effective date of the Technical Report, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.
10. I contributed to the preparation of Items 1.1 to 1.4, 1.6; Items 2 to 12 inclusive, and Items 23 to 27 inclusive of this report.

Dated at Vancouver, British Columbia, this 31st day of May, 2013.

SIGNED

"R. Sierd Eriks"
(signed and sealed)

R. Sierd Eriks, B.A., P. Geo.
Vice-President, Exploration
UEX Corporation

David Alan Rhys
14180 Greencrest Drive, Surrey, B.C. V4P 1L9

Certificate of Author

I, David A. Rhys, P.Geo., as an author of this report, titled "Technical Report on the Shea Creek property, northern Saskatchewan, with an updated mineral resource estimate", prepared for UEX Corporation and dated May 31, 2013, do hereby certify that:

1. I am a consulting geologist employed by Panterra Geoservices Inc. at 14180 Greencrest Drive, Surrey, British Columbia, Canada and am president of Panterra Geoservices Inc., a geological consulting firm incorporated in the Province of British Columbia.
2. I am a member in good standing of the Association of Professional Engineers and Geoscientists of British Columbia and the Association of Professional Geoscientists of Ontario.
3. I am a graduate of the University of British Columbia with a B.Sc. (1989) and a M.Sc. (1993) in geology.
4. I have practiced my profession continuously since graduation in 1989, and have been involved in mineral exploration and mine geology evaluation in Canada, Australia, Mexico, Russia, China, U.S.A., New Zealand, Tanzania, Ecuador, Greece, Turkey, Senegal, and Peru.
5. As a result of my experience and qualification, I am a qualified person as defined in N.I. 43-101.
6. I am not independent of the issuer applying the test set out in section 1.5 of N.I. 43-101.
7. The foregoing report is based on my personal knowledge of the geology of the property gained through on site investigation of diamond drill core, and review of exploration results and documentation. I last visited the project area between July 21 and 22, 2012.
8. I have read N.I. 43-101 and Form 43-101F1, and the technical report has been prepared in compliance with both.
9. As of the effective date of the Technical Report, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.
10. I am responsible for preparation of Items 1.1 to 1.4, 1.6; Items 2 to 12 inclusive, and Items 23 to 27 inclusive of this report.

Dated at Vancouver, British Columbia, this 31st day of May, 2013.

SIGNED

"David Rhys"
(signed and sealed)

David Rhys, M.Sc., P.Geo.
Panterra Geoservices Inc.

James N. Gray
1051 Bullmoose Trail, Osoyoos, B.C. V0H 1V6

Certificate of Author

I, James N. Gray, P.Geo., as an author of this report entitled "Technical Report on the Shea Creek property, northern Saskatchewan, with an updated mineral resource estimate", prepared for UEX Corporation and dated May 31, 2013, do hereby certify that:

1. I am a consulting geologist employed by Advantage Geoservices Limited and residing at 1051 Bullmoose Trail, Osoyoos, BC.
2. I am a Professional Geoscientist registered in good standing with the Association of Professional Engineers and Geoscientists of British Columbia (#27022).
3. I am a graduate of the University of Waterloo, with a B.Sc. in Geology in 1985.
4. I have practiced my profession continuously since 1985. My experience includes resource estimation work at operating mines as well as base and precious metal projects in North and South America, Europe, Asia and Africa.
5. As a result of my experience and qualification, I am a qualified person as defined in N.I. 43-101.
6. I am independent of the Issuer applying all the tests in Section 1.5 of NI 43-101.
7. I visited the subject property on July 21 and 22, 2012.
8. I have read NI 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.
9. As of the effective date of the Technical Report, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.
10. I am responsible for the preparation of supporting content in Item 1.5, Item 14, and portions of Item 25 of the Technical Report.
11. I have not had prior involvement or experience with the project that is the subject of the Technical Report.

Dated at Osoyoos, British Columbia, this 31st day of May, 2013.

SIGNED

"James N. Gray"
(signed and sealed)

James N. Gray, P.Geo
Advantage Geoservices Limited

Steve Hasegawa
3746 Sunset Street, Burnaby, B.C. V5G 1T2

Certificate of Author

I, Steve Hasewaga, P.Geo., as an author of this report, titled "Technical Report on the Shea Creek property, northern Saskatchewan, with an updated mineral resource estimate", prepared for UEX Corporation and dated May 31, 2013, do hereby certify that:

1. I am a consulting geologist currently residing at 3746 Sunset Street, Burnaby, British Columbia, Canada.
2. I am a member in good standing of the Association of Professional Engineers and Geoscientists of British Columbia.
3. I am a graduate of the Simon Fraser University with a B.Sc. (2007) in geology.
4. I have practiced my profession continuously since 2006, and have been involved in mineral exploration in Canada.
5. As a result of my experience and qualification, I am a qualified person as defined in N.I. 43-101.
6. I am not independent of the issuer applying the test set out in section 1.5 of N.I. 43-101.
7. The foregoing report is based on my personal knowledge of the geology of the property gained through on site investigation of diamond drill core, and review of exploration results and documentation.   I last visited the project area on July 21 and 22, 2012.
8. I have read N.I. 43-101 and Form 43-101F1, and the technical report has been prepared in compliance with both.
9. As of the effective date of the Technical Report, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.
10. I contributed to the preparation of Items 7 and 12 of this report.

Dated at Vancouver, British Columbia, this31st day of May, 2013.

SIGNED

"Steve Hasegawa"
(signed and sealed)

Steve Hasegawa, B.Sc., P.Geo.
Geological Consultant