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TECHNICAL REPORT ON THE ROOK I PROPERTY, SASKATCHEWAN, CANADA

NI 43-101 Report

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April 13, 2016

Report Control Form

Document Title	Technical Report on the Rook I Property, Saskatchewan, Canada
Client Name & Address	NexGen Energy Ltd. Suite 3150, 1021 West Hastings Street, Vancouver, BC, V6E 0C3

Document Reference	Project #2579	***Status & Issue No.***	FINAL Version	
Issue Date	April 13, 2016			

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Report Distribution

Name	No. of Copies
Client	
RPA Filing	1 (project box)

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1 SUMMARY

EXECUTIVE SUMMARY

Roscoe Postle Associates Inc. (RPA) was retained by NexGen Energy Ltd. (NexGen) to prepare an independent technical report on the Rook I Property (the Property), located in Saskatchewan, Canada. This technical report conforms to National Instrument 43-101 *Standards of Disclosure for Mineral Projects* (NI 43-101). The purpose of this report is to support the disclosure of an initial Mineral Resource estimate for the Arrow deposit located on the Property, made by NexGen in a news release dated March 3, 2016. RPA visited the Property from January 19 to 20, 2016, during an active drilling campaign.

NexGen is a Canadian exploration company, primarily engaged in the acquisition, evaluation, and development of uranium properties with a view to commercial production. NexGen is listed on the TSX Venture Exchange (symbol NXE) and on the OTCQX Best Markets (symbol NXGEF).

NexGen acquired the Property in December 2012 and has a 100% interest in 32 dispositions with a total area of 35,065 ha. Six of the claims are subject to a 2% net smelter return royalty (NSR) and a 10% production carried interest, however, the Arrow deposit is not located on any of these claims and therefore is not subject to the NSR or production carried interest.

A Mineral Resource estimate for the Arrow deposit, based on 99 diamond drill holes totalling 67,547 m, was completed by RPA. Of the 99 holes completed, 17 holes were abandoned before reaching their target, are considered restarts, and were not used in the resource estimate. Inferred Mineral Resources total 3.48 million tonnes grading 2.63% U_3O_8 containing 201.9 million pounds of U_3O_8. The Inferred Mineral Resource estimate for the Arrow deposit, as of January 14, 2016, is summarized in Table 1-1.

TABLE 1-1 MINERAL RESOURCE SUMMARY – JANUARY 14, 2016
NexGen Energy Ltd. – Arrow Deposit

Structure	Tonnage (t)	Grade (U_3O_8 %)	Contained Metal (U_3O_8 lb)
A1	380,000	0.50	4,200,000
A2 Low Grade	1,480,000	0.85	27,600,000
A2 High Grade	410,000	13.26	120,500,000
A3	1,130,000	1.90	47,300,000
A4	80,000	1.35	2,300,000
Total	**3,480,000**	**2.63**	**201,900,000**

Notes:
1. CIM definitions were followed for Mineral Resources.
2. Mineral Resources are reported at a cut-off grade of 0.25% U_3O_8 based on a long-term price of US$65 per lb U_3O_8 and estimated mining costs.
3. A minimum mining width of 2.0 m was used.
4. Numbers may not add due to rounding.

CONCLUSIONS

The drilling completed by NexGen from 2014 to 2015 on the Property has resulted in the discovery and rapid growth of the Arrow deposit. Uranium mineralization was intersected in 80 of 82 holes and NexGen was able to expand the footprint of high grade mineralization extensively. The discovery of the Arrow deposit was the result of drill testing a circular gravity anomaly (gravity low) with an approximate diameter of one kilometre coincident with a steep magnetic gradient and a disrupted electromagnetic (VTEM) conductor. It is thought that the gravity low present at Arrow is the result of desilicification of the sandstone above the deposit and clay alteration (illite/dravite/sudoite) of the basement rocks within and adjacent to the deposit.

The Arrow deposit consists of multiple high grade, basement hosted uranium lenses concentrated within four horizons, known as the A1 through A4 shears. It currently has dimensions of 645 m (strike) by 235 m (width) by 820 m (vertical). Dravite breccia veins are key indicators of mineralization at Arrow.

The drilling completed by NexGen in 2015 also identified a new uranium discovery at Bow located approximately 3.7 km northeast of the Arrow deposit.

NexGen's protocols for drilling, sampling, analysis, security, and database management meet industry standard practices. The drill hole database was verified by RPA and is suitable for Mineral Resource estimation work.

Using drill hole data available as of January 14, 2016, RPA estimated an Inferred Mineral Resource at the Arrow deposit of 3.48 million tonnes grading 2.63% U_3O_8 containing 201.9 million pounds of U_3O_8.

RECOMMENDATIONS

The Rook 1 Property hosts a significant uranium deposit and merits considerable exploration and development work. The primary objectives are to expand the Arrow Mineral Resource and explore elsewhere on the Property. The proposed Phase I budget of C$29 million is listed in Table 1-1. Phase II totalling C$65 million is contingent on results from Phase I.

TABLE 1-1 PROPOSED BUDGET
NexGen Energy Ltd. – Rook I Property

Phase and Item	C$M
Phase I	
Infill and expansion drilling (70 holes for 35,000 m)	14.0
Drilling on the Patterson corridor (20 holes, 10,000 m)	4.0
Drilling southwest and northeast of the Arrow deposit (30 holes, 20,000 m)	8.0
Drilling at the Bow discovery (5 holes, 2,500 m)	1.0
Metallurgical Test Study	0.5
Site Characterization and Geotechnical Study	1.0
Preliminary Economic Assessment and resource update	0.5
Total Phase I	**29.0**
Phase II	
Permitting and Engineering Studies	8.0
Pre-feasibility Study	2.0
Additional exploration drilling	55.0
Total Phase II	**65.0**

Details on the Phase I proposed budget are provided below.

<u>Phase I Drilling</u>

1. Winter/Spring 2016 (C$15 million)
   a. Arrow deposit infill and expansion drilling: 40 holes, 20,000 m – estimated $8.0 million
   b. Drilling southwest and northeast of the Arrow deposit: 15 holes, 10,000 m – estimated $4.0 million
   c. Drilling on the Patterson corridor: 10 holes, 5,000 m – estimated $2.0 million
   d. Drilling at the Bow discovery: 5 holes, 2,500 m – estimated $1.0 million (ice conditions permitting)

2. Summer/Fall 2016 (C$12 million)
    a. Arrow deposit infill and expansion drilling: 30 holes, 15,000 m – estimated $6.0 million.
    b. Drilling southwest and northeast of the Arrow deposit: 15 holes, 10,000 m – estimated $4.0 million.
    c. Drilling on the Patterson corridor: 10 holes, 5,000 m – estimated $2.0 million

As part of the infill drilling campaign, RPA recommends that a drilling density study program be undertaken on the Arrow deposit to assist in upgrading the Inferred Mineral Resource to Indicated category. The program should be designed with the following parameters:

- Use a 25 m staggered drilling pattern to ensure estimation of block grades are within 20 m or less of the mineralized intersections.
- Complete infill drilling from the southeast to evaluate the distance between the hanging wall and footwall contact points.
- Use a 25 m or less drill hole spacing on the northeast end of the high grade zone to test for apparent bifurcation of mineralization towards northeast.

<u>Metallurgical Test Study (part of Phase I)</u> – Estimated C$0.5 million

RPA recommends that a mineralogy and metallurgical study be completed on the Arrow deposit in support of preparing a Preliminary Economic Assessment (PEA) or Pre-feasibility Study (PFS) on the deposit. The objectives of this study should include: (1) investigating the metallurgical characteristics of the uranium mineralization and its relationships to the gangue mineralogy, (2) assessing how these characteristics and relationships vary spatially and between different rock types, and (3) developing a uranium leaching process with optimum leaching efficiency.

<u>Site Characterization and Geotechnical Study (part of Phase I)</u> – Estimated C$1.0 million

Also in support of preparing a PEA or PFS, RPA recommends that site characterization and geotechnical studies be completed. The objectives of these studies should include: (1) collecting baseline environmental and wildlife data, (2) assessing site suitability for mine infrastructure, and (3) assessing the geotechnical characteristics of the Arrow deposit and its host lithologies.

TECHNICAL SUMMARY

PROPERTY DESCRIPTION AND LOCATION

The Rook I Property is located in Northern Saskatchewan, approximately 40 km east of the Alberta border. The Property lies approximately 150 km north of the town of La Loche and 550 km north-northwest of the City of Prince Albert. The Rook I Property covers parts of National Topographic System (NTS) map sheets 74F07, 74F10, and 74F11.

OWNERSHIP

The Property consists of 32 contiguous mineral dispositions (claims) totalling 35,065 ha. NexGen acquired the Rook I Property in December 2012 and has a 100% interest in the claims. Six of the claims are subject to: (i) a 2% net smelter return royalty (NSR); and (ii) a 10% production carried interest, however, the Arrow deposit is not located on any of these claims. The NSR may be reduced to 1% upon payment of C$1 million. The 10% production carried interest provides for the owner to be carried to the date of commercial production.

All claims are in good standing until at least 2019 and the claim that hosts the Arrow deposit, S-113927, is in good standing until 2035.

GEOLOGY AND MINERALIZATION

The Rook I Property is located along the southwestern rim of the Athabasca Basin and straddles the Athabasca/basement unconformity. The Lloyd Domain basement rocks are northeast trending Archean and Aphebian granitic and metasedimentary gneisses, the latter containing graphitic biotite gneisses within which uranium mineralization can occur. Overlying these are flat lying sandstones with conglomeratic horizons that make up the mid-Proterozoic Athabasca Group. In the western part of the Rook I Property, remnants of Devonian sandstones are occasionally seen in drill core. These are overlain by flat lying Cretaceous Mannville Group mudstones, siltstones, and sandstones with coaly horizons. Thick sandy glacial deposits cover all of the Rook I Property area.

Uranium mineralization is known to occur in three areas of the Rook I Property: (i) the area of the Bow discovery (BO-15-10 returned 0.20% U_3O_8 over 9.0) and historical drill holes PAT-04 (171 ppm U over 1.5 m) and PAT-13 (64 ppm U over 9.0 m); (ii) the intersection in NexGen's drill hole RK-13-05 (330 ppm U over 4.0 m) at a downhole depth of 220 m (Area A); (iii) the Arrow deposit where extensive uranium mineralization occurs in multiple holes. In the PAT and Bow holes, the uranium mineralization occurs in intense clay and chlorite altered graphitic biotite gneisses below the unconformity. Mineralization in RK-13-05 occurs as uraninite in a structural zone with clay, chlorite, hematite, and silica alteration. In the Arrow deposit, mineralization occurs as locally dense accumulations of massive uraninite in close association with clay and graphitic mylonites.

EXPLORATION STATUS

Since acquiring the Rook I Property in December 2012, NexGen has carried out exploration consisting of ground gravity surveys, a ground DC resistivity survey, an airborne magnetic-radiometric-very low frequency (VLF) survey, an airborne versatile time-domain electromagnetic (VTEM) survey, and a radon-in-water geochemical survey. Diamond drilling programs have also tested several targets on the Rook I Property which resulted in the discovery of the Arrow deposit with drill hole AR-14-01 (formerly known as RK-14-21) in February 2014.

During the winter 2014 program, the Arrow deposit was discovered by drill hole AR-14-01 (previously RK-14-21). Mineralization at the Arrow deposit was defined in an area of 645 m (strike) x 215 m (width) x 820 m (vertical, starting from 100 m below surface down to 920 m), and is open in all directions. The deposit consists of at least four steeply dipping shears, named A1 through A4, which are locally host to high grade uranium mineralization

During the winter 2015 drill program, testing of coincident radon in lake water and VTEM conductors 3.7 km to the northeast and along trend from the Arrow deposit resulted in the discovery of the Bow occurrence with drill hole BO-15-10 that returned 0.20% U_3O_8 over 9.5 m.

MINERAL RESOURCE ESTIMATE

RPA has estimated Mineral Resources for the Property based on results of surface diamond drilling campaigns from 2014 to 2015. Table 1-1 summarizes the Arrow Mineral Resource estimate. The effective date of the Mineral Resource estimate is January 14, 2016. The Mineral Resources for the Arrow deposit are classified as Inferred based on drill hole spacing and apparent continuity of mineralization.

RPA has interpreted the geology, structure, and mineralization at the Arrow deposit using data from 99 diamond drill holes and developed 3D wireframe models which represent 0.05% U_3O_8 grade envelopes with a minimum thickness of two metres. Of the 99 drill holes completed, 17 were abandoned before reaching their target depth, are considered restarts, and were not used in the resource estimate by RPA.

Based on 1,949 dry bulk density determinations for the Arrow deposit, NexGen developed a formula relating bulk density to grade which was used to assign a density value to each assay. Bulk density values were then used to weight grades during the resource estimation process and to convert volume to tonnage.

High grade values were capped and their influence restricted during the block estimation process. Capping and restriction of high grade assays at the Arrow deposit was considered to be necessary because of apparent erratic high grade outliers. Very high grade outliers were capped at 55% U_3O_8 within the A2 High Grade (HG) domain and 6%, 8%, 10%, and 15% U_3O_8 in the lower grade (LG) domain.

The variables density (D) and grade x density (GxD) were interpolated using inverse distance cubed (ID^3) with a minimum of two to a maximum of seven composites per block estimate with a maximum of three composites per drill hole. Block grade (GxD_D) was derived from the interpolated GxD value by dividing that value by the interpolated density value for each block. Grades not weighted by density (grade_id3) were also interpolated as a check.

The resulting block model was validated by visual inspection, volumetric comparison, and swath plots. As well, the mean block grade at zero cut-off was compared to the mean of the composited assay data to ensure that there was no global bias.

2 INTRODUCTION

Roscoe Postle Associates Inc. (RPA) was retained by NexGen Energy Ltd. (NexGen) to prepare an independent Technical Report on the Rook I Property (the Property), located in Saskatchewan, Canada. This Technical Report conforms to National Instrument 43-101 *Standards of Disclosure for Mineral Projects* (NI 43-101). The purpose of this report is to support the disclosure of an initial Mineral Resource estimate for the Arrow deposit located on the Property, made by NexGen in a news release dated March 3, 2016.

NexGen is a Canadian exploration company, primarily engaged in the acquisition, evaluation, and development of uranium properties with a view to commercial production. NexGen is listed on the TSX Venture Exchange (symbol NXE) and on the OTCQX Best Markets (symbol NXGEF).

SOURCES OF INFORMATION

This report was prepared by Mark B. Mathisen, C.P.G., RPA Senior Geologist, and David A. Ross, P.Geo., RPA Principal Geologist. Both are Qualified Persons in accordance with NI 43-101.

A site visit was carried out by Mr. Mathisen on January 19 to 20, 2016.

Mr. Mathisen and Mr. Ross share responsibility for all sections of this report and are independent for the purposes of NI 43-101.

The documentation reviewed and other sources of information are listed at the end of this report in Section 27 References.

EFFECTIVE DATE

The effective date of the Mineral Resource estimate reported in Section 14 is January 14, 2016, which is the date of the last technical information provided by NexGen to RPA for the purposes of this Technical Report.

LIST OF ABBREVIATIONS

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

a	annum
A	ampere
bbl	barrels
btu	British thermal units
°C	degree Celsius
C$	Canadian dollars
cal	calorie
cfm	cubic feet per minute
cm	centimetre
cm^2	square centimetre
d	day
dia	diameter
dmt	dry metric tonne
dwt	dead-weight ton
°F	degree Fahrenheit
ft	foot
ft^2	square foot
ft^3	cubic foot
ft/s	foot per second
g	gram
G	giga (billion)
Gal	Imperial gallon
g/L	gram per litre
Gpm	Imperial gallons per minute
g/t	gram per tonne
gr/ft^3	grain per cubic foot
gr/m^3	grain per cubic metre
ha	hectare
hp	horsepower
hr	hour
Hz	hertz
in.	inch
in^2	square inch
J	joule
k	kilo (thousand)
kcal	kilocalorie
kg	kilogram
km	kilometre
km^2	square kilometre
km/h	kilometre per hour
kPa	kilopascal
kVA	kilovolt-amperes
kW	kilowatt
kWh	kilowatt-hour
L	litre
lb	pound
L/s	litres per second
m	metre
M	mega (million); molar
m^2	square metre
m^3	cubic metre
µ	micron
MASL	metres above sea level
µg	microgram
m^3/h	cubic metres per hour
mi	mile
min	minute
µm	micrometre
mm	millimetre
mph	miles per hour
MVA	megavolt-amperes
MW	megawatt
MWh	megawatt-hour
oz	Troy ounce (31.1035g)
oz/st, opt	ounce per short ton
ppb	part per billion
ppm	part per million
psia	pound per square inch absolute
psig	pound per square inch gauge
RL	relative elevation
s	second
st	short ton
stpa	short ton per year
stpd	short ton per day
t	metric tonne
tpa	metric tonne per year
tpd	metric tonne per day
US$	United States dollar
USg	United States gallon
USgpm	US gallon per minute
V	volt
W	watt
wmt	wet metric tonne
wt%	weight percent
yd^3	cubic yard
yr	year

3 RELIANCE ON OTHER EXPERTS

This report has been prepared by Roscoe Postle Associates Inc. (RPA) for NexGen Energy Ltd. (NexGen). The information, conclusions, opinions, and estimates contained herein are based on:

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

For the purposes of the legal matters in Section 4 of this report (land tenure), RPA has (other than as set forth below), exclusively relied on ownership information provided by NexGen (Ledingham and Luther, 2015), and RPA expresses no opinion as to the ownership status of the Property.

RPA did review the status of the mineral claims on the web site of the Saskatchewan Ministry of Economy (http://economy.gov.sk.ca/mining). The information for the mineral claims constituting the Property are as noted in Section 4 of this report as of March 10, 2016, the date of RPA's review.

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

4 PROPERTY DESCRIPTION AND LOCATION

The Rook I Property is located in northern Saskatchewan approximately 40 km east of the Alberta–Saskatchewan border, 150 km north of the town of La Loche, and 640 km northwest of the city of Saskatoon (Figure 4-1).

The Property lies within parts of NTS map sheets 74F/07, 74F/10, and 74F/11 and is approximately centred at Universal Transverse Mercator (UTM) coordinates of 620,000 mE and 6,385,000 mN (NAD 83, Zone 12N). It is shaped in a rectangular fashion with approximate dimensions of 38 km (northwest – southeast) by 10 km (northeast – southwest). The Arrow deposit is located at approximate UTM coordinates of 604,350 mE and 6,393,600 mN.

LAND TENURE

The Rook I Property consists of 32 Saskatchewan mineral claims with a total area of 35,065 ha. All claims are 100% owned by NexGen. Six of the 32 claims are subject to a 2% NSR and a 10% production carried interest, however, the Arrow deposit is located outside those six claims. The Property formerly consisted of nine larger dispositions which were acquired by NexGen in 2012, however, in 2015 NexGen divided eight of those dispositions into 31 smaller dispositions to accommodate a more efficient spreading of mineral assessment credits over the Property (Table 4-1 and Figure 4-2). All claims are in good standing until at least 2019 and the claim that hosts the Arrow deposit, S-113927, is in good standing until 2035.

TABLE 4-1 ROOK I CLAIMS
NexGen Energy Ltd. – Rook 1 Property

Disposition Number	Previous Disposition Number	NTS	Record Date	Anniversary Date	In Good Standing to	Area (ha)	Annual Expenditure ($)
S-110932	S-110932	74F/11	17-Mar-08	16-Mar-16	14-Jun-26	2,558	38,370
S-113903	S-110575	74F/10	13-Feb-07	13-Feb-16	12-May-20	673	10,095
S-113904	S-110575	74F/10	13-Feb-07	13-Feb-16	12-May-20	900	13,500
S-113905	S-110575	74F/11, 74F/10	13-Feb-07	13-Feb-16	12-May-20	1,432	21,480
S-113906	S-110575	74F/11, 74F/10	13-Feb-07	13-Feb-16	12-May-20	1,092	16,380
S-113907	S-110574	74F/10	13-Feb-07	13-Feb-16	13-May-22	1,436	21,540
S-113908	S-110574	74F/10	13-Feb-07	13-Feb-16	13-May-22	462	6,930
S-113909	S-110574	74F/10	13-Feb-07	13-Feb-16	13-May-22	492	7,380
S-113910	S-110574	74F/10	13-Feb-07	13-Feb-16	13-May-22	1,029	15,435
S-113911	S-110574	74F/10	13-Feb-07	13-Feb-16	13-May-22	800	12,000
S-113912	S-110573	74F/10	13-Feb-07	13-Feb-16	13-May-19	2,539	38,085
S-113913	S-110573	74F/10	13-Feb-07	13-Feb-16	13-May-19	1,280	19,200
S-113914	S-110573	74F/10	13-Feb-07	13-Feb-16	13-May-19	560	8,400
S-113915	S-110572	74 F 10, 74 F 07	13-Feb-07	13-Feb-16	13-May-19	1,806	27,090
S-113916	S-110572	74F/10	13-Feb-07	13-Feb-16	13-May-19	1,187	17,805
S-113917	S-110934	74F/10	17-Mar-08	16-Mar-16	14-Jun-19	1,385	20,775
S-113918	S-110934	74F/10, 74F/07	17-Mar-08	16-Mar-16	14-Jun-19	2,481	37,215
S-113919	S-110933	74F/11, 74F/10	17-Mar-08	16-Mar-16	14-Jun-25	1,328	19,920
S-113920	S-110933	74F/11, 74F/10	17-Mar-08	16-Mar-16	14-Jun-25	2,098	31,470
S-113921	S-110931	74F/11	17-Mar-08	16-Mar-16	14-Jun-35	392	5,880
S-113922	S-110931	74F/11	17-Mar-08	16-Mar-16	14-Jun-35	498	7,470
S-113923	S-110931	74F/11	17-Mar-08	16-Mar-16	14-Jun-35	378	5,670
S-113924	S-110931	74F/11	17-Mar-08	16-Mar-16	14-Jun-35	475	7,125
S-113925	S-110931	74F/11	17-Mar-08	16-Mar-16	14-Jun-35	360	5,400
S-113926	S-110931	74F/11	17-Mar-08	16-Mar-16	14-Jun-35	429	6,435
S-113927	S-110931	74F/11	17-Mar-08	16-Mar-16	14-Jun-35	1,514	22,710
S-113928	S-108095	74F/11	17-Mar-05	16-Mar-16	14-Jun-36	920	23,000
S-113929	S-108095	74F/11	17-Mar-05	16-Mar-16	14-Jun-36	811	20,275
S-113930	S-108095	74F/11	17-Mar-05	16-Mar-16	14-Jun-36	303	7,575
S-113931	S-108095	74F/11	17-Mar-05	16-Mar-16	14-Jun-36	1,395	34,875
S-113932	S-108095	74F/11	17-Mar-05	16-Mar-16	14-Jun-36	627	15,675
S-113933	S-108095	74F/11	17-Mar-05	16-Mar-16	14-Jun-36	1,425	35,625
					Total	**35,065**	**580,785**

MINERAL RIGHTS

In Canada, natural resources fall under provincial jurisdiction. All mineral resource rights in the Province of Saskatchewan are governed by the *Crown Minerals Act* and the *Mineral*

Tenure Registry Regulations, 2012, that are administered by the Saskatchewan Ministry of the Economy. Mineral rights are owned by the Crown and are distinct from surface rights.

In order to maintain mineral claims in good standing in the Province of Saskatchewan, the claim holder must undertake prescribed minimum exploration work on a yearly basis. The current requirements are $15/ha per year for claims that have existed for 10 years or less and $25/ha per year for claims that have existed in excess of 10 years. Dispositions S-113928 through S-113933 were recorded in 2005 and are subject to minimum work requirements of $25/ha per year. All other dispositions comprising the Rook I Property are subject to minimum work requirements of $15/ha per year. Excess expenditures can be accumulated as credits for future years and it is also possible to group contiguous claims and apply work from one disposition to several, with a maximum grouping size of 18,000 ha.

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

As of December 6, 2012, mineral dispositions are defined as electronic mineral claims parcels within the Mineral Administration Registry System (MARS) using a Geographical Information System (GIS). MARS is an electronic tenure system for issuing and administrating mineral permits, claims, and leases that is web based. Mineral claims are now acquired by electronic map staking and administration of the dispositions is also web based.

As of the effective date of this report, all 32 mineral claims comprising the Property are in good standing and registered in the name of NexGen Energy Ltd.

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

ROYALTIES AND OTHER ENCUMBRANCES

Six of the 32 claims that make up the Property are subject to a 2% NSR and a 10% production carried interest. These claims are S-113928, S-113929, S-113930, S-113931, S-

113932, and S-113933. The NSR, in favour of Advance Royalty Corporation., may be reduced to 1% for C$1 million. The 10% production carried interest provides for the owner to be carried to the date of commercial production. The Mineral Resources reported in Section 14 of this Technical Report do not occur within claims covered by the 2% NSR or 10% production carried interest and therefore the Arrow deposit is free of royalties.

Other than as set forth above, the Property is not subject to any royalties, back-in rights, payments or other agreements and encumbrances.

PERMITTING

In order to conduct exploration activities in Saskatchewan, the owner must be registered in the Province and the requisite permits must be acquired. To carry out exploration on the ground, the following permits are required: (i) a Surface Exploration Permit, (ii) a Forest Product Permit, and (iii) an Aquatic Habitat Protection Permit. Drill programs also require a Term Water Rights permit from the Saskatchewan Watershed Authority and notice must be given to Saskatchewan Environment, the Heritage Resource Branch, and the Water Security Agency. If exploration work is being staged from a temporary work camp, a Temporary Work Camp permit is also required. Temporary work camps typically also trigger the need for a Term Water Rights permit if surface water is to be used for camp purposes. The relevant agency notification requirements also apply. RPA understands that NexGen has all required permits to conduct its proposed mineral exploration.

The Heritage Resource Branch may require an archeological assessment of the exploration area known as a Heritage Resource Impact Assessment (HRIA). A HRIA was completed by NexGen on the Rook I Property in 2015 (Pickering, 2015). Nothing of archeological significance was located or is expected to occur on the Property.

RPA is not aware of any environmental liabilities on the Property. RPA is not aware of any other significant factors and risks that may affect access, title, or the right or ability to perform the proposed work program on the Property.

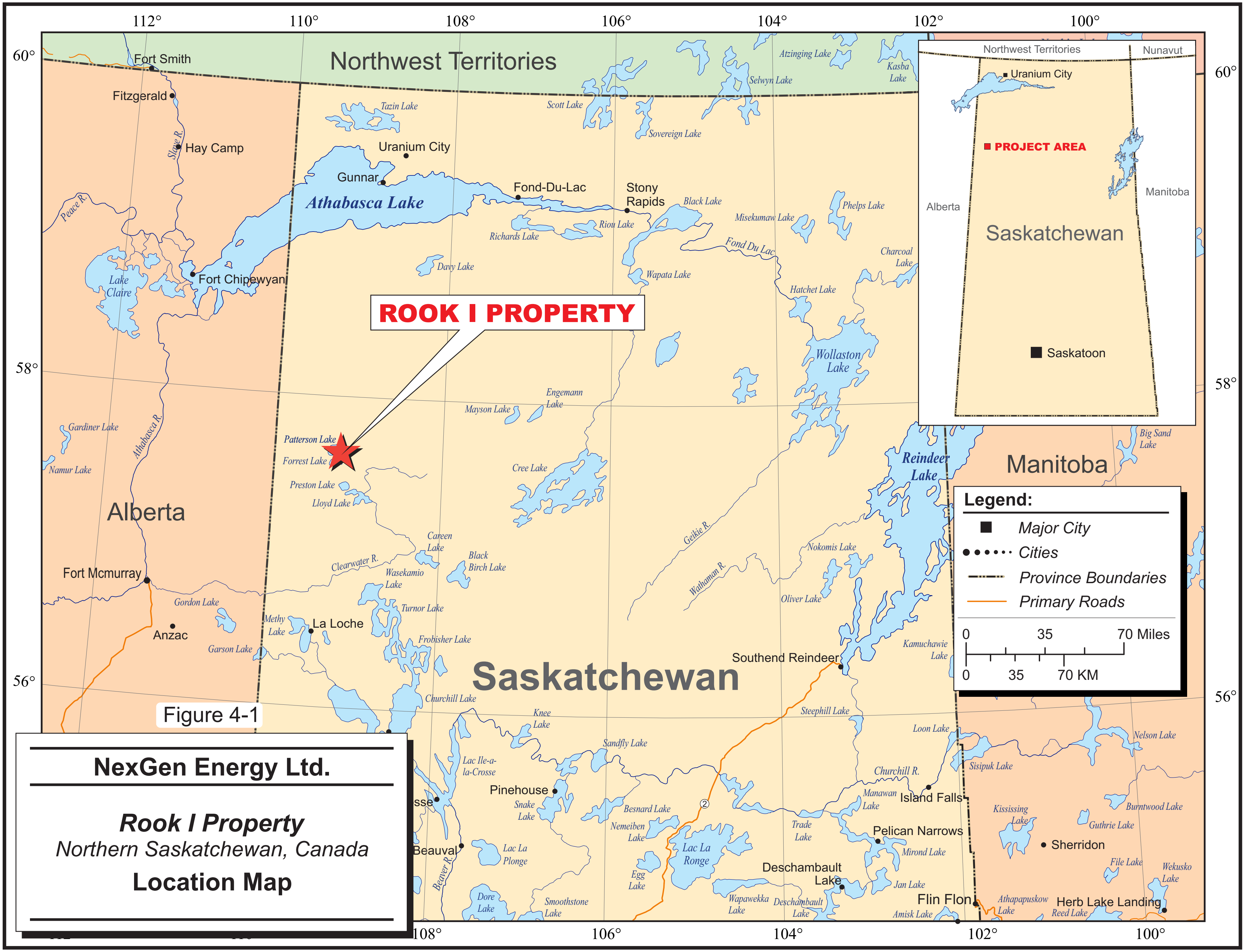


Figure 4-1

NexGen Energy Ltd.

Rook I Property

Northern Saskatchewan, Canada

Location Map

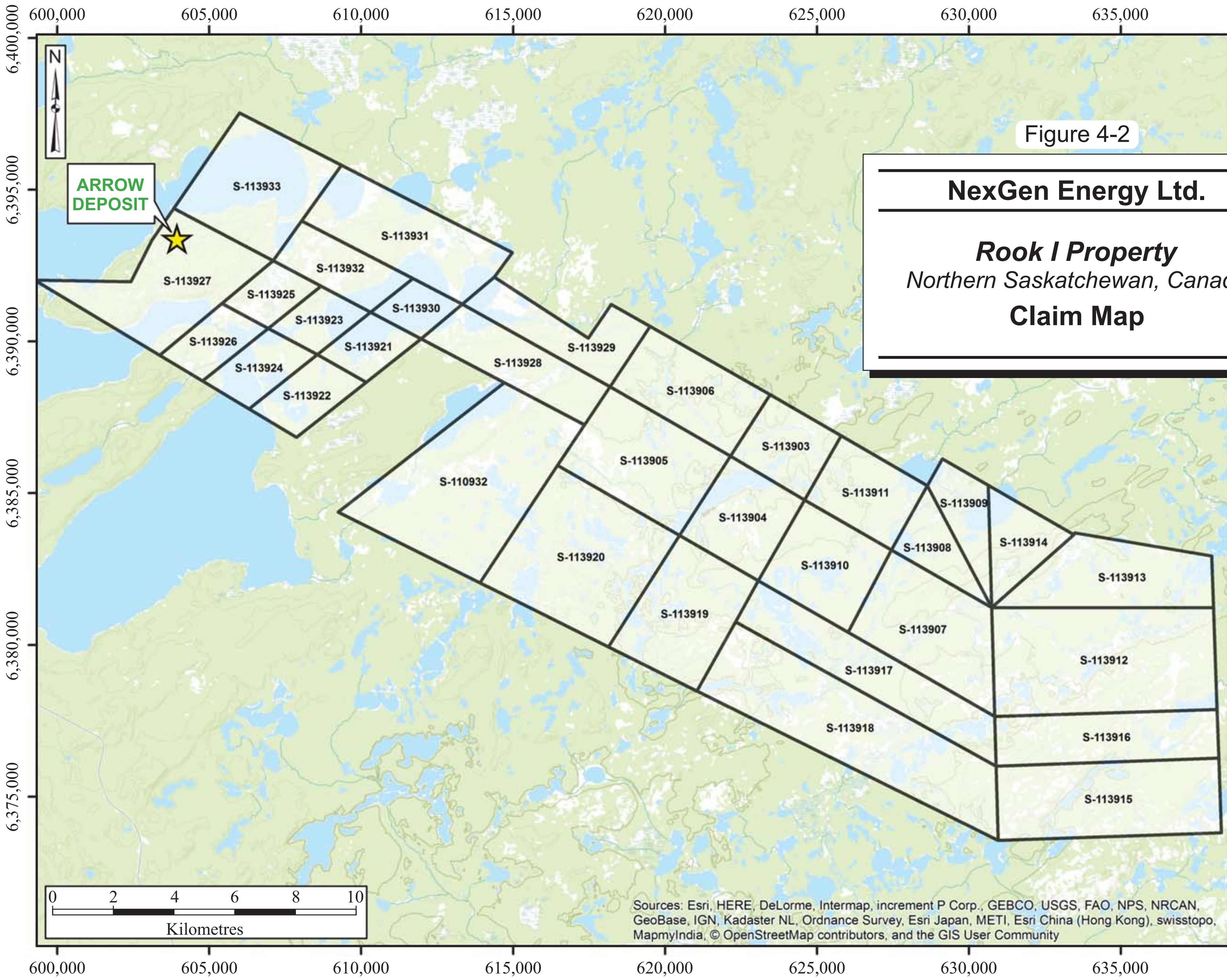
Figure 4-2

NexGen Energy Ltd.

Rook I Property

Northern Saskatchewan, Canada

Claim Map



April 2016

Source: NexGen Energy Ltd., 2016.

5 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

ACCESSIBILITY

The Property is best accessed via all-weather gravel Highway 955, which travels north-south approximately eight kilometres west of the Arrow deposit. The highway, which is maintained year round by the Provincial Government, leads from La Loche, the nearest population centre, 150 km to the south of the Property, to the Cluff Lake mine site (decommissioned), which is 75 km to the north of the Property. La Loche is connected to Prince Albert and Saskatoon by paved provincial highways. Fort McMurray, Alberta, is 180 km southwest of Rook I and can be reached via winter road between the months of December and April. From Highway 955, there are several passable four-wheel drive roads and trails that allow for access to much of the Property. Fixed wing aircraft on floats can land on lakes on and near the Property. Other areas of the Property can be accessed by helicopter.

CLIMATE

The Property has a sub-Arctic climate typical of mid-latitude continental areas. Temperatures range from greater than +30˚C in the summer to colder than –40˚C during the winter. Winters are long and cold, with mean monthly temperatures of below freezing for seven months. Annual precipitation is approximately 0.5 m with half of this as rain during the warmer months and the remainder as 70 cm to 100 cm of snow. Freeze-up normally starts in October and break-up occurs in April. Drilling can be carried out year round, although ground access is affected by freeze-up and break-up. Ground geological and geochemical surveys are typically restricted to the summer months, when the ground is free of snow.

LOCAL RESOURCES

Fuel, groceries, emergency medical services, and basic construction services are available at La Loche, and 150 km to the south of La Loche at Buffalo Narrows, which also has fixed wing float planes for charter. Approximately 20 km to the north on Highway 955 is the Big Bear Camp outfitter lodge which provides food, accommodation, fuel, other supplies and basic services. All other services, including mining personnel, are available in abundance in Prince Albert and Saskatoon.

INFRASTRUCTURE

There is no permanent infrastructure on the Property. There is a power line 70 km south of the Property; however, the amount of power available for a new mining operation is not known. The Property has sufficient space for an open pit or underground mining operation including space for waste rock piles and tailings facilities. Water is readily available. A surface lease would be required from the Provincial government in advance of construction of permanent surface facilities on the Property.

PHYSIOGRAPHY

The topography of the Rook I area is variable with drumlins and lakes/wetlands dominating the northwest and southeast parts of the Property respectively, and lowland lakes, rivers, and muskegs dominating the central part of the Property. Elevations range from 583 MASL on drumlins to 480 MASL in lowland lakes. The elevation of Patterson Lake is 495 m. Bedrock outcrops are very rare, but are known to exist in areas of the eastern half of the Property.

The northwest part of the Property lies over portions of Patterson Lake and Forrest Lake, which are two of the largest waterbodies within 100 km of the Property. Both lakes are part of the Clearwater River watershed. The Clearwater River extends east-southeast from Beet Lake and eventually drains south off the Property.

The Property is covered by boreal forest common to the Canadian Shield. The most common trees are jack pine and black spruce, with few poplar and birch clusters. Tamarack, stunted black spruce, willow, and alder are also common in the lower wetland areas.

Wildlife species common to the area include moose, deer, black bear, wolf, and all other mammal species commonly found in boreal forest ecosystems. Common fish species include pickerel, lake trout, rainbow trout, northern pike, whitefish, and perch.

6 HISTORY

PRIOR OWNERSHIP

Pursuant to an agreement to purchase mineral claims dated June 20, 2005 (as amended) Titan Uranium Inc. (Titan) purchased disposition S-108095 (now S-113928 through S-113933) from 455702 B.C. Ltd. and 643990 B.C. Ltd. The remainder of the claims comprising the Property were subsequently ground staked by Titan in 2007 and 2008. In 2012, pursuant to a mineral property acquisition agreement between Titan and Mega Uranium Ltd. (Mega), Titan sold the Property to Mega. NexGen acquired the Rook I Property from Mega pursuant to an asset purchase agreement dated November 14, 2012.

EXPLORATION AND DEVELOPMENT HISTORY

Recorded exploration in and around the dispositions comprising the Property commenced in 1968. Bow Valley Company Ltd.'s Permits 1 and 6, Wainoco Oil and Chemicals Ltd.'s Permit 1, and Canada Southern Petroleum and Gas Ltd.'s Permit 6 covered parts of what is now known as the Rook I Property. From 1968 to 1970, these companies flew airborne magnetic and radiometric surveys and carried out prospecting and geochemical sampling. They found little to warrant continued work and relinquished their permits in the early 1970s (source: Saskatchewan Assessment Files (AF) 74F11-0002, 74F11-0001, 74F08-0003, and 74F09-0003). The next recorded work was by Uranerz Exploration and Mining Ltd. (Uranerz) on the Inexco Permits 1 and 2 which covered the Rook I Property. In 1974, Uranerz completed geological mapping, prospecting, lake sediment sampling, and a helicopter borne radiometric survey but found nothing to warrant further work (source: AF74F-0001).

In 1976 and 1977, with the discovery of Key Lake announced, companies started to acquire land in the western part of the Athabasca Basin. Canadian Occidental Petroleum Ltd. (Canoxy) had claims (CBS 4745, 4756, 4747, 4748) covering most of the area of current dispositions S-110932 and S-113921 through S-113933. Houston Oil and Gas Ltd. had one claim (CBS 5680) covering parts of claims S-113903 through S-113906. Hudson Bay Exploration and Development Company Ltd. (HBED) had two small claims covering S-113919 and S-113920 and Kerr Addison Mines Ltd. (Kerr) had claims covering S-113907 through S-113914. Saskatchewan Mining and Development Corp. (SMDC, now Cameco) had MPP 1076 (later CBS 8807) which covered parts of S-113928 through S-113933.

From 1976 to 1982, these companies completed airborne INPUT electromagnetic (EM) surveys which detected numerous conductors, many of which were subject to ground surveys prior to drilling. Airborne magnetic-radiometric surveys were also carried out and followed up by prospecting, geological mapping, lake sediment surveys, and some soil and rock geochemical sampling. Few anomalies were found other than those located by the airborne and ground EM surveys.

From 1980 to 1982, SMDC drilled 13 holes, PAT-01 to PAT-13, on what is now S-113933. PAT-04 intersected weak uranium mineralization (171 ppm U over one metre) in highly altered basement rocks just below the unconformity at 97 m. Drill hole PAT-13 intersected 64 ppm U_3O_8 over a nine metre interval just below the unconformity from 110 m to 119 m (source: AF74F11-0011, 74F11-0024 and AF 74F11-0029). The mineralization and alteration were reported to be similar to that seen at unconformity associated uranium deposits in the Athabasca Basin.

To the east, Kerr drilled 24 holes from 1977 to 1979 in the area of the Property. One hole was completed on claim S-113903. No other holes were completed on the Property. No significant alteration or mineralization was intersected (source: AF74F10-0011, AF74F10-0012 and AF74F10-0016).

HBED drilled two holes in 1982 on claims which cover part of what is now S-113920. The holes hit graphitic gneisses but no radioactivity (source: 74F11-0018).

CanOxy reported drilling 41 holes on its CLU project from 1978 to 1980 but only 27 of these are on the Rook I dispositions. Drilling did not intersect any uranium mineralization but did intersect thick glacial till deposits, basement regolith, and geological structures. The basement rocks were quartz-feldspar-biotite gneisses, with lesser quartz rich gneisses, garnetiferous pyroxene granulites, and graphitic basement gneisses which were often sheared and brecciated. Granitic and granodioritic gneisses were also intersected (source: AF74F11-0012, AF 74F11-0013 and 74F11-0015).

In 1982, exploration waned in the western part of the Athabasca Basin and companies allowed their claims to lapse. There is little work recorded in the Saskatchewan mineral assessment files between 1982 and 2006.

In 2006, Titan carried out MegaTEM and versatile time domain EM (VTEM) airborne surveys, which detected and/or confirmed numerous EM anomalies. A ground MaxMin II horizontal loop EM (HLEM) survey completed in 2008 confirmed the presence of many of the airborne anomalies (source: AF74F-0015, AF74F11-0040, AF74F11-0035).

In 2012, Mega completed a ground gravity survey over parts of claims S-113921 through S-113933 (Creamer and Gilman, 2013a) and a number of anomalies were identified. A soil geochemical survey and prospecting program were also completed in the same year (Creamer and Gilman, 2013b). No soil geochemical anomalies or radioactive boulders were identified.

HISTORICAL RESOURCE ESTIMATES

No resource estimates have been prepared by previous owners.

PAST PRODUCTION

There has been no production from the Property up to the effective date of this report.

7 GEOLOGICAL SETTING AND MINERALIZATION

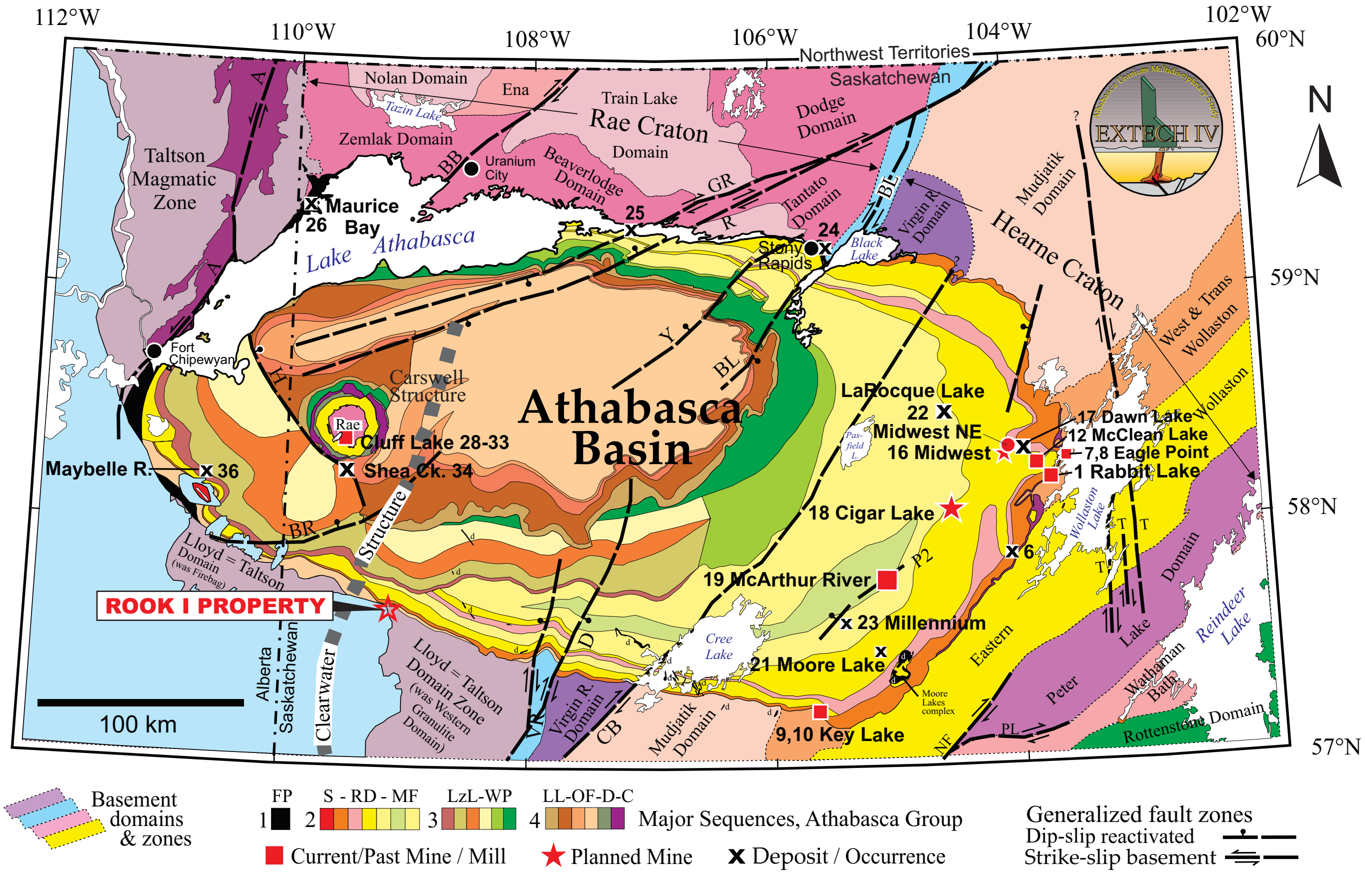
REGIONAL GEOLOGY

The Rook I Property is located along the southwestern rim of the Athabasca Basin, a large Paleoproterozoic-aged, flat-lying, intracontinental, fluvial, redbed sedimentary basin which covers much of northern Saskatchewan and part of northern Alberta (Jefferson et al., 2007). The Athabasca Basin is oval shaped at surface with approximate dimensions of 450 km by 200 km (Figure 7-1) and reaches a maximum thickness of approximately 1,500 m near the centre. It consists principally of unmetamorphosed sandstones with local conglomerate beds that are collectively known as the Athabasca Group. Every geologic unit comprising the Athabasca Group contains cross-bedding and ripple cross-lamination. Most units also contain single-layer thick quartz pebble or granule beds.

The base of the Athabasca Group is marked by an unconformity with the underlying crystalline basement rocks of the Archean to Paleoproterozoic-aged Hearne and Rae provinces to the east and west, respectively, and the Proterozoic Taltson Magmatic Zone (TMZ) to the west (Card et al., 2007). The Rae Province consists mostly of metasedimentary supracrustal sequences as well as granitoid rocks. In contrast, the Hearne Province consists primarily of granitoid gneisses with interleaved supracrustal rocks. The TMZ is characterized as a basement complex that was intruded by both continental magmatic arc granitoid rocks and peraluminous granitoid rocks. The Hearne and Rae Provinces are separated near the centre of the Athabasca Basin by the northeast trending Snowbird Tectonic Zone.

The Athabasca Group basal unconformity is spatially related to all significant uranium occurrences in the region. The basement immediately below the unconformity typically has a paleoweathered profile ranging from a few centimetres to up to 220 m thick where fluid migration was aided by fault zones (MacDonald, 1980). Paleoweathered profiles usually consist of a thin bleached zone at the unconformity which grades into a hematite altered zone and then a chlorite altered zone before alteration features dissipate.

The southwest part of the Athabasca Group is overlain by flat lying Phanerozoic rocks of the Western Canada Sedimentary Basin comprised of mudstones, siltstones, and sandstones.



Source:
After GSC - Mineral Deposits of Canada, Unconformity Associated Uranium Deposits.

April 2016

Figure 7-1

NexGen Energy Ltd.

Rook I Property

Northern Saskatchewan, Canada

Regional Geology and Uranium Deposits

LOCAL AND PROPERTY GEOLOGY

The oldest rocks in the area of the Property occur in the TMZ. Within the Property, the TMZ consists chiefly of granitic, granodioritic, tonalitic, dioritic, and locally gabbroic gneisses (Figure 7-2). There are also local bodies of graphitic and chloritic semipelitic to pelitic gneisses that typically occur as discontinuous, elongate, north-northeast trending lenses and schlieren ranging from less than one kilometre to greater than 10 km in length (Grover et al., 1997). These paragneiss bodies are the chief host rock of uranium mineralization in basement settings in the area including the Arrow deposit. All lithologies present in the TMZ have been metamorphosed at upper amphibolite to granulate facies conditions.

Immediately west of the Rook I Property are the rocks of the Clearwater Domain, a northeast trending belt of granitic rocks 20 km to 25 km thick. Although poorly exposed, it is marked by an aeromagnetic high that overprints the magnetic signature of the TMZ (Card et al., 2007). Where intersected in drill holes, the felsic intrusive rocks of the Clearwater Domain often show anomalous uranium concentrations. Hence, these rocks may represent the source of uranium for deposits in the area.

The Property straddles the Athabasca Group basal unconformity. Overlying the basement rocks in the area of the Property are the flat lying sandstones of the Athabasca Group. Where intersected in drilling, the Athabasca Group rocks are likely part of the Smart and Manitou Falls formations. These formations are both characterized by uniform quartz arenite beds and rare pebble conglomerate beds.

Phanerozoic rocks of the Cretaceous Manville Group and Devonian La Loche Formation overlie the Athabasca Group and basement rocks on portions of the western side of the Property and above the Arrow deposit. The Manville Group is characterized by non-marine and marine shales and sandstones. A coal bed marker horizon at the bottom of the Mannville Group is often observed in drill core. The La Loche Formation consists of arenitic to arkosic sandstones and conglomerates.

The Property and surrounding area are covered by Pleistocene glacial deposits composed of sand, Athabasca Group sandstone boulders, and rare basement and Manville Group boulders. Glacial geomorphological topographic features are common and include northeast to east-northeast trending drumlins, outwashes, hummocky terrain, and kettle lakes. The glacial deposits are typically at least 30 m thick and may be up to 100 m thick. Over the Arrow deposit, glacial overburden is approximately 60 m thick.

MINERALIZATION

As of the effective date of this report, mineralization is known to occur at three locations on the Rook I Property: 1) Arrow deposit, 2) Bow occurrence, and 3) Area A occurrence, the most significant of which is the Arrow deposit (Figure 7-3). All uranium mineralization discovered on the Property to date is hosted exclusively in basement lithologies below the unconformity.

ARROW DEPOSIT

Uranium was first discovered at Arrow by NexGen in February of 2014 when drill hole AR-14-01 intersected modest mineralization including 0.16% U_3O_8 over 9.0 m. Subsequent follow-up drilling identified a zone of extensive mineralization highlighted by drill holes AR-15-62, which intersected 6.35% U_3O_8 over 124.0 m, and AR-15-44b, which intersected 11.55% U_3O_8 over 56.5 m including 20.0 m at 20.68% U_3O_8 and 1.0 m at 70.0% U_3O_8. These drill holes intersected the mineralization at a low angle and therefore the core lengths do not represent the width of the mineralization. A description of the dimensions of the mineralization is provided in Section 14, Mineral Resource Estimate.

Uranium mineralization at the Arrow deposit dominantly occurs as uraninite. Other common uranium minerals include coffinite and secondary yellow coloured minerals, currently interpreted to be autunite, carnotite, and/or uranophane. A green coloured secondary uranium mineral interpreted to be torbernite has also been observed very locally.

Two key but contrasting types of uranium mineralization occur at Arrow:

- Open-space fillings

  Open-space fillings include massive uraninite bodies interpreted to be uranium veins, and breccia bodies where the matrix is comprised nearly exclusively of massive uraninite. Uranium veins and breccias typically range in thickness from less than 0.1 m to greater than one metre and display sharp contacts with the surrounding wall rocks. Individual uranium veins usually occur at parallel to sub-parallel orientations to the regional foliation, however, at least one set of veins cross-cuts the regional foliation. Clasts present in uranium breccias at Arrow are typically fragments of the immediate wall rocks and often contain additional disseminated uraninite mineralization. Uranium breccias occur as both clast supported and matrix supported forms, with the latter typically hosting higher grades. Coffinite occurs most commonly in vein-style mineralized bodies and is typically observed as black, subhedral to euhedral crystal masses filling vugs in the host uraninite. Both styles of open-space filling mineralization are categorized by high uranium grades that can be in excess of 40% U_3O_8 and as high as 80% U_3O_8.

- Chemical replacement styles

  Chemical replacement types of mineralization present at Arrow include disseminated, worm-rock and near complete to complete replacement styles. Disseminated mineralization is typically associated with strong to intense hydrothermal alteration (discussed below) where uraninite occurs as fine to medium grained anhedral crystals and crystal agglomerates spread throughout the host in concentrations of typically less than five modal percent. Worm-rock style mineralization is named for the wormy texture it by definition displays, which is the result of redox reactions between uranium bearing fluids and the host wall rocks. Typically, these redox fronts are less than 10 cm thick. Near to complete uraninite replacement of the host rock has also been observed at Arrow. These zones range in thickness from less than 0.1 m to greater than 1.0 m and, in contrast to open-space fillings, show gradual contacts. Near complete to complete replacement bodies also often contain centimetre sized vugs which may once have been garnet porphyroblasts, pseudomorphs of which are common in the host rocks. The presence of vugs in this style of mineralization and in some zones interpreted to be uraninite veins suggest that in at least some places, the latter may actually be the result of chemical replacement and not open-space filling. Uranium grades associated with chemical replacement styles of mineralization at Arrow range from less than 1% U_3O_8 in disseminated bodies to greater than 70% U_3O_8 in complete replacement bodies.

Hydrothermal alteration that occurs in the vicinity of Arrow is extensive and several distinct styles have been observed. In some areas, mineralization is closely associated with a pervasive quartz-sericite-sudoite-illite alteration assemblage that nearly completely replaces the host rock, although pre-alteration textures are often preserved. In other areas, mineralization is closely associated with pervasive brick red coloured hematite alteration.

Another key alteration phase present at Arrow is dravite. Typically, it occurs in centimetre to decimetre wide breccia vein bodies beginning tens of metres from high grade uranium mineralization and increasing in size and frequency closer to mineralization. Carbon buttons are commonly observed in association with dravite. Centimetre sized drusy quartz veins occur ubiquitously in the vicinity of the deposit. Where proximal to high-grade mineralization, these veins are often pink coloured.

The Arrow deposit is hosted chiefly in semipelitic gneiss (Figure 7-4) composed almost solely of quartz and garnet porphyroblast pseudomorphs which are now almost exclusively chlorite, hematite, illite, or sudoite. Other minor mineral phases present include plagioclase, potassium feldspar, biotite, muscovite, and amphibole, in varying concentrations. Local bodies of pelitic gneiss have also been observed. This lithology is distinct from semipelitic gneiss as it is defined by lower concentrations of quartz. The geology of the immediate area of the Arrow deposit is also marked by the presence of a large sill-like intrusive body containing granitic to gabbroic gneisses commonly cross-cut by mineralization.

Uranium mineralization at Arrow is closely associated with narrow, strongly graphitic pelitic and graphitic semipelitic gneiss lithologies thought to represent discrete shear zones. High grade uranium zones often occur immediately adjacent to heavily sheared and strongly graphitic zones, but never within them. Deformation likely played a key role in localizing uranium mineralization at Arrow and the area has a complex structural history. The main foliation present in the Arrow area trends towards the northeast and dips sub-vertically to vertically. Currently, mineralization occurs within four discrete, parallel shear panels referred to as the A1 though A4 shears (Figure 7-4). Each shear panel is approximately 50 m wide and contains a number of narrow graphitic shear zones that are oriented parallel to foliation striking at approximately 050° to 060° and dipping vertically to sub-vertically. These graphitic shear zones are host to the uranium mineralized lenses and pods which are also oriented parallel to the regional foliation. Slickenstriae observed on fault faces within the graphitic shear zones close to high grade uranium mineralization show two distinct orientations, an older dip-slip orientation and a younger overprinting strike-slip/oblique-slip orientation. This suggests at least two distinct plunge directions.

As of the effective date of this report, mineralization at Arrow has been identified within an area of 645 m (strike) by 235 m (width) by 820 m (vertical, starting from 100 m below surface down to 920 m).

The mineralization in the Arrow deposit is sub-vertical and true width is estimated to be between 30% and 50% of reported core lengths based on currently available information.

BOW OCCURRENCE

The Bow occurrence is located 3.7km northeast of the Arrow deposit. Anomalous uranium concentrations were first identified by SMDC in drill hole PAT-04, which intersected 171 ppm U over 1.0 m in 1980. In total, SMDC drilled 13 holes at Bow between 1980 and 1982. The uranium values occur at or just below the unconformity in fractured, slickensided, and sometimes brecciated sandstone and basement quartz-feldspar-biotite +/- graphite paragneisses with compositions ranging from psammitic to pelitic. Quartzite was also noted in several holes. Basement rocks are described as strongly bleached and clay altered. While no continuity has been established to date, the alteration and host rocks described are similar to what is seen in unconformity associated uranium deposits elsewhere in the Athabasca Basin.

Drilling completed in this area by NexGen in the winter of 2015 resulted in the intersection of uranium mineralization in BO-15-02, BO-15-10, and BO-15-13. The best intersection was 0.20% U3O8 over 9.5 m in drill hole BO-15-10. Further drilling at Bow is planned.

AREA A OCCURRENCE

In 2013, drill hole RK-13-05 intersected 330 ppm U_3O_8 over 4.0 m approximately 3.5 km southwest from where the Arrow deposit would later be discovered. Visible pitchblende was identified within a strongly hematite altered breccia. The mineralization occurs within a 29 m wide shear zone marked by faults, fractures, a variety of veins, and breccias. The host rocks are garnetiferous quartz-plagioclase-biotite gneiss with minor graphite. Follow-up drilling failed to intersect mineralization. Further drilling is currently being considered.

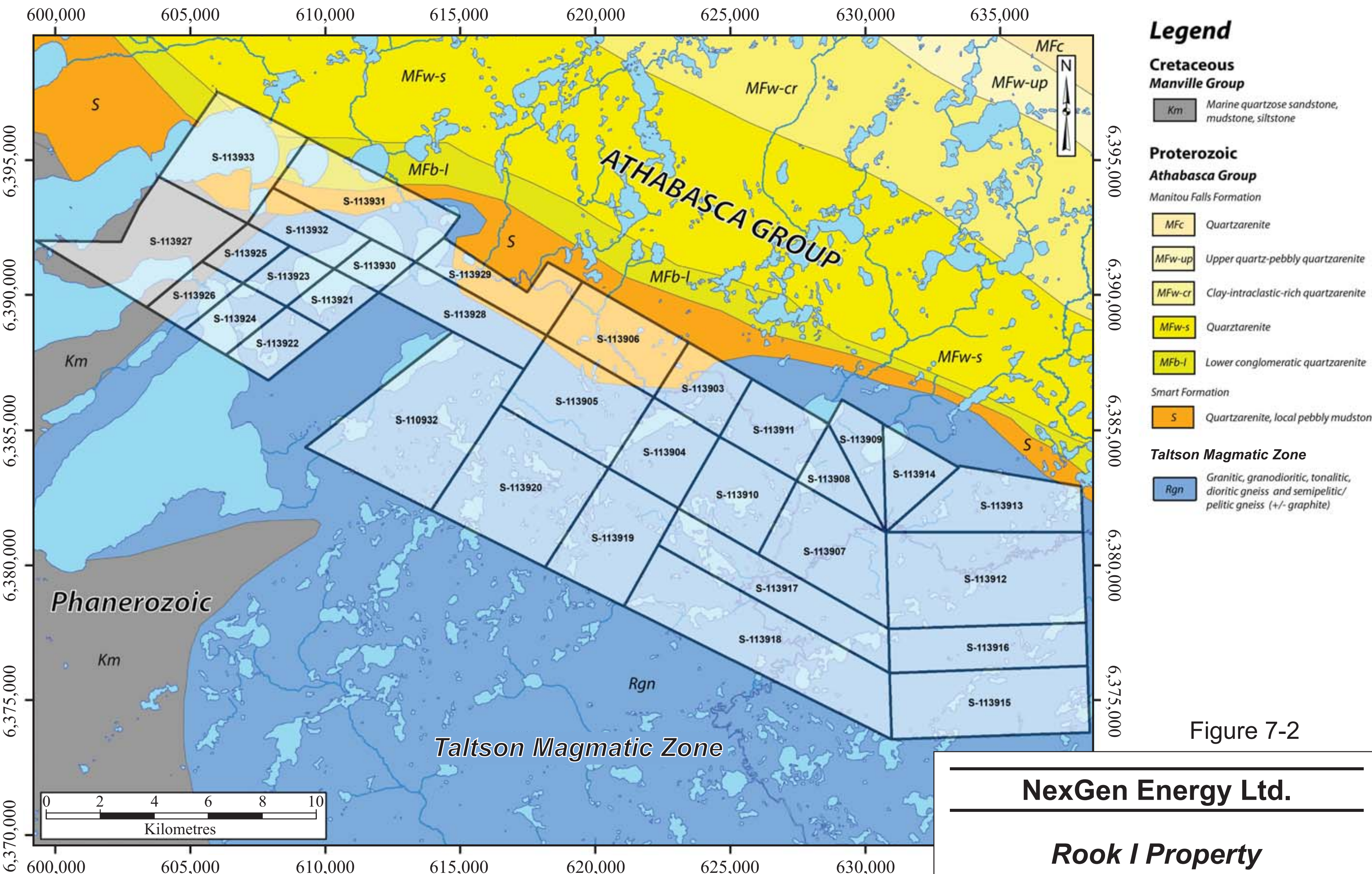


Figure 7-2

NexGen Energy Ltd.

Rook I Property

Northern Saskatchewan, Canada

Local Geology

Source: NexGen Energy Ltd., 2016.
Saskatchewan Geological Survey, 2016.

April 2016

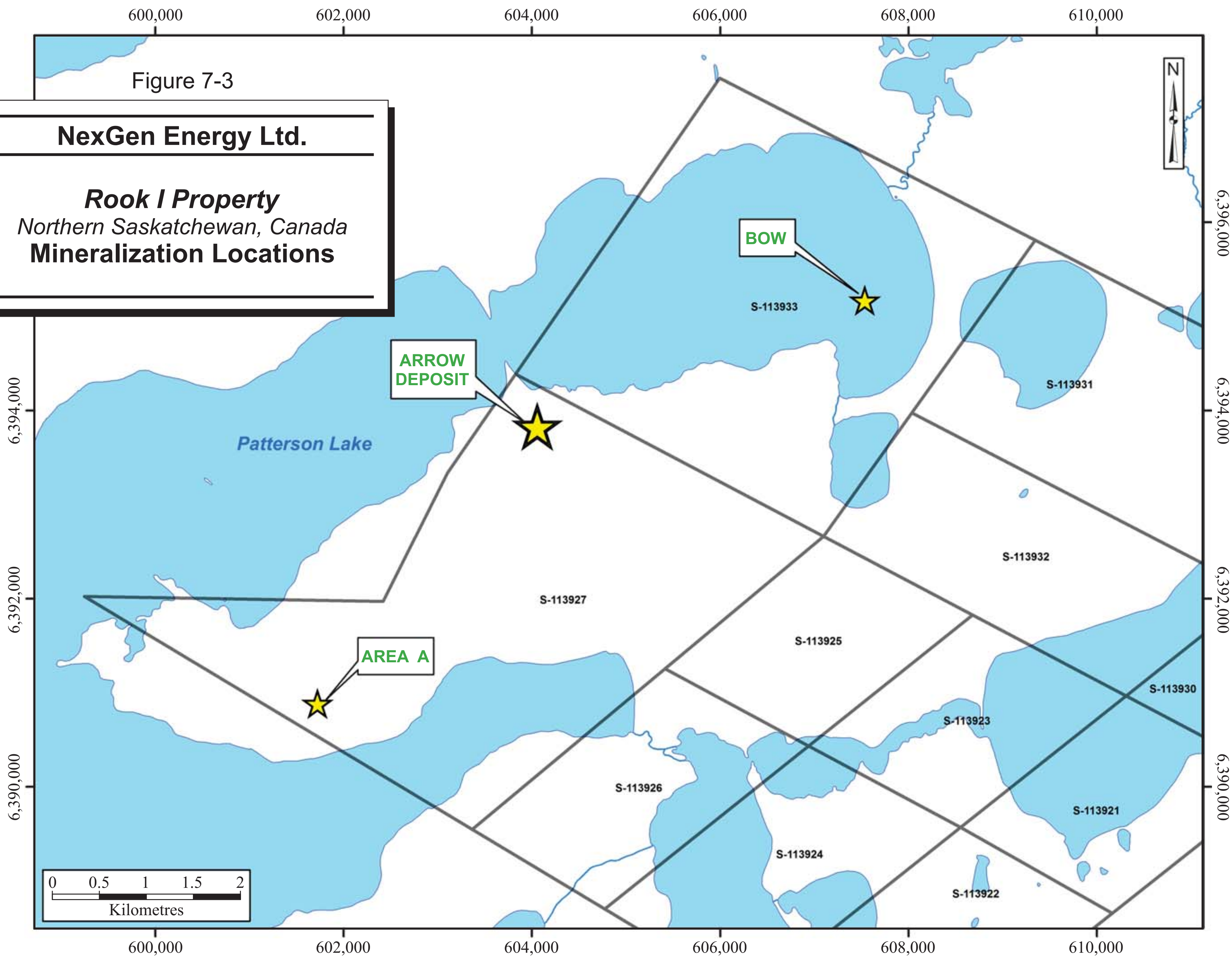
Figure 7-3

NexGen Energy Ltd.

Rook I Property

Northern Saskatchewan, Canada

Mineralization Locations



April 2016

Source: NexGen Energy Ltd., 2016.

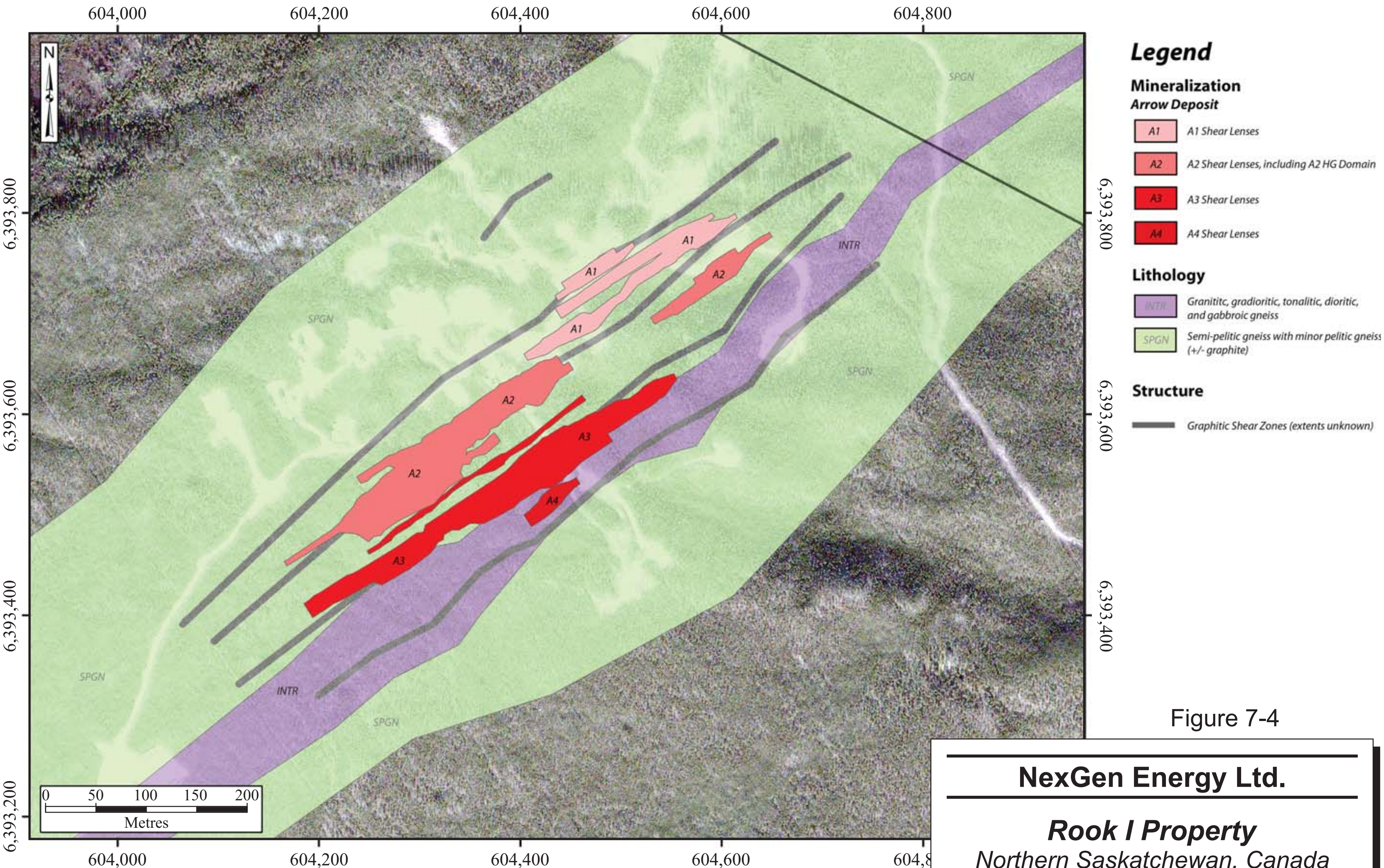


Figure 7-4

NexGen Energy Ltd.

Rook I Property

Northern Saskatchewan, Canada

Arrow Deposit
Basement Geology

April 2016

Source: NexGen Energy Ltd., 2016.

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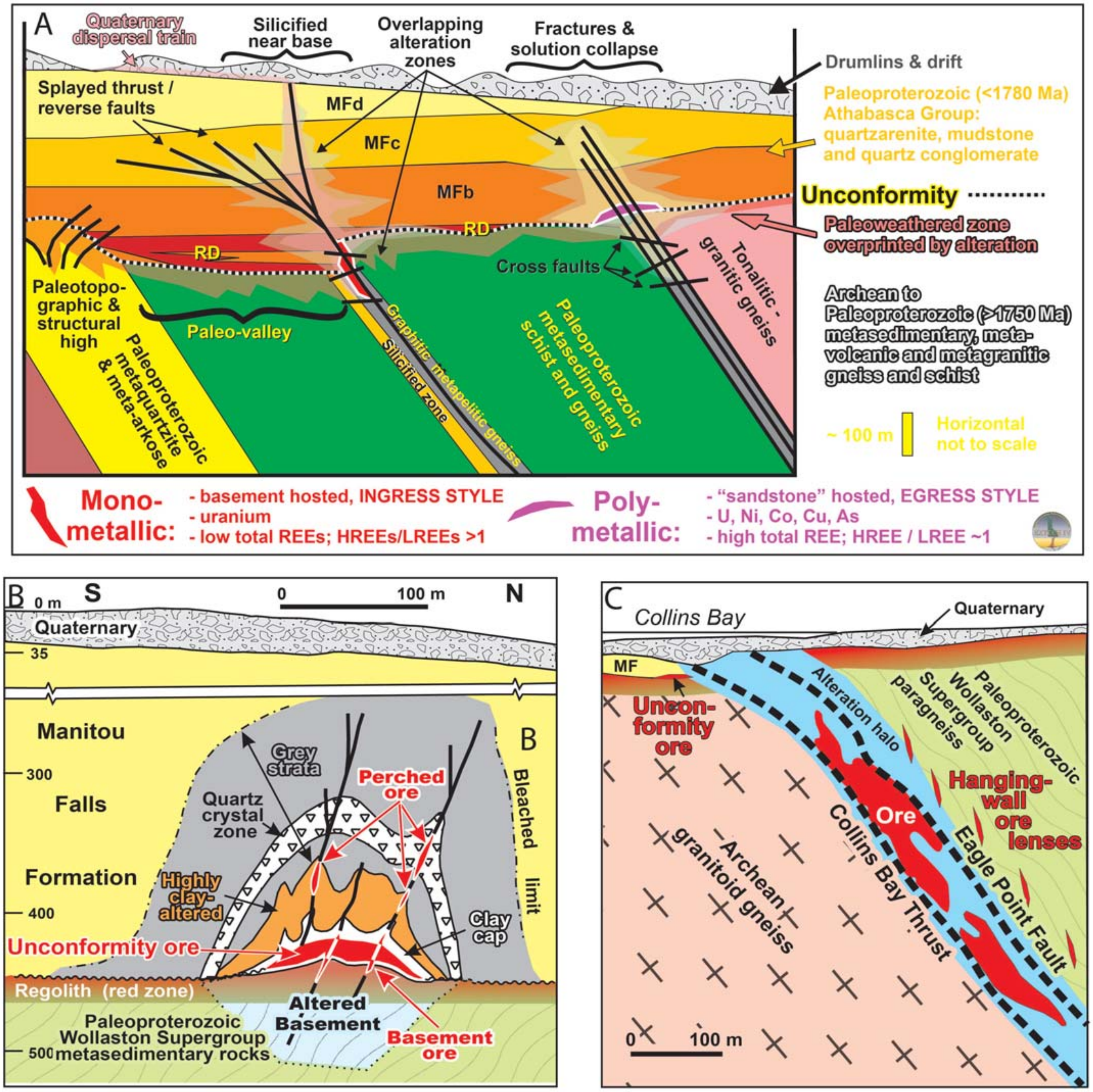
8 DEPOSIT TYPES

The Arrow deposit and other exploration targets at Rook I belong to the unconformity-associated class of uranium deposits. This type of mineralization is spatially associated with unconformities that separate Paleo- to Mesoproterozoic conglomeratic sandstone basins and metamorphosed basement rocks (Jefferson et al., 2007).

At numerous locations in Saskatchewan and fewer in Alberta, uranium deposits have been discovered at, above, and below the Athabasca Group unconformity. Mineralization can occur several hundred metres into the basement or can be perched up to 100 m above in the sandstone. At Arrow, no uranium has been identified at or above the unconformity; massive veins have been discovered in the basement at depths ranging from immediately below the unconformity to 700 m below it. Typically, uranium is present as uraninite/pitchblende which occurs as veins and semi-massive to massive replacement bodies. In most cases, mineralization is also spatially associated with steeply dipping, graphitic basement structures that have penetrated into the sandstones and offset the unconformity during successive reactivation events. Such structures are thought to represent both important fluid pathways as well as chemical/structural traps for mineralization through geologic time as reactivation events have likely introduced further uranium into mineralized zones and provided a means for remobilization.

Two end members of unconformity-associated mineralization have been identified in the Athabasca Basin (Figure 8-1). Egress type deposits occur at or above the unconformity and are hosted by sandstone. Ingress type deposits occur in basement rocks below the unconformity. The location and style of mineralization present at any deposit is the result of where fluid mixing between oxidizing basin fluids and reducing basement fluids occurred. If the two fluids interacted mostly at or above the unconformity, egress style mineralization is the result. Fluid mixing below the unconformity has led to the formation of ingress style mineralization. Furthermore, egress style mineralization is often polymetallic and may contain appreciable concentrations of nickel, cobalt, arsenic, and lead in addition to uranium. Ingress style mineralization is typically monometallic, containing nearly exclusively uranium.

Unconformity-associated uranium deposits of the Athabasca Basin typically display extensive hydrothermal alteration halos, especially in the sandstones above major deposits where relatively higher porosity/permeability allowed for increased fluid flux. Where mineralization is basement hosted, alteration is typically confined to structures in the basement. Chlorite, hematite, dravite, sudoite, illite, kaolinite, and dickite are often, but not always, key alteration phases associated with mineralization. Silicification and desilicification of sandstones is also empirically associated with mineralization at many deposits, especially those located at the unconformity and in the sandstone.



Features and examples of unconfomity associated-uranium deposits in the eastern part of the Athabasca Basin
(A) Generalized geological features of ingress- (monometallic) and egress (polymetallic) type deposits
(B) Egress type deposit - Cigar Lake
(C) Ingress type deposit - Eagle Point

Figure 8-1

NexGen Energy Ltd.

Rook I Property

Northern Saskatchewan, Canada

General Geological Setting of Unconformity Associated Uranium Mineralization

April 2016

Source: after Jefferson et al., 2007.

9 EXPLORATION

Since acquiring the Rook I Property in December 2012, NexGen has carried out exploration consisting of ground gravity surveys, a ground DC resistivity survey, an airborne magnetic-radiometric-very low frequency (VLF) survey, an airborne VTEM survey, and a radon-in-water geochemical survey. Diamond drilling programs have also tested several targets on the Rook I Property which resulted in the discovery of the Arrow deposit in AR-14-01 (formerly known as RK-14-21) in February 2014.

GROUND GEOPHYSICAL SURVEYS

GRAVITY

NexGen completed a ground gravity survey over much of the western half of the Rook I Property (Koch, 2015; Koch 2013) (Figure 9-1). The surveys were completed by Discovery Geophysics International Inc. (Discovery) and MWH Geo-Surveys Ltd. (MWH) between the fall of 2013 and the winter of 2015. In total, 12,867 gravity measurements were acquired within the survey areas, including a number of duplicate measurements acquired in areas surveyed by Mega before the Property was acquired by NexGen. Stations were spaced 50 m apart along lines spaced at 200 m and were located by differential GPS. Features identified from the survey results are interpreted to be larger regional trends upon which smaller, more localized features occur. These smaller features, showing both relatively high and low gravity responses, can be the result of hydrothermal alteration in both sandstones and basement rocks. The discovery of the Arrow deposit was the result of drill testing a circular gravity anomaly (gravity low) with an approximate diameter of one kilometre. It is thought that the gravity low present at Arrow is the result of desilicification of the sandstone above the deposit and clay alteration (illite/dravite/sudoite) of the basement rocks within and adjacent to the deposit.

DC RESISTIVITY

In 2013, NexGen completed a DC resistivity survey over a small area on the western-most portion of the Property (Koch, 2013b) (Figure 9-2). This survey was completed by Discovery on 200 m spaced grid lines via pole-dipole array with stations spaced at 50 m along lines. Estimated depth penetration based on the array parameters used (n=1 through 8, and 0.5

through 7.5) was approximately 225 m. The survey successfully identified several prospective basement hosted EM anomalies. It also identified a near surface, flat lying conductive horizon interpreted to be carbonaceous Manville Group rocks overlying the basement.

AIRBORNE GEOPHYSICAL SURVEYS

MAGNETIC-RADIOMETRIC-VLF

In 2013, Goldak Airborne Surveys was contracted by NexGen to fly a high resolution radiometric magnetic gradiometer– VLF EM survey over the entire Rook I Property (Figure 9-3). The survey included 3,491 line-km flown on lines spaced 200 m apart (Goldak, 2013). VLF data acquired as part of the survey has confirmed the widespread presence of basement structures on the Property. Magnetic data acquired suggest highly variable geology on the Property and a complex geological history. Radiometric data acquired show a number of surficial radiometric anomalies.

VTEM

In 2014, Aeroquest Airborne (Geotech) was contracted by NexGen to fly a VTEM survey over a portion of the Rook I Property (Pendrigh and Witherly, 2015) (Figure 9-4). The survey included 793 line-km on lines spaced 100 m apart. Magnetic data was also collected in tandem with EM data. The results showed a number of northeast trending EM conductors, most of which remain untested by drilling. Additionally, the acquired EM data allowed for more precise interpretation of the conductors that host the Arrow deposit as this survey was both higher powered, and flown at closer line spacing than any previous airborne EM survey completed in the area by past operators.

GEOCHEMICAL SURVEYS

RADON-IN-WATER

In 2015, radon-in-water surveys were conducted by RadonEx Exploration Management Ltd. over parts of Patterson, Beet, and Naomi lakes (Charlton, 2015) (Figures 9-5 and 9-6). The surveys consisted of the collection of 1,942 near bottom water samples. Radon was measured using electret ionization chamber technology after water samples were collected and stored in glass jars. Samples were spaced 25 m apart on lines generally, but not always, spaced 200 m apart. The results showed multiple areas with anomalous radon gas concentrations.

GEOLOGICAL SURVEYS

GROUND RADIOMETRIC/BOULDER PROSPECTING

In 2014, NexGen carried out a ground radiometric and boulder prospecting program in order to investigate many of the radiometric anomalies identified by the 2013 Goldak Airborne survey (discussed above) (Figure 9-7). Radioactivity was measured at 698 stations, mostly on boulders which were chiefly Athabasca Group sandstones. Rare boulders of basement affinity were also measured. Only two outcrops were observed. Where boulders were not present, background radioactivity was measured every 50 m along survey lines spaced 200 m apart. Several anomalously radioactive boulders were discovered, however, in each case, spectrometer analyses showed the radioactivity to be sourced from thorium. No samples were assayed.

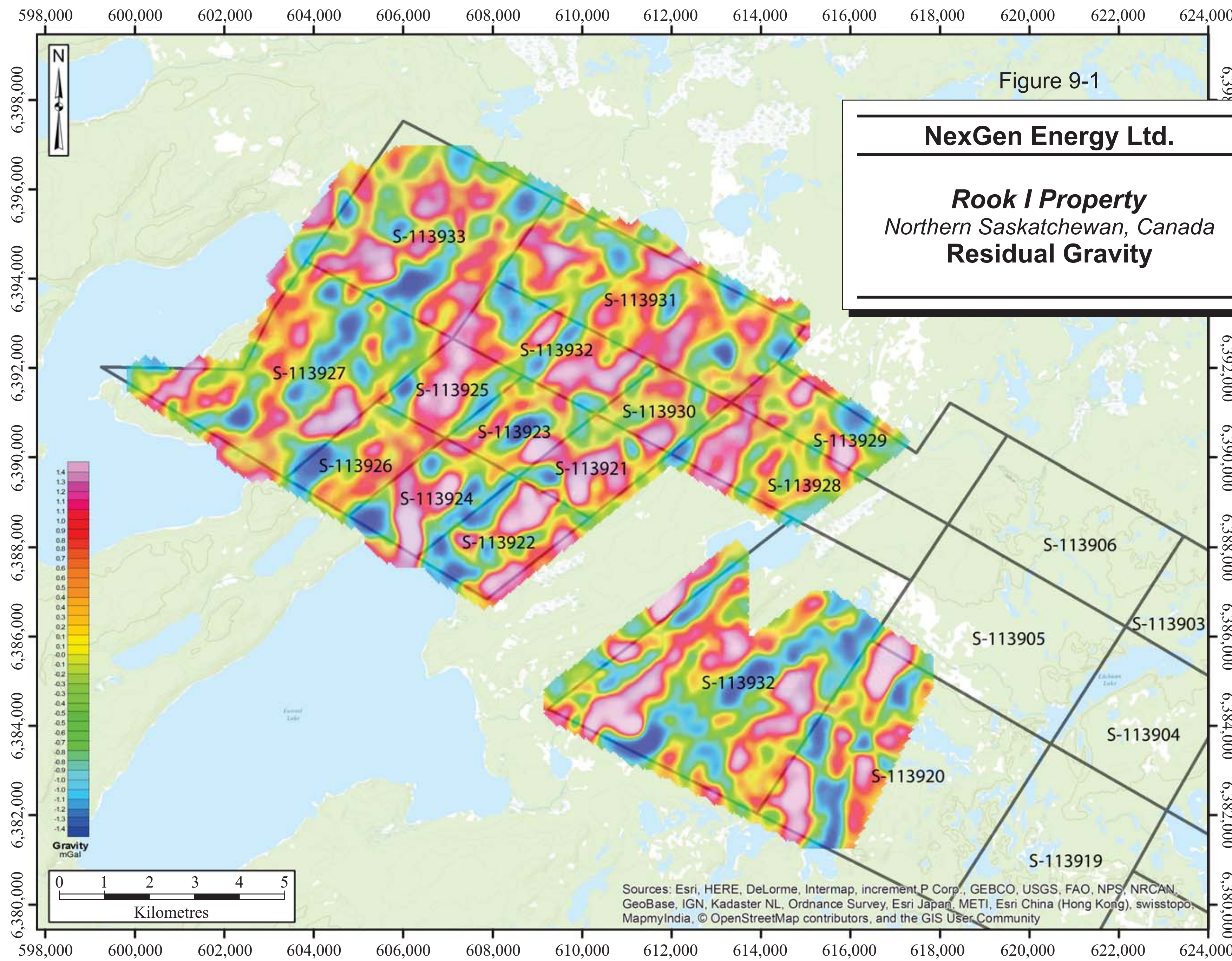
Figure 9-1

NexGen Energy Ltd.

Rook I Property

Northern Saskatchewan, Canada

Residual Gravity



April 2016

Source: NexGen Energy Ltd., 2016.

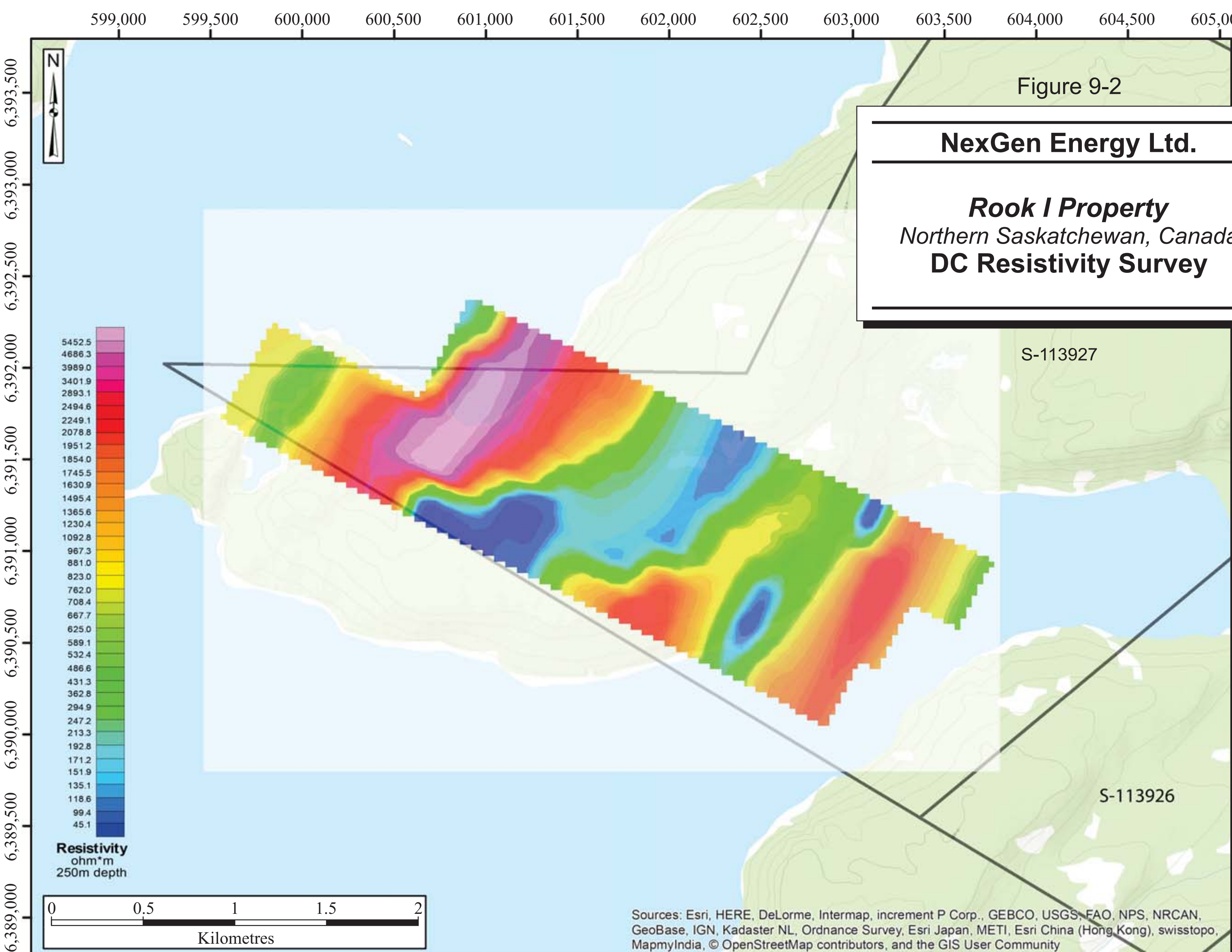


Figure 9-2

NexGen Energy Ltd.

Rook I Property

Northern Saskatchewan, Canada

DC Resistivity Survey

April 2016

Source: NexGen Energy Ltd., 2016.

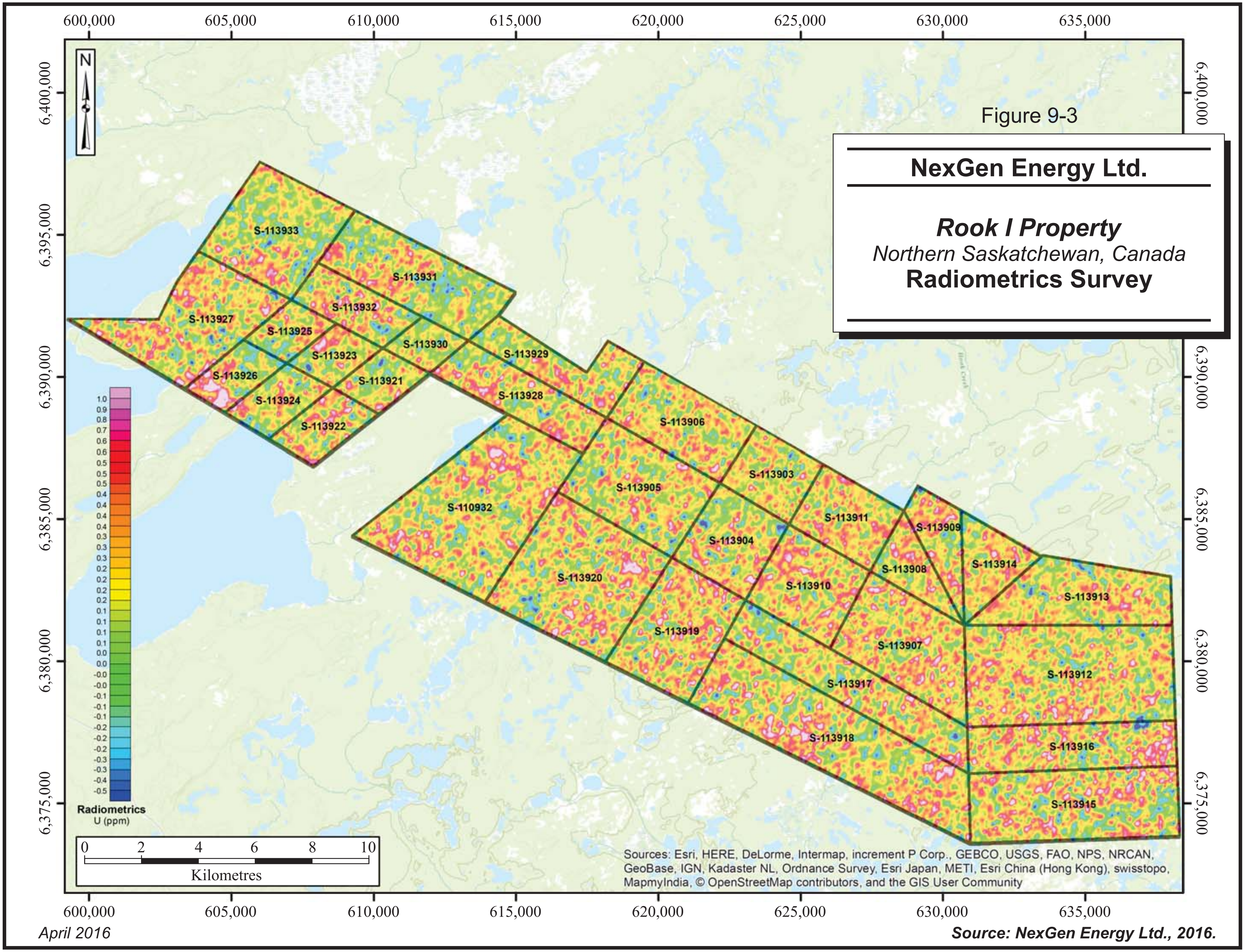
Figure 9-3

NexGen Energy Ltd.

Rook I Property

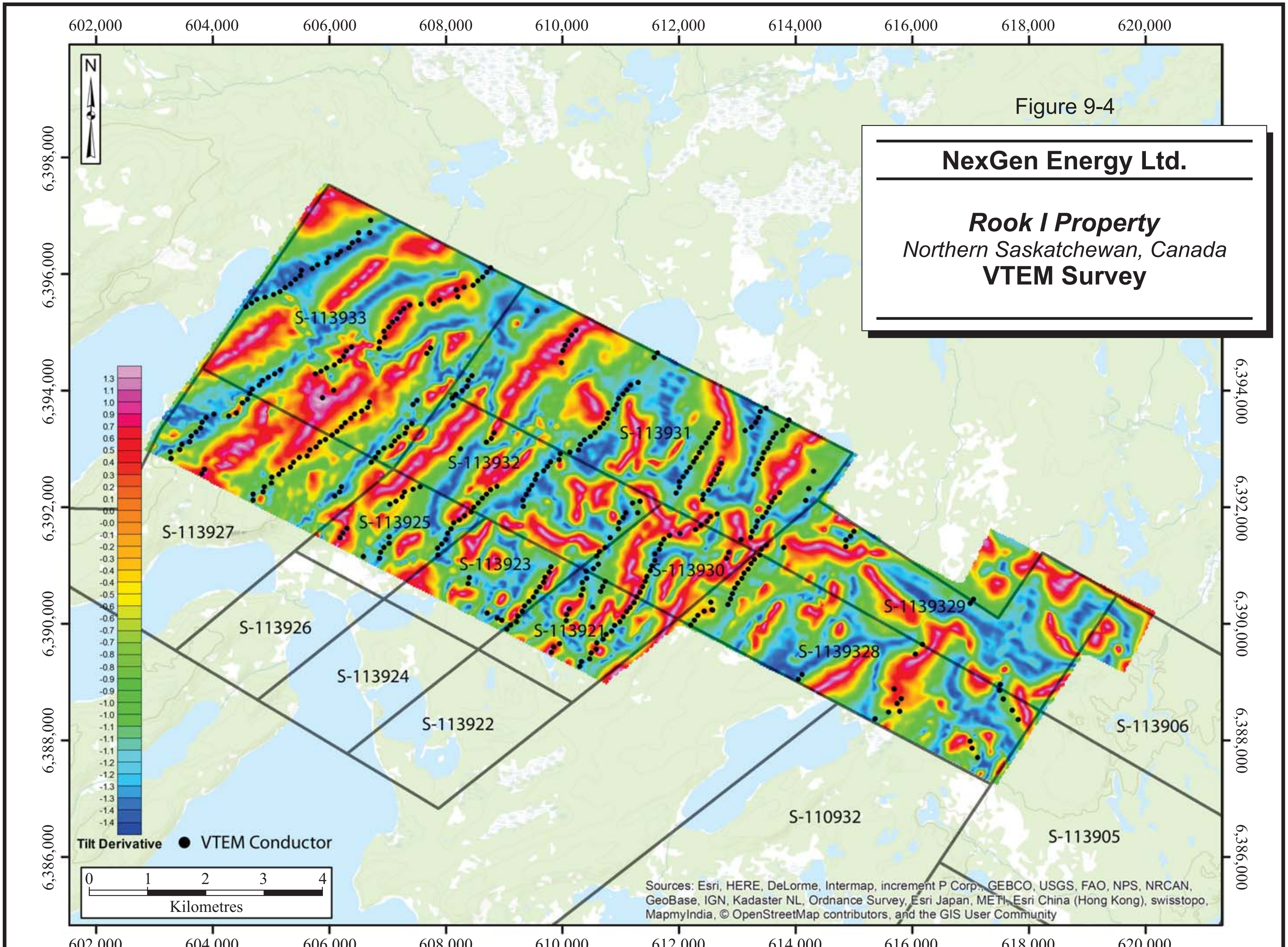
Northern Saskatchewan, Canada

Radiometrics Survey



April 2016

Source: NexGen Energy Ltd., 2016.



April 2016

Source: NexGen Energy Ltd., 2016.

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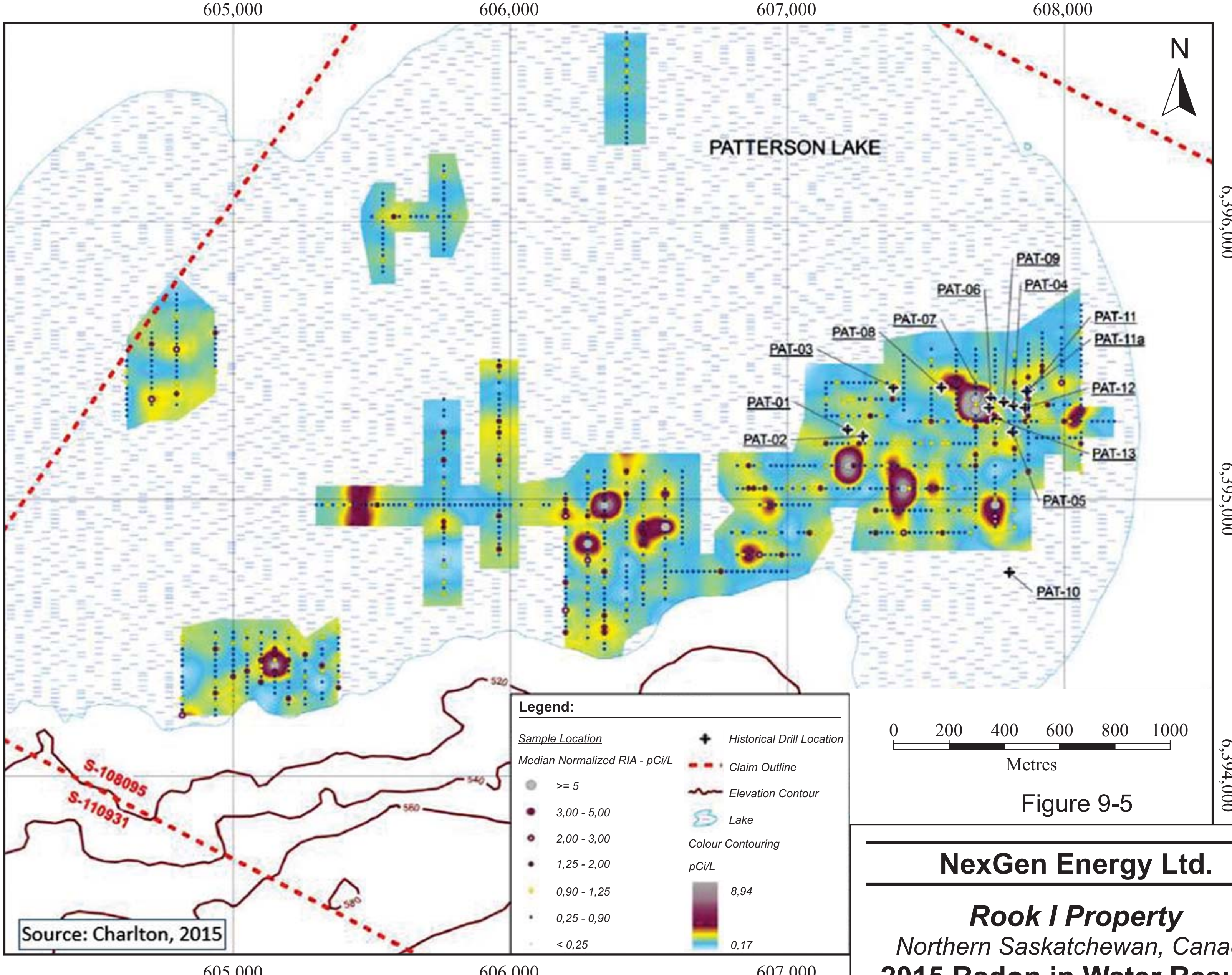

Projection: UTM Zone 12 (NAD 83)

Figure 9-5

NexGen Energy Ltd.

Rook I Property

Northern Saskatchewan, Canada

2015 Radon in Water Results
Patterson Lake

April 2016

Source: NexGen Energy Ltd., 2016.

RPA

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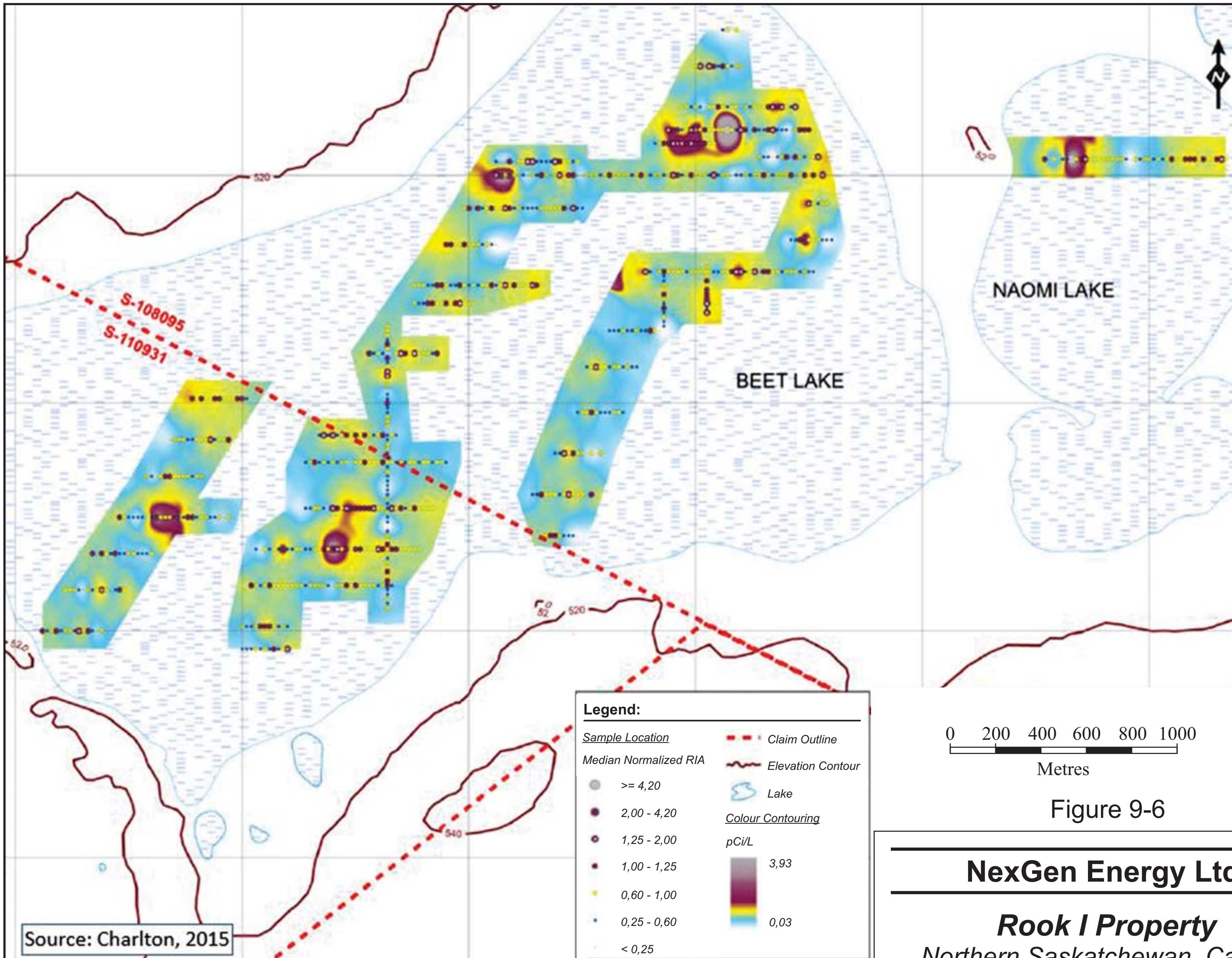

Projection: UTM Zone 12 (NAD 83)

April 2016

Source: NexGen Energy Ltd., 2016.

Figure 9-6

NexGen Energy Ltd.

Rook I Property

Northern Saskatchewan, Canada

2015 Radon in Water Results
Beet and Naomi Lakes

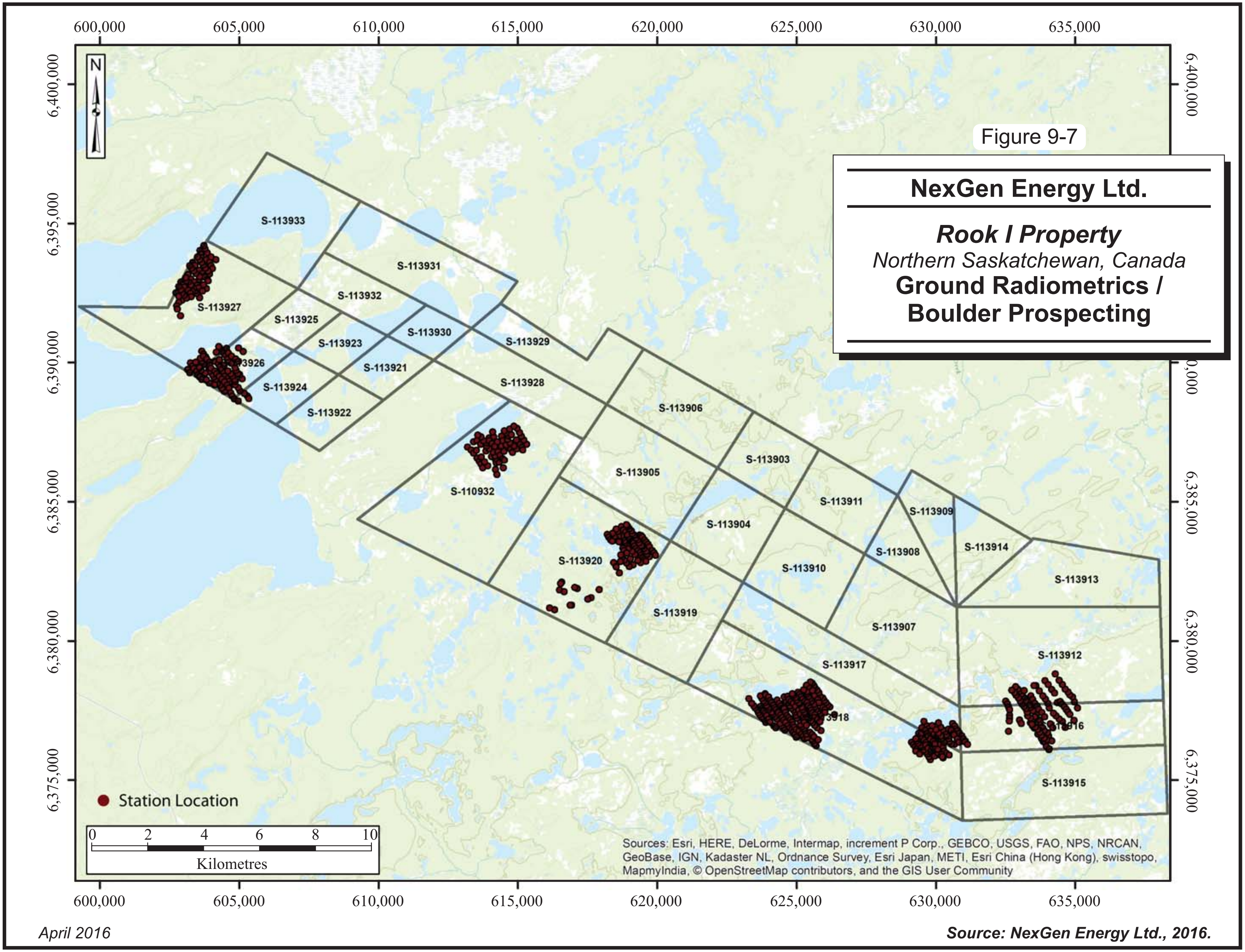
Figure 9-7
NexGen Energy Ltd.
Rook I Property
Northern Saskatchewan, Canada
Ground Radiometrics / Boulder Prospecting
Station Location
Kilometres
0 2 4 6 8 10
600,000
605,000
610,000
615,000
620,000
625,000
630,000
635,000
6,400,000
6,395,000
6,390,000
6,385,000
6,380,000
6,375,000
S-113933
S-113931
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Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community
April 2016
Source: NexGen Energy Ltd., 2016.
RPA
www.rpacan.com

10 DRILLING

Diamond drilling on the Rook I Property is the principal method of exploration and delineation of uranium mineralization after initial geophysical surveys. Drilling can generally be conducted year round on the Property.

As of the effective date of this report, NexGen and its predecessors have completed 218 holes totalling 89,417 m. Since 2013, NexGen has completed 180 holes totalling 84,078 m of drilling on the Rook I Property. Table 10-1 lists the holes by drilling program. Figure 10-1 illustrates the collar locations of the drill holes. Sample acquisition, preparation, security, and analysis were essentially the same for all drill programs and are described in Section 11.

The mineralization in the Arrow deposit is sub-vertical and true width is estimated to be between 30% and 50% of reported core lengths based on currently available information. A description of the dimensions of the mineralization is provided in Section 14, Mineral Resource Estimate.

TABLE 10-1 DRILLING PROGRAMS
NexGen Energy Ltd. – Rook I Property

Year	Season	Target Area	Company	Contractor	No. of Holes	Metres Drilled
1977		Rook I Property	Kerr Addison Mines - SMDC JV		1	124
1978		Rook I Property	Canadian Occidental Petroleum Ltd.		2	290
1978		Rook I Property	Hudson Bay Exploration and Development Co. Ltd.		1	297
1979		Rook I Property	Canadian Occidental Petroleum Ltd.		7	800
1980		Rook I Property	Canadian Occidental Petroleum Ltd.		11	1764
1980		Rook I Property	Saskatchewan Mineral Development Corporation		6	746
1982		Rook I Property	Saskatchewan Mineral Development Corporation		8	1070
1982		Rook I Property	Hudson Bay Exploration and Development Co. Ltd.		2	248
2013	Fall	A	NexGen Energy Ltd.	Guardian Drilling Corp.	13	3,032
2013 Total					**13**	**3,032**
2014	Summer	A	NexGen Energy Ltd.	Aggressive Drilling Ltd.	3	885
		Arrow	NexGen Energy Ltd.	Aggressive Drilling Ltd.	26	16,094
		B	NexGen Energy Ltd.	Aggressive Drilling Ltd.	3	936
		Dagger	NexGen Energy Ltd.	Aggressive Drilling Ltd.	1	413
		K	NexGen Energy Ltd.	Aggressive Drilling Ltd.	2	558
	Winter	A	NexGen Energy Ltd.	Aggressive Drilling Ltd.	6	1,837
		Arrow	NexGen Energy Ltd.	Aggressive Drilling Ltd.	8	4,642
		Dagger	NexGen Energy Ltd.	Aggressive Drilling Ltd.	3	963
2014 Total					**52**	**26,328**
2015	Summer	Arrow	NexGen Energy Ltd.	Aggressive Drilling Ltd.	40	26,366
		Derkson	NexGen Energy Ltd.	Aggressive Drilling Ltd.	16	4,670
		NE Bow	NexGen Energy Ltd.	Aggressive Drilling Ltd.	5	1,974
	Winter	Arrow	NexGen Energy Ltd.	Aggressive Drilling Ltd.	24	12,694
		Bow	NexGen Energy Ltd.	Aggressive Drilling Ltd.	14	5,185
		Fury	NexGen Energy Ltd.	Aggressive Drilling Ltd.	6	1,357
		North Patterson	NexGen Energy Ltd.	Aggressive Drilling Ltd.	10	2,473
2015 Total					**115**	**54,718**
Grand Total					**218**	**89,417**

FALL 2013 DRILL PROGRAM

Between August and October 2013, NexGen completed 3,032 m of diamond drilling in 13 drill holes. The contractor was Guardian Drilling Corp. and two rigs were utilized. Drilling was supported by helicopter for most of the program. Drill holes tested targets identified from the 2013 DC resistivity survey in Area A.

Drill holes RK-13-01, RK-13-02, and RK-13-03 targeted a narrow resistivity low on the eastern part of the grid. The low was interpreted to be caused by a graphitic quartz-feldspar gneiss horizon. Drill holes RK-13-04, RK-13-05, RK-13-07, RK-13-09, RK-13-11, and RK-13-13 targeted the east side of a broad resistivity low and holes RK-13-06, RK-13-08, RK-13-10, and RK-13-12 tested the west side of the same low. The broad low is interpreted as a thick sequence of pelitic to semipelitic gneisses with variable graphite content.

Anomalous radioactivity was intersected in RK-13-05 which returned 330 ppm U_3O_8 over four metres. Visible pitchblende was identified within a strongly hematite-altered breccia. The mineralization occurs within a 29 m wide shear zone marked by faults, fractures, a variety of veins, and breccias. The host rocks are garnetiferous quartz-plagioclase-biotite gneiss with minor graphite. Follow-up drilling failed to intersect mineralization. Further drilling is currently being considered.

WINTER 2014 DRILL PROGRAM

Between January and March of 2014, NexGen completed 7,442 m of diamond drilling in 17 drill holes. All drilling was completed by Aggressive Drilling Ltd. (Aggressive) of Saskatoon, Saskatchewan. The purpose of the drill program was to follow up previously intersected uranium mineralization in hole RK-13-05, as well as test a combination of airborne magnetic, EM, and ground gravity geophysical anomalies that were considered priority targets for uranium mineralization.

Three areas were targeted during the winter 2014 exploration drill season: Area A, Dagger (Area D), and Arrow (Figure 10-1). Anomalous radioactivity was intersected in drill holes AR-14-01 (formerly RK-14-21) through AR-14-08 (formerly RK-14-30) at Arrow. Subsequent assay results confirmed the presence of significant uranium concentrations. These drill holes represent the first discovery of mineralization at the Arrow deposit.

SUMMER 2014 DRILL PROGRAM

A total of 18,886 m of drilling was completed in 35 drill holes by NexGen on the Rook I Property between May and September 2014. Three drill rigs were utilized, all operated by Aggressive. The drill holes were primarily designed to follow up on uranium mineralization intersected at the Arrow deposit during the previous winter season. In addition, regional holes tested a combination of magnetic, EM, and gravity targets in four areas on the Property that included Area A, Area B, Area D (Dagger), and Area K (Figure 10-1).

The program was successful and extensive uranium mineralization was intersected at the Arrow deposit in several holes including AR-14-15 (3.42% U_3O_8 over 22.35 m and 1.52% U_3O_8 over 32.0 m) and AR-14-30 (10.17% U_3O_8 over 20.0 m and 7.54% U_3O_8 over 63.5 m).

A reinterpretation of the structural setting resulted in the identification of three main mineralized shear zones, the A1 through A3 shears. Both AR-14-15 and AR-14-30 represent the first holes drilled through what would become known as the high grade domain of the A2 shear.

WINTER 2015 DRILL PROGRAM

Between January and April 2015, NexGen completed 21,709 m of diamond drilling in 54 drill holes. Four drill rigs were utilized, all operated by Aggressive. The holes were primarily designed to expand the mineralization at the Arrow deposit. Regional holes continued to test a combination of magnetic, EM, and gravity targets at the Bow and Fury areas (Figure 10-1). At Arrow, drilling continued to intersect strong mineralization. Results are highlighted by AR-15-44b which intersected 11.55% U_3O_8 over 56.5 m including 20.0 m at 20.68% U_3O_8 and 1.0 m at 70.0% U_3O_8 in the high grade domain of the A2 shear.

A new zone of uranium mineralization was also discovered in the Bow area. Now referred to as the Bow occurrence, the best hole in this area to date has been BO-15-10. This hole intersected 0.20% U_3O_8 over 9.5 m. To date, 14 holes have been drilled at Bow. Further drilling is planned.

SUMMER 2015 DRILL PROGRAM

From June to October 2015, 33,010 m of drilling was completed in 58 drill holes on the Rook I Property. All diamond drilling was performed by Aggressive with five diamond drill rigs.

For the first time at Rook I, directional core drilling technology was utilized which allows for precise controlled deviation of drill holes and multiple branches drilled from one main pilot hole. The drilling method allows for both precise pierce point control (<3 m) and saves significant drilling metres. Because the daughter holes are not collared from surface, termination depths do not represent total metres drilled in many cases. Directional drilling was completed by Tech Directional Services Ltd. of Millertown, Newfoundland.

Drill holes of the summer 2015 program were primarily designed to follow up on uranium mineralization intersected at the Arrow deposit in consecutive seasons since the winter of 2014 (Figure 10-1). All holes at Arrow intersected significant and often intense uranium mineralization. Results are highlighted by AR-15-62 which intersected 6.35% U_3O_8 over 124.0 m including 10.00% U_3O_8 over 78.0 m. In addition, AR-15-49c2 intersected 12.01% U_3O_8 over 50.0 m including 18.0 m at 20.55% U_3O_8.

Regional holes of the summer 2015 program tested a combination of magnetic, EM, and gravity targets on the Rook I Property that included an on-land target area 750 m northeast of the Bow occurrence and five on-land target areas within the Derkson conductor corridor in the area of Beet Lake. Highly anomalous uranium concentrations were intersected in one hole in the Bow discovery area. RK-15-69 encountered 0.05% U_3O_8 over 2.5 m. Further drilling is planned.

DRILL HOLE SURVEYING

The collar locations of drill holes are spotted and surveyed by differential base station GPS using the UTM Zone 12N NAD83 reference datum. The drill holes have a concise naming convention with the prefix “AR” denoting “Arrow” or “RK” denoting “Rook I” followed by two digits representing the year and the number of the drill hole. In general, most of the drilling was completed on a northwest-southeast oriented grid with drill holes spaced approximately 25 m to 50 m apart based on directional drilling orientation.

The trajectory of all drill holes is determined during drilling with a Reflex instrument in single point mode, which measures the dip and azimuth at 30 m intervals. After completed, most holes are surveyed with a Stockholm Precision Tools north seeking gyro, which measures the dip and azimuth at 10 m intervals. All mineralized zones within the Rook I Property are cemented from approximately 10 m below the mineralized zone to approximately 10 m above the zone. All holes are cemented from approximately 30 m below the bottom of the casing to approximately 5 m above the top of the Devonian sandstones, if present, or to the top of bedrock if not present.

DRILL CORE HANDLING AND LOGGING PROCEDURES

At each drill site, core is removed from the core tube by the drill contractors and placed directly into three row NQ wooden core boxes with standard 1.5 m length (4.5 m total). 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 NexGen's camp where the box is initially surveyed with a Radiation Solutions RS-120 scintillometer to determine if any boxes contain mineralization. A threshold of 500 counts per second (cps) is used for Arrow core, and 300 cps for core from elsewhere on the Property. All mineralized core boxes above the threshold, plus a box before and after, is taken to the "hot" shacks for logging and sampling. All other core is moved to be processed in the "cold" logging shacks.

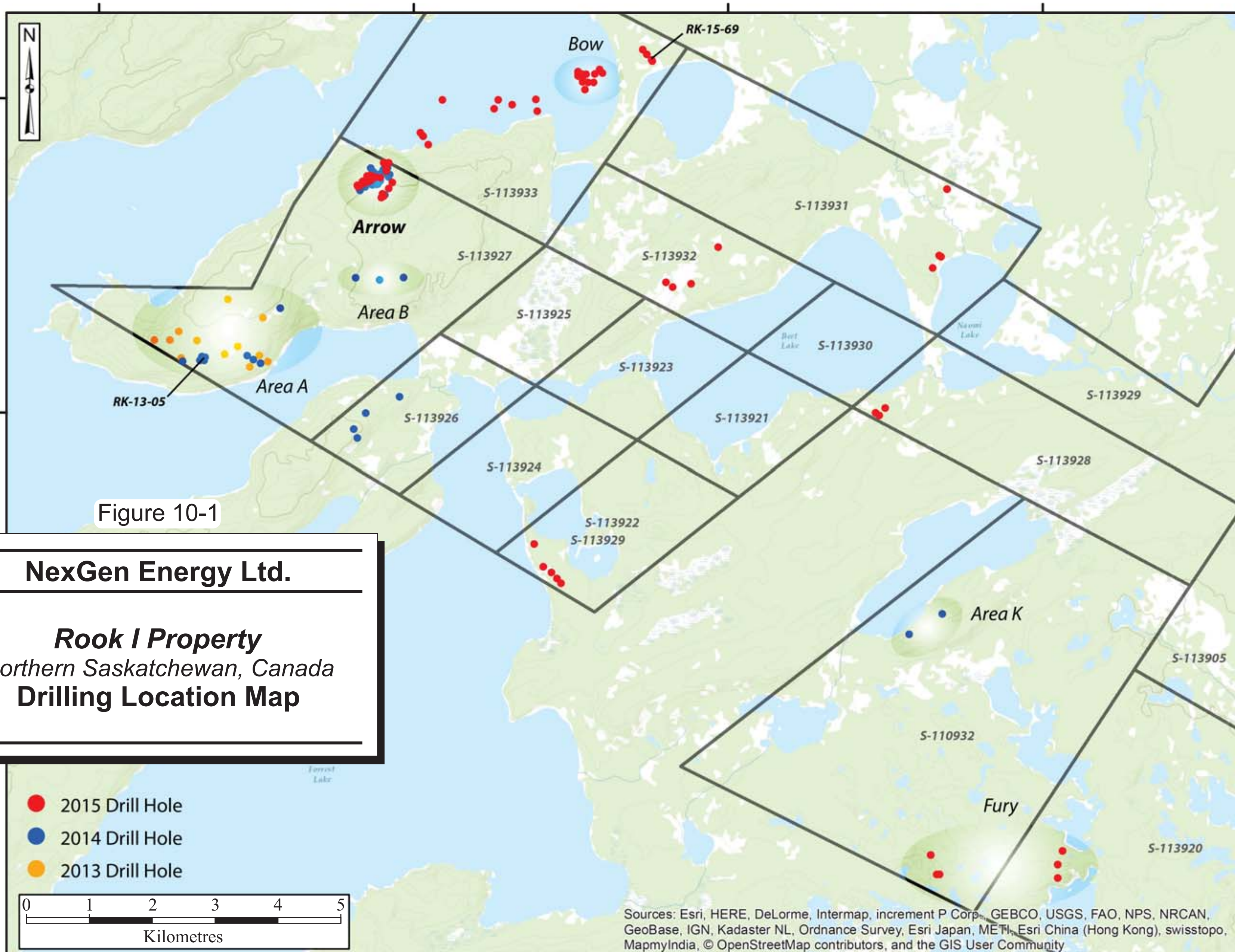
Before the core is split for sampling, depth markers are checked, core is carefully reconstructed, washed, geotechnically logged for lithologies, alteration, structures, and mineralization, measured for rock quality designation (RQD), resurveyed in detail with scintillometer, photographed (wet), and marked for sampling. Sampling of the holes for assay is guided by the observed geology and readings from a hand-held scintillometer.

Logging and sampling information is entered into a spreadsheet based template on a laptop computer which is integrated into the Project digital database on a daily basis.

Core recovery at Arrow is excellent, allowing for representative samples to be taken and accurate analyses to be performed. RPA is not aware of any drilling, sampling, or recovery factors that could materially impact the accuracy and reliability of the results.

In RPA's opinion, the drilling, core handling, logging, and sampling procedures meet or exceed industry standards and are adequate for the purpose of Mineral Resource estimation.

Figure 10-1



NexGen Energy Ltd.

Rook I Property

Northern Saskatchewan, Canada

Drilling Location Map

April 2016

Source: NexGen Energy Ltd., 2016.

11 SAMPLE PREPARATION, ANALYSES AND SECURITY

SAMPLE PREPARATION

Three types of samples are collected for geochemical analysis: (i) point samples taken at nominal spacing of five metres and meant to be representative of the interval or of a particular rock unit; (ii) composite samples in Athabasca sandstone where one centimetre long pieces are taken at the end of each core box row over 10 m intervals (five to seven pieces normally for a sample); and (iii) 0.5 m samples taken over intervals of elevated radioactivity and one or two metres beyond the radioactivity.

On site sample preparation consists of core splitting by geological technicians under the supervision of geologists. One half of the core is placed in plastic sample bags pre-marked with the sample number along with a sample number tag. The other half is returned to the core box and stored at the core storage area located near the logging facility at the project site. The bags containing the split samples are then placed in buckets with lids for transport to Saskatchewan Research Council Geoanalytical Laboratories (SRC) in Saskatoon, Saskatchewan, by NexGen personnel.

All other sample preparation is carried out by SRC prior to analyses. SRC crushes each sample to 60% passing -10 mesh and then riffle split to a 200 g sample with the remainder retained as coarse reject. The 200 g sample is then milled to 90% passing -140 mesh.

ANALYSES

DRILL CORE GEOCHEMICAL ANALYSES AND ASSAY

All samples are analyzed at SRC by inductively coupled plasma optical emission spectroscopy (ICP-OES) or inductively coupled plasma mass spectroscopy (ICP-MS) for 64 elements including uranium. Samples with low radioactivity are analyzed using ICP-MS. Samples with anomalous radioactivity are analyzed using ICP-OES.

Partial and total digestion runs are completed on most samples. For the partial digestion, an aliquot of each sample is digested in HNO_3/HCl for one hour at 95°C then diluted using de-ionized water. For the total digestion, an aliquot of each sample is heated in a mixture of $HF/HNO_3/HClO_4$ until completely dried down and the residue dissolved in dilute HNO_3. For uranium assays, an aliquot of sample pulp is completely digested in concentrated $HCl:HNO_3$ and then dissolved in dilute HNO_3 before analysis via ICP-OES. For boron, an aliquot of pulp is fused in a mixture of $NaO_2/NaCO_3$ in a muffle oven. The fused melt is dissolved in de-ionized water before analysis using ICP-OES.

Selected samples are also analyzed for gold, platinum, and palladium using traditional fire assay methods.

DRILL CORE PIMA ANALYSES

Samples are also collected for clay mineral identification using infrared spectroscopy regularly in areas of clay alteration. Samples are typically collected at five metre intervals and consist of centimetre sized pieces of core selected by a geologist. These samples are transported to Rekasa Rocks Inc. (Rekasa) of Saskatoon, Saskatchewan, by NexGen staff for analysis. Rekasa performs clay analyses using a portable infrared mineral analyzer (PIMA).

DRILL CORE BULK DENSITY ANALYSES

NexGen personnel perform bulk density measurements on full core on site using standard laboratory techniques. In mineralized zones, bulk density is measured from samples at 2.5 m intervals, where possible (i.e., approximately 20% of all mineralized samples). Pieces of core are sealed in cellophane wrap and are then weighed in air and weighed submerged in water. Bulk density is then calculated from the resulting data. In order for density to be correlated with uranium grades across the data set, each density sample directly correlates with a sample sent to SRC for assay (i.e., downhole intervals are the same for density samples and assay samples).

QUALITY ASSURANCE AND QUALITY CONTROL

NEXGEN QA/QC PROGRAM OVERVIEW

Quality assurance/quality control (QA/QC) programs validate the accuracy of analytical results and are essential for reliable estimates of Mineral Resources. NexGen's QA/QC program includes:

- Duplicate samples – Determination of precision/repeatability
- Standard reference materials (SRM) – Determination of accuracy
- Blank samples – Screen cross-contamination between samples during preparation and analyses

Results from the QA/QC samples are continually tracked by NexGen as certificates for each sample batch are received. If QA/QC samples of a sample batch pass within acceptable limits, the results of the sample batch are imported into the master database. To date, no batches have failed QA/QC testing.

PROTOCOLS

Field duplicates are submitted to SRC at every 20th even numbered mineralized sample sent for analysis (i.e., every sample ending in xxx20, xxx40, etc.). These samples are split into quarter cores at the Rook I core processing facility. A minimum of one field duplicate is submitted for each mineralized hole. Field duplicates are submitted to the laboratory in numerical order, directly preceding the original sample. This should ensure that the duplicate samples are analyzed as part of the same sample batch as their respective mother sample.

SRC also completes laboratory duplicate analysis on one in every 10 in-house bulk density measurements before the respective samples are crushed prior to geochemical analyses. Bulk density measurements at SRC are completed on half cores of entire samples via wax methods.

SRMs are also regularly inserted into the sample stream. All SRMs were obtained from the Canadian Centre for Mineral and Energy Technology (CANMET) and include BL2-A (0.502 +/- 0.002 % U_3O_8), BL-4a (0.1472 +/- 0.008 % U_3O_8), and BL-5 (8.36 +/- 0.04 % U_3O_8). The SRM selected is based on scintillometer measurements. In zones of drill core radioactivity between 500 cps and 5,000 cps, BL4a is used. In zones of drill core radioactivity between 5,000 cps and 10,000 cps, BL-2a is used. In zones of drill core radioactivity in excess of 10,000 cps, BL-5 is used. One SRM is inserted into the sample stream for every 30 m of mineralization intersected in any drill hole. Furthermore, at least one SRM is inserted for each mineralized drill hole.

At least one blank sample is inserted into the sample stream for each mineralized drill hole. In many cases, and at the discretion of the geologist logging the hole, blanks are also inserted immediately above, within, and below zones of significant mineralization. Blank material samples consist of pieces of rose quartz obtained from Deptuck's Landscaping & Supplies of Saskatoon, Saskatchewan.

QA/QC RESULTS

Results of the QA/QC program have been well documented by NexGen. RPA has relied on documentation provided by NexGen in addition to review of the QA/QC data. In summary, results indicate that the resource database is suitable to estimate Mineral Resources for the Arrow deposit.

Figures 11-1 to 11-3 show the results of SRMs BL-2a, BL-4a, and BL-5 analyzed at SRC. SRMs fail when more than three standard deviations (3SD) from the mean of the measured values for each type of material is returned. Two samples of BL-2a returned values in excess of 3SD from the mean. Because the two samples plotted only just above the 3SD threshold, the decision was made to pass the respective batches. All other samples returned acceptable values.

Figure 11-4 shows blank sample results. Blank samples fail when results are greater than 10 times the lower detection limit. In the case of uranium assays completed at SRC, the pass/fail threshold is 0.005% U_3O_8. One sample failure occurred. Sample 25604 returned 0.036% U_3O_8. Because all other QA/QC samples from that sample batch passed, NexGen chose not to take corrective steps and the batch was passed.

Figure 11-5 shows results from field duplicate samples. Figure 11-6 shows results from bulk density duplicate samples. The results are as expected with acceptable repeatability for both data sets.

FIGURE 11-1 REFERENCE MATERIAL CONTROL CHART - BL-2A (LOW GRADE STANDARD)

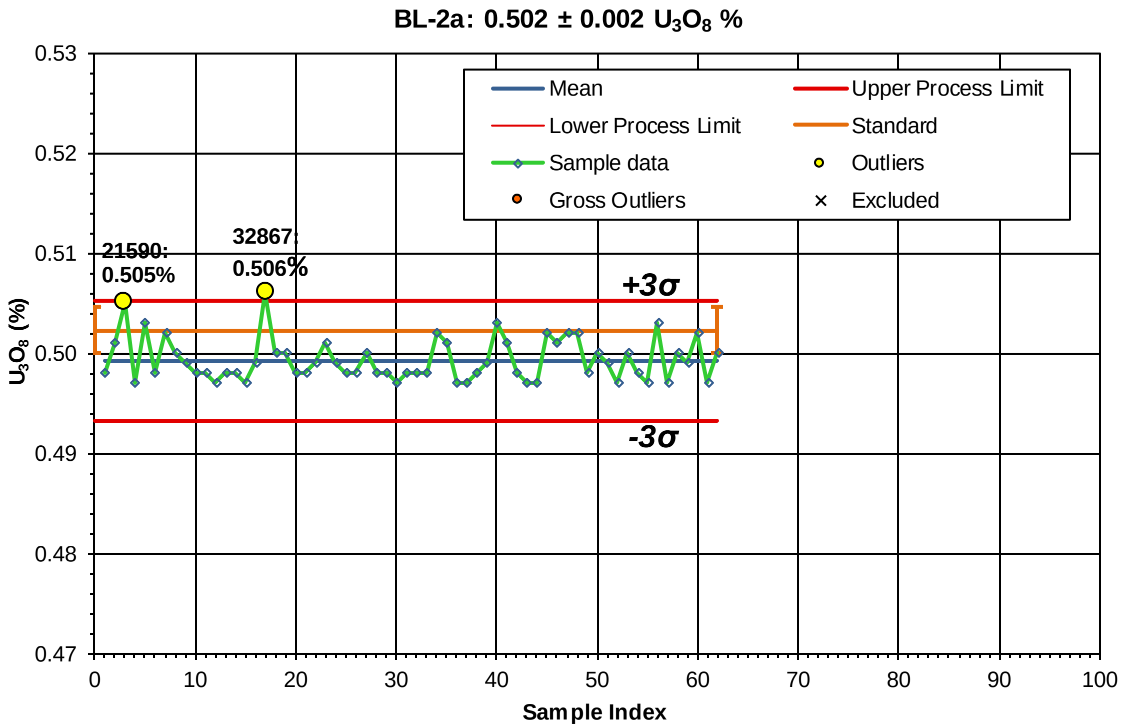


FIGURE 11-2 REFERENCE MATERIAL CONTROL CHART - BL-4A (MEDIUM GRADE STANDARD)

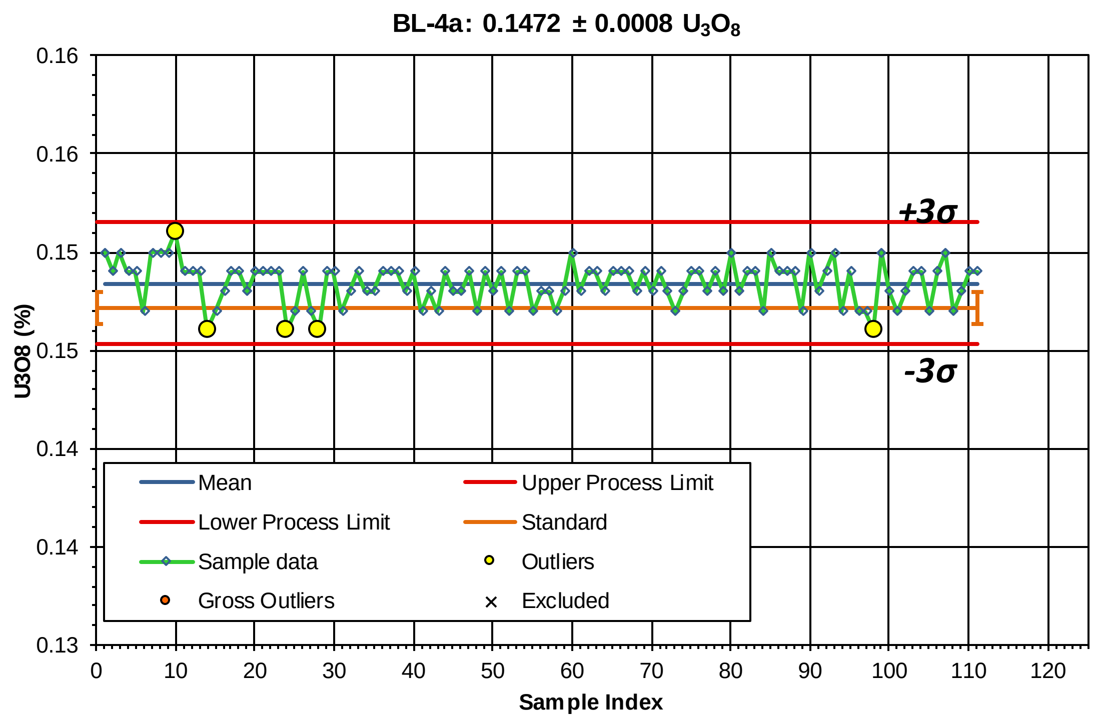


FIGURE 11-3 REFERENCE MATERIAL CONTROL CHART - BL-5 (HIGH GRADE STANDARD)

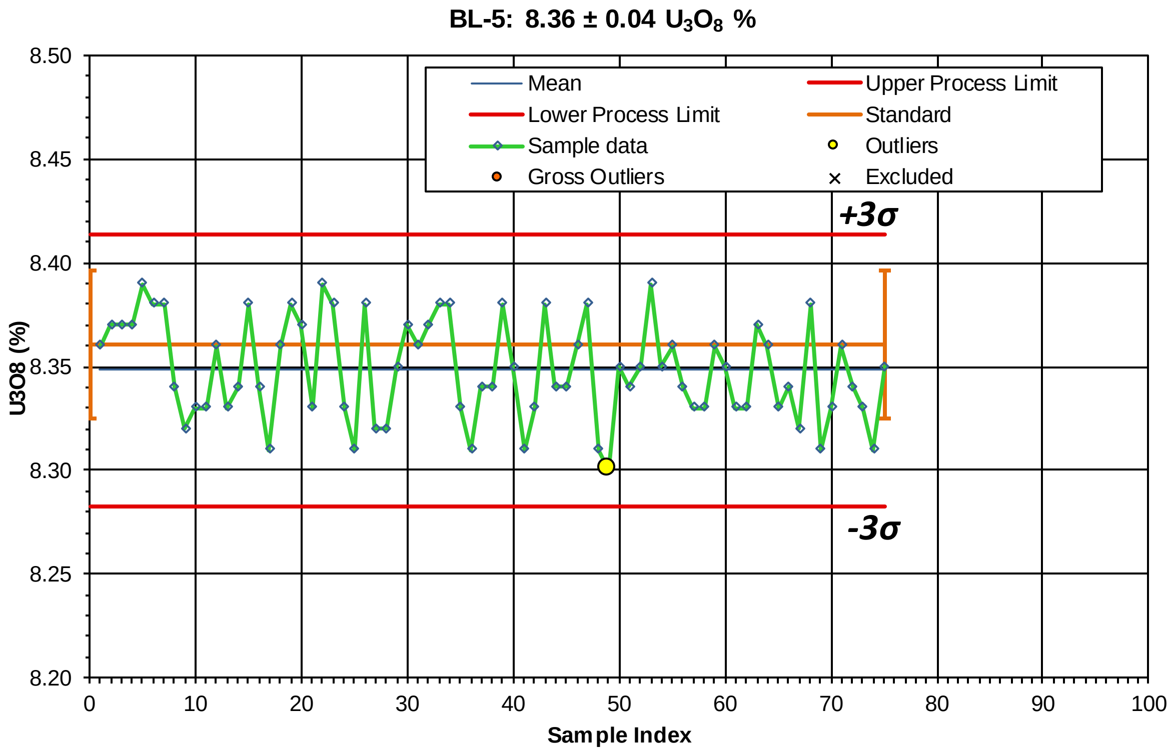


FIGURE 11-4 BLANK MATERIAL CONTROL CHART

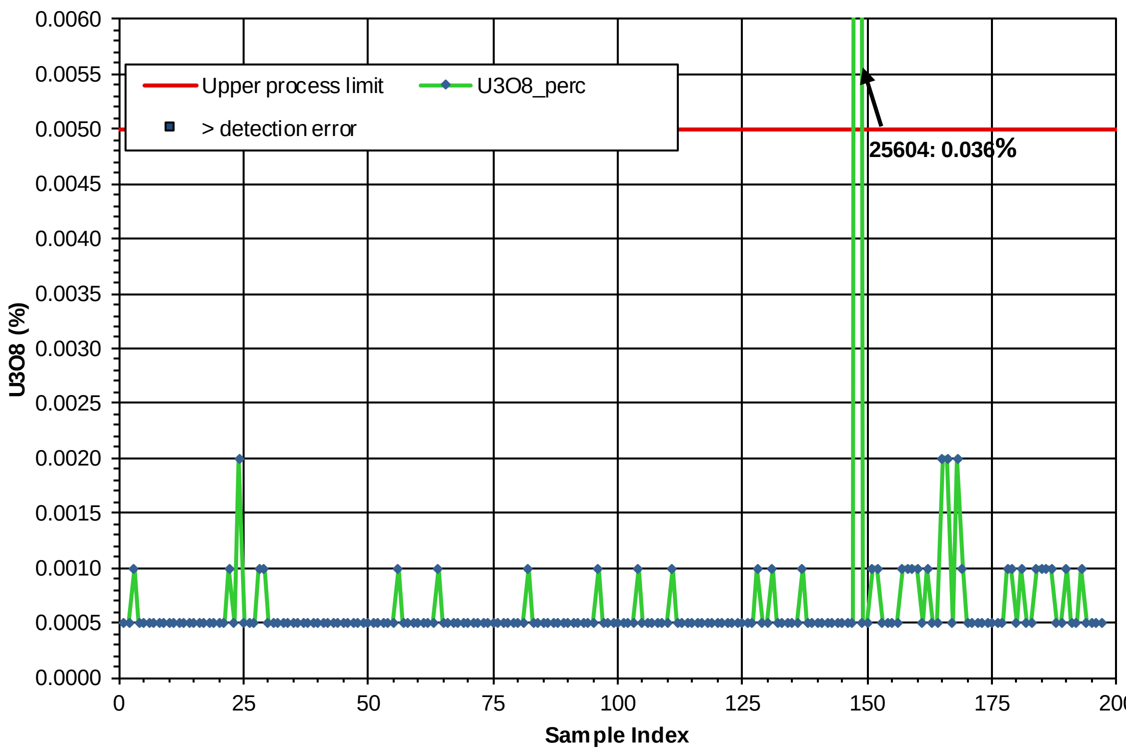


FIGURE 11-5 FIELD DUPLICATE CONTROL CHART

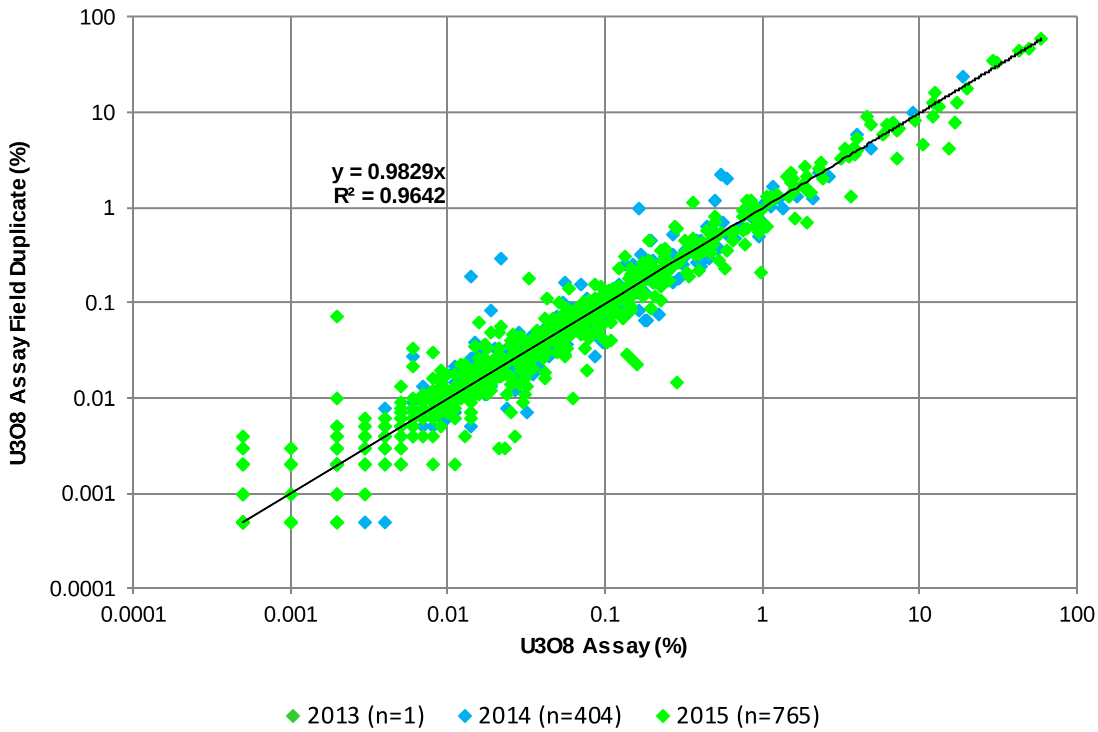
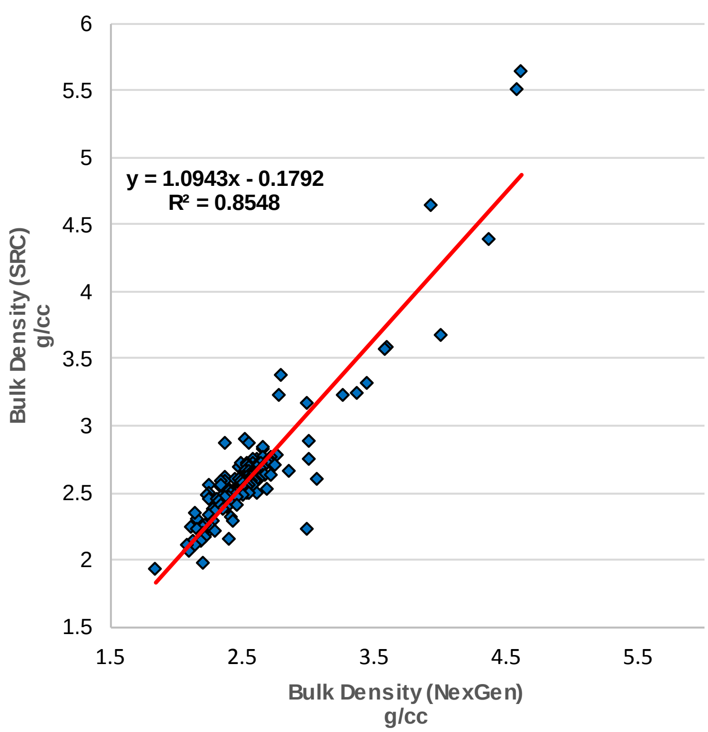


FIGURE 11-6 BULK DENSITY COMPARISON CHART



SRC INTERNAL QA/QC PROGRAM

Quality control was maintained for all analytical apparatus at SRC with certified reference material used to track analytical drift, and data accuracy and precision. Independently of NexGen's QA/QC samples, standards were inserted into sample batches at regular intervals by SRC. Standards used include BL-2a, BL-4a, BL-5, and SRCUO2 (1.59% U_3O_8), a standard produced in-house at the laboratory. In addition, samples were regularly analysed in duplicate. All quality control results must be within specified limits otherwise corrective action is taken. If there is a failure in a QA/QC analysis, the entire batch would be reanalysed.

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

RPA is independent of SRC.

Based on the data validation and the results of the standard, blank and duplicate analyses, RPA is of the opinion that the assay and bulk density databases are of sufficient quality for Mineral Resource estimation at the Arrow deposit.

SECURITY

As each hole is being drilled, drilling contractor personnel place the core in boxes at the drill site and seal core boxes with screwed on lids. Core is then delivered to the Rook I core processing facility by the contractor twice daily. Only the contractor and NexGen geological staff are authorized to be at drill sites and in the core processing facility. After logging, sampling and shipment preparation, samples are transported directly from the project site to SRC by NexGen staff.

SRC places a large emphasis on confidentiality and data security. Appropriate steps are taken to protect the integrity of samples at all processing stages. Access to the SRC premises is restricted by an electronic security system and patrolled by security guards 24 hours a day.

After the completion of analyses, data are sent securely via electronic transmission to NexGen. These results are provided as a series of PDFs and an Excel spreadsheet.

In RPA's opinion, the security and confidentially protocols as designed and implemented by NexGen are adequate and the assay results within the database are suitable for use in a Mineral Resource estimate.

12 DATA VERIFICATION

RPA reviewed and verified the resource database used to estimate the Mineral Resources for the Arrow deposit. The verification included a review of the QA/QC methods and results, comparison of the database assay table against assay certificates, standard database validation tests, and a site visit including drill core review. No limitations were placed on RPA's data verification process. The review of the QA/QC program and results is presented in Section 11, Sample Preparation, Analyses and Security.

RPA considers the resource database reliable and appropriate to prepare a Mineral Resource estimate.

SITE VISIT AND CORE REVIEW

Mr. Mathisen, CPG, visited the Property on January 19 to 20, 2016, during the winter drill program in connection with the Arrow Mineral Resource estimate. RPA visited several active drill sites and targets. RPA reviewed core handling, logging, sample preparation and analytical protocols, density measurement system, and storage procedures. RPA examined core from drill holes AR-14-30, AR-15-57C3, and AR-15-62, and compared observations with assay results and descriptive log records made by NexGen geologists. As part of the review, RPA verified the occurrences of mineralization visually and by way of a hand-held scintillometer.

As part of the data verification process, RPA also:

- Reviewed the Leapfrog model parameters and interpreted geology.
- Reviewed how drill hole collar locations are defined and inspected use of the Devico directional drilling.
- Observed data management system and obtained master database.
- Obtained SRC laboratory certificates for assays from 11 holes representing approximately 10% of the 99 holes drilled, of which 17 are considered restarts or were abandoned.

DATABASE VALIDATION

RPA performed the following digital queries:

- Header table: searched for incorrect or duplicate collar coordinates and duplicate hole IDs.
- Survey table: searched for duplicate entries, survey points past the specified maximum depth in the collar table, and abnormal dips and azimuths.
- Core recovery table: searched for core recoveries greater than 100% or less than 80%, overlapping intervals, missing collar data, negative lengths, and data points past the specified maximum depth in the collar table.
- Lithology: searched for duplicate entries, intervals past the specified maximum depth in the collar table, overlapping intervals, negative lengths, missing collar data, missing intervals, and incorrect logging codes.
- Geochemical and assay table: searched for duplicate entries, sample intervals past the specified maximum depth, negative lengths, overlapping intervals, sampling lengths exceeding tolerance levels, missing collar data, missing intervals, and duplicated sample IDs.

No significant issues were identified.

INDEPENDENT VERIFICATION OF ASSAY TABLE

The assay table contains 33,467 laboratory records from 99 drill holes. RPA verified approximately 3,512 records from 11 drill holes (AR-14-01, AR-14-10, AR-14-17, AR-14-30, AR-15-39, AR-15-43a, AR-15-45b, AR-15-48c1, AR-15-53c1, AR-15-57c3, and AR-15-62) representing approximately 10% of the data for uranium values against 42 different laboratory certificates. Other than some rounding differences, no major discrepancies were found.

Based on the data validation by NexGen and RPA and the results of the standard, blank, and duplicate analyses, RPA is of the opinion that the assay database is of sufficient quality for Mineral Resource estimation.

13 MINERAL PROCESSING AND METALLURGICAL TESTING

There has been no mineral processing or metallurgical testwork completed on the Arrow deposit. RPA recommends that NexGen initiate bench scale testwork.

14 MINERAL RESOURCE ESTIMATE

RPA estimated Mineral Resources for the Arrow deposit using drill hole data available as of January 14, 2016. At a cut-off grade of 0.25% U_3O_8, the Inferred Mineral Resource is estimated to total 3.48 million tonnes at an average grade of 2.63% U_3O_8 for a total of 201.9 million pounds U_3O_8 (Table 14-1). The effective date of the Mineral Resource estimate is January 14, 2016. Estimated block model grades are based on chemical assays only. No Mineral Reserves have been estimated at the Property.

TABLE 14-1 INFERRED MINERAL RESOURCE – JANUARY 14, 2016
NexGen Energy Ltd. – Arrow Deposit

Structure	Tonnage (Tonnes)	Grade (U_3O_8 %)	Metal U_3O_8 (U_3O_8 lb)
A1	380,000	0.50	4,200,000
A2 Low Grade	1,480,000	0.85	27,600,000
A2 High Grade	410,000	13.26	120,500,000
A3	1,130,000	1.90	47,300,000
A4	80,000	1.35	2,300,000
Total	**3,480,000**	**2.63**	**201,900,000**

Notes:
1. CIM definitions were followed for Mineral Resources.
2. Mineral Resources are reported at a cut-off grade of 0.25% U_3O_8 based on a long-term price of US$65 per lb U_3O_8 and estimated mining costs.
3. A minimum mining width of 2.0 m was used.
4. Numbers may not add due to rounding.

RPA is not aware of any known environmental, permitting, legal, title, taxation, socioeconomic, marketing, political, or other relevant factors that could materially affect the current resource estimate.

RESOURCE DATABASE

The resource estimate was prepared using drill hole data assayed to January 14, 2016 (AR-14-01 to AR-15-62) for a total of 99 holes totalling 67,547 m of drilling (Table 14-2). Of the 99 holes completed, 17 drill holes were abandoned before reaching their target depth, are considered restarts, and were not used in the resource estimate by RPA. The wireframe models representing the mineralized zones are intersected by 68 holes.

NexGen maintains a complete set of drill hole plus other exploration data for the entire Property in Microsoft Access Database. RPA exported only those data used to estimate resources and built a Maptek Vulcan project. Table 14-2 lists the records for drill hole data in or near the Arrow deposit.

TABLE 14-2 VULCAN DATABASE RECORD COUNT
NexGen Energy Ltd. - Arrow Deposit

Table Name	Number of Records*
Collar	99
Survey	4,229
U_3O_8 Chemical Assays	33,467
Lithology	2,851
Density	1,955
Full width mineralized intersections	9,059
2m Composites	2,283

* In the area of the Arrow deposit only.

GEOLOGICAL INTERPRETATION AND 3D SOLIDS

Uranium mineralization at Arrow occurs within and proximal to structurally prepared basement rocks (graphitic mylonites) that show varying degrees of clay, chlorite, and hematite alteration. Structures have been reactivated, and four main parallel structural zones (namely the A1, A2, A3, and A4 shears) have been recognized, with the A2 and A3 shears hosting higher grade, thicker and more continuous mineralization than the others as defined by current drilling. Mineralization consists predominantly of uraninite/pitchblende that occurs as massive to semi-massive accumulations, foliation controlled, mineral replacements, and disseminations. A continuous zone of higher grade mineralization in the A2 shear is known as the higher grade A2 sub-zone. The A2 High Grade (HG) domain contains approximately 60% of the contained pounds of U_3O_8 classified as Inferred Mineral Resources.

Wireframe models of mineralized zones were used to constrain the block model grade interpolation process. RPA's interpretation for most of the mineralized lenses (domains) was guided by preliminary grade-shell wireframes created in Leapfrog software and then refined in Vulcan software with conventional three-dimensional wireframe grade shells with a threshold of 0.05% U_3O_8 and minimum thickness of two metres. RPA built the wireframe models using three dimensional (3D) polylines on northeast looking vertical sections spaced 12.5 m apart. Extension distance for the wireframes was half-way to the next hole, or approximately 25 m vertically and horizontally past the last drilling. Polylines were "snapped" to assay intervals along the drill hole traces such that the sectional interpretations "wobbled" in 3D space. Infill polylines were added to accommodate irregular geometries. Wireframes were assembled by tying two-dimensional cross-section and plan view polygons together using the drill hole data for a reference, and the continuity was checked using a longitudinal section and level plans.

One high grade portion (A2 High Grade) of the deposit was modelled with an additional higher grade wireframe based on a threshold of 5.0% U_3O_8 although some lower grades were incorporated in places to maintain continuity and a minimum thickness of two metres. The higher grade wireframe is located within and completely encompassed by a 0.05% grade shell (LG) within the A2 structure.

In total, RPA interpreted, built, and used 16 wireframe models of the mineralization, also known as domains (Table 14-3 and Figures 14-1). Wireframes were assigned to zones as identified by NexGen geologists based on mapping the sub-vertical shear zones.

TABLE 14-3 SUMMARY OF WIREFRAME MODELS
NexGen Energy Ltd. - Arrow Deposit

Domain	Points	Triangles	Surface Area	Wireframe Volume (m^3)	Tonnage	Rock Code
101.00t	72	140	23,772	43,605	107,356	101
102.00t	452	900	61,769	258,229	635,761	102
103.00t	20	36	8,568	16,521	40,675	103
106.00t	832	1,660	43,428	82,414	202,904	106
111.00t	32	60	8,134	23,309	57,386	111
200.00t	80	156	14,236	27,225	67,028	200
201.00t	179	354	35,404	89,185	219,574	201
204_hg_domain_v6.00t	917	1,830	72,918	156,355	384,947	2,040
204_lg_domain_V6.00t	2,210	4,432	258,313	789,306	1,943,272	204
205.00t	408	812	30,358	69,966	172,255	205
207.00t	203	402	13,594	16,166	39,801	207
311_V5.00t	164	324	31,086	48,874	120,328	311
312.00t	122	240	16,629	34,033	83,790	312
317_V5.00t	2,826	5,648	161,849	614,491	1,512,876	317
318.00t	118	232	11,945	12,595	31,008	318

Domain	Points	Triangles	Surface Area	Wireframe Volume (m^3)	Tonnage	Rock Code
403_V5.00t	63	122	11,710	41,623	102,475	403
Total	**8,698**	**17,348**	**803,711**	**2,323,898**	**5,721,437**	

At its highest elevation, mineralization reaches the sub-Athabasca unconformity, 100 m below surface. The Mineral Resource estimate reported herein extends to a depth of 800 m below surface. Wide spaced drill holes beneath the Mineral Resource estimate have intersected mineralization at depths of up to 920 m below surface. The deposit as defined in the Mineral Resource estimate is comprised of several stacked lenses within an overall strike length of 645 m. The individual lenses vary in thickness from 4 m to 25 m.

Looking East

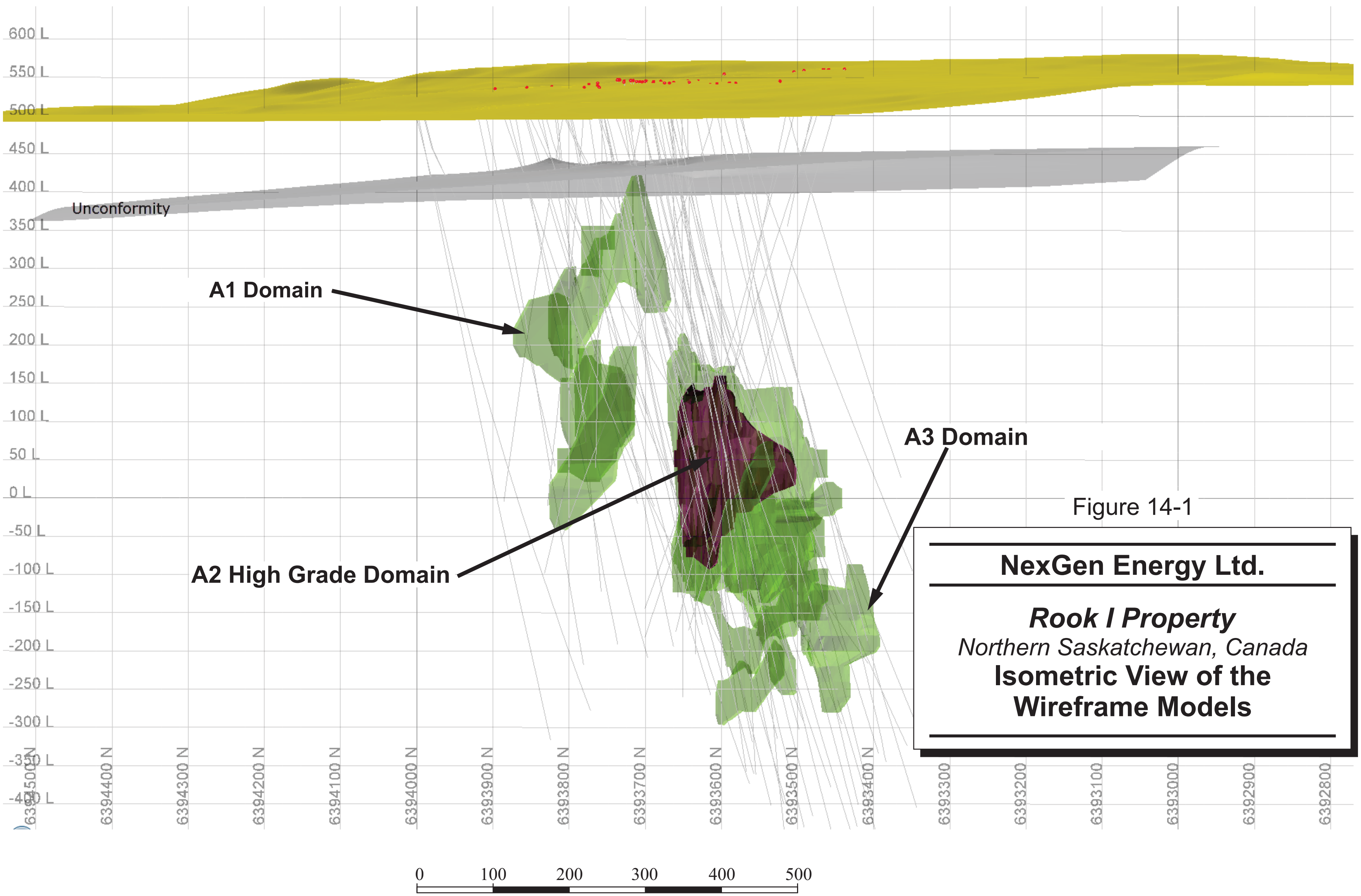


Figure 14-1

NexGen Energy Ltd.

Rook I Property

Northern Saskatchewan, Canada

Isometric View of the Wireframe Models

April 2016

Source: RPA, 2016.

STATISTICAL ANALYSIS

Assay values located inside the wireframe models were tagged with domain identifiers and exported for statistical analysis. Results were used to help verify the modelling process. Basic statistics by domain are summarized in Table 14-4.

TABLE 14-4 STATISTICS OF RESOURCE ASSAY VALUES BY DOMAIN
NexGen Energy Ltd. - Arrow Deposit

Zone	Count	Minimum ($\%U_3O_8$)	Maximum ($\%U_3O_8$)	Mean ($\%U_3O_8$)	Stdev ($\%U_3O_8$)	Variance	CV
101	84	0.00	3.52	0.18	0.43	0.18	2.31
102	672	0.00	23.50	0.31	1.05	1.10	3.36
103	125	0.00	5.40	0.28	0.58	0.34	2.08
106	80	0.00	3.20	0.34	0.58	0.33	1.68
111	124	0.02	4.92	0.63	0.92	0.85	1.45
200	84	0.00	1.97	0.20	0.33	0.11	1.69
201	157	0.00	6.94	0.25	0.64	0.41	2.60
204	3,564	0.00	55.80	0.76	2.96	8.79	3.89
205	265	0.00	22.40	0.93	2.47	6.10	2.65
207	46	0.00	3.51	0.49	0.80	0.65	1.65
311	334	0.00	38.00	1.22	3.68	13.56	3.02
312	141	0.00	27.20	1.89	4.38	19.15	2.31
317	1,492	0.00	50.60	1.53	5.14	26.43	3.35
318	53	0.00	20.20	2.11	3.98	15.85	1.89
403	160	0.00	24.50	1.56	3.93	15.42	2.51
2040 (A2 High Grade)	1,006	0.00	80.50	10.52	16.52	272.97	1.57

CAPPING HIGH GRADE VALUES

Where the assay distribution is skewed positively or approaches log-normal, erratic high grade assay values can have a disproportionate effect on the average grade of a deposit. One method of treating these outliers in order to reduce their influence on the average grade is to cut or cap them at a specific grade level. In the absence of production data to calibrate the capping level, inspection of the assay distribution can be used to estimate a “first pass” cutting level.

Review of the resource assay histograms within the wireframe domains (Figures 14-2 to 14-6) and a visual inspection of high grade values on vertical sections suggested that some capping of erratic values was warranted. Domains were grouped based on statistical similarities into Groups 1 through 5 and capping analysis was then completed based on the individual groups. The domain, group number, capping values, and total number of capped values are shown in Table 14-5. Very high grade outliers were capped at 55% U_3O_8 within the A2 HG domain and 6%, 8%, 10%, and 15% U_3O_8 in the LG domains, resulting in a total of 167 capped values. Cut assay statistics by domain are summarized in Table 14-6.

TABLE 14-5 CAPPING OF RESOURCE ASSAY VALUES BY DOMAIN
NexGen Energy Ltd. - Arrow Deposit

Domain	RPA Group	RPA Capping Analysis	Count	# Capped Count	# Capped %	Mean (U_3O_8%) Uncap	Mean (U_3O_8%) Cap	CV Uncap	CV Cap
2040	1	55	1,006	42	4.17	10.52	10.19	1.57	1.52
204	2	10	3,564	53	1.49	0.76	0.60	3.89	2.58
311	3	15	334	6	1.80	1.22	1.09	3.02	2.54
312	3	15	141	4	2.84	1.89	1.71	2.31	2.08
317	3	15	1,492	43	2.88	1.53	1.19	3.35	2.65
318	3	15	53	1	1.89	2.11	2.02	1.89	1.78
101	4	6	84	0	0.00	0.18	0.18	2.31	2.31
102	4	6	672	3	0.45	0.31	0.28	3.36	2.06
103	4	6	125	0	0.00	0.28	0.28	2.08	2.08
106	4	6	80	0	0.00	0.34	0.34	1.68	1.68
111	4	6	124	0	0.00	0.63	0.63	1.45	1.45
200	4	6	84	0	0.00	0.20	0.20	1.69	1.69
201	4	6	157	1	0.64	0.25	0.24	2.60	2.44
207	4	6	46	0	0.00	0.49	0.49	1.65	1.65
205	5	8	265	6	2.26	0.93	0.79	2.65	2.10
403	5	8	160	8	5.00	1.56	1.13	2.51	1.95
Total			**8,387**	**167**	**1.99**				

TABLE 14-6 STATISTICS OF RESOURCE CAPPED ASSAY VALUES BY DOMAIN
NexGen Energy Ltd. - Arrow Deposit

Zone	Count	Minimum (%U_3O_8)	Maximum (%U_3O_8)	Mean (%U_3O_8)	Stdev (%U_3O_8)	Variance	CV
101	84	0.00	3.52	0.18	0.43	0.18	2.31
102	672	0.00	6.00	0.28	0.58	0.34	2.06
103	125	0.00	5.40	0.28	0.58	0.34	2.08
106	80	0.00	3.20	0.34	0.58	0.33	1.68
111	124	0.02	4.92	0.63	0.92	0.85	1.45
200	84	0.00	1.97	0.20	0.33	0.11	1.69
201	157	0.00	6.00	0.24	0.59	0.35	2.44
204	3,564	0.00	10.00	0.60	1.55	2.39	2.58
205	265	0.00	8.00	0.79	1.65	2.73	2.10
207	46	0.00	3.51	0.49	0.80	0.65	1.65
311	334	0.00	15.00	1.09	2.77	7.66	2.54
312	141	0.00	15.00	1.71	3.56	12.70	2.08
317	1,492	0.00	15.00	1.19	3.15	9.95	2.65
318	53	0.00	15.00	2.02	3.61	13.02	1.78
403	160	0.00	8.00	1.13	2.21	4.88	1.95
2040	1,006	0.00	55.00	10.19	15.47	239.30	1.52

FIGURE 14-2 HISTOGRAM OF RESOURCE ASSAYS IN HIGH GRADE (GROUP 1) DOMAIN

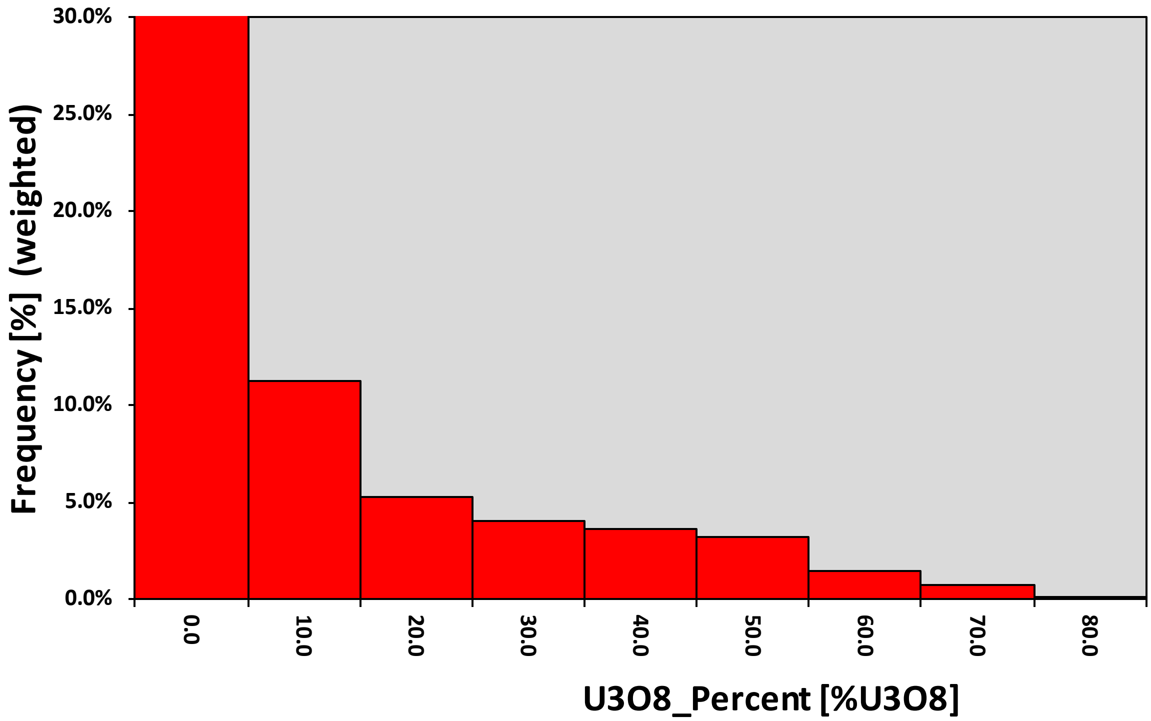


FIGURE 14-3 HISTOGRAM OF RESOURCE ASSAYS IN LOW GRADE (GROUP 2) DOMAIN

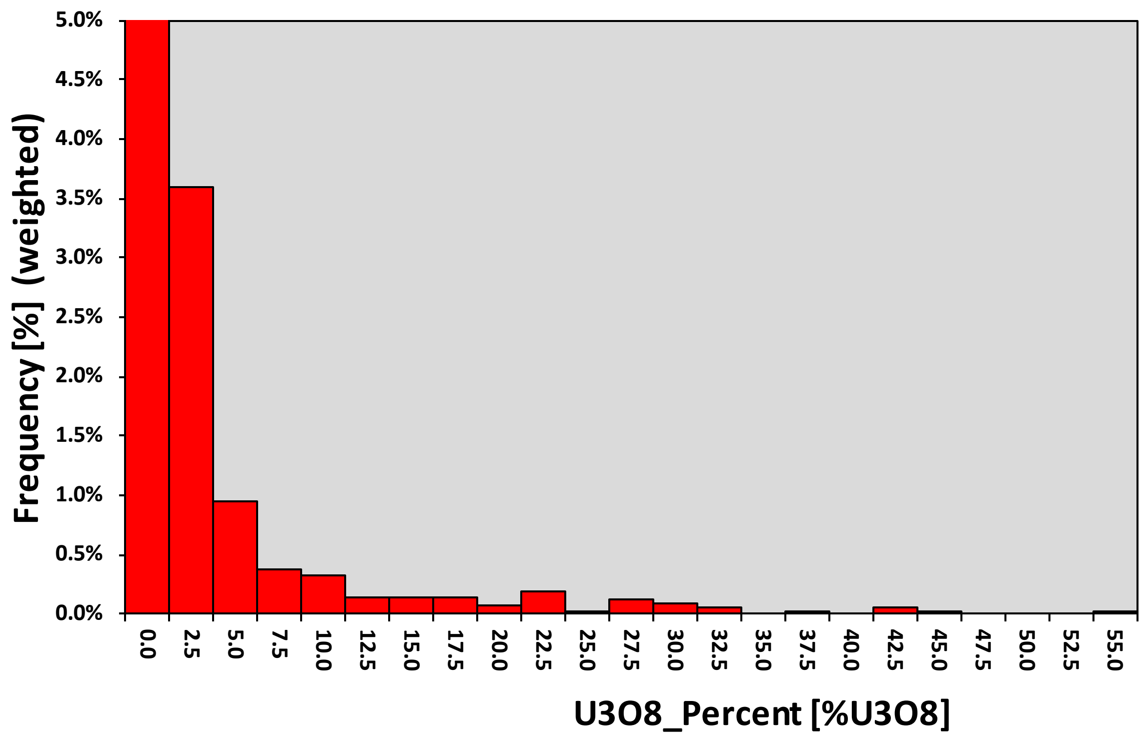


FIGURE 14-4 HISTOGRAM OF RESOURCE ASSAYS IN LOW GRADE (GROUP 3) DOMAIN

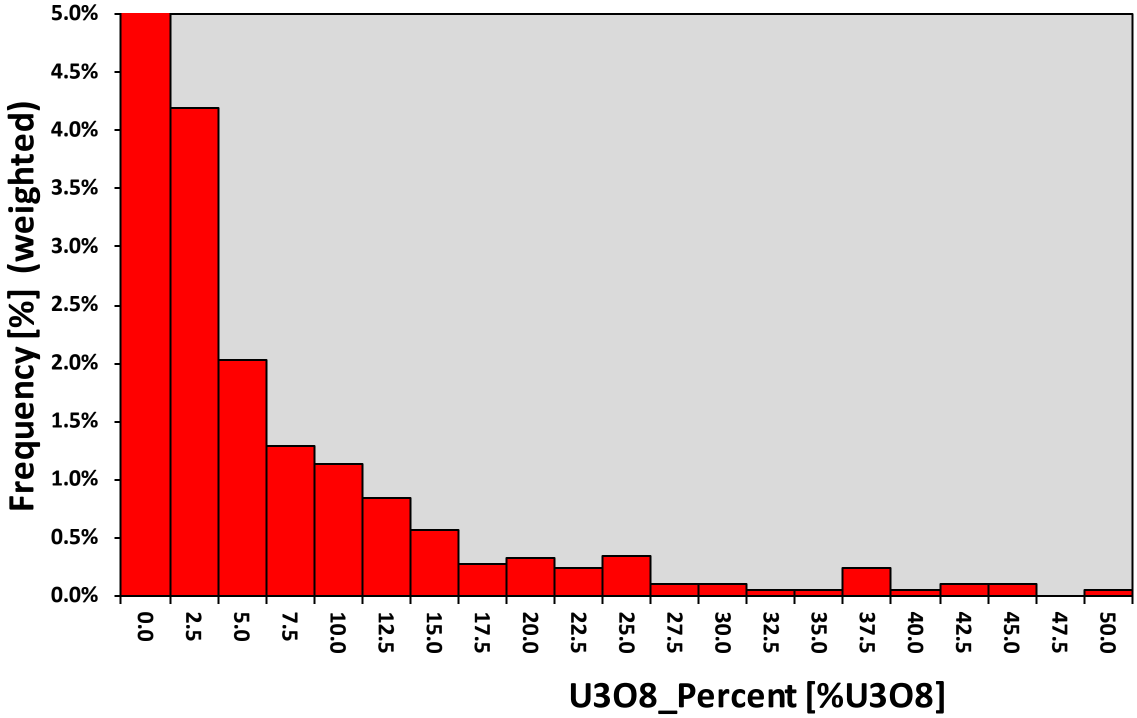


FIGURE 14-5 HISTOGRAM OF RESOURCE ASSAYS IN LOW GRADE (GROUP 4) DOMAIN

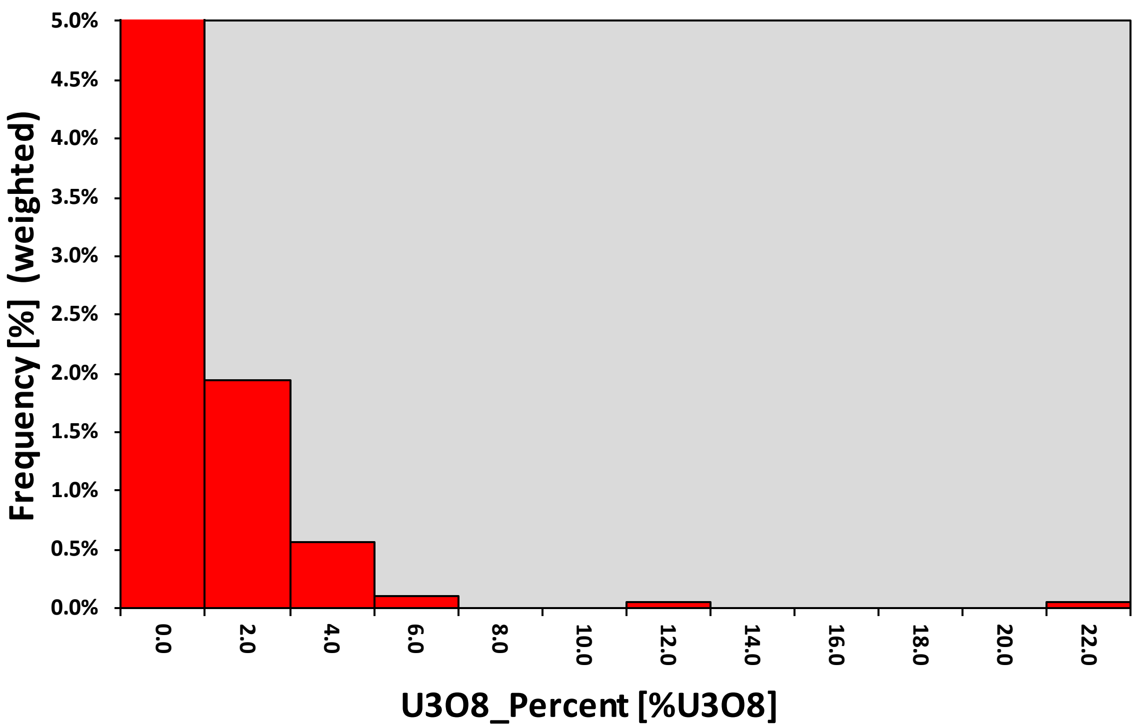
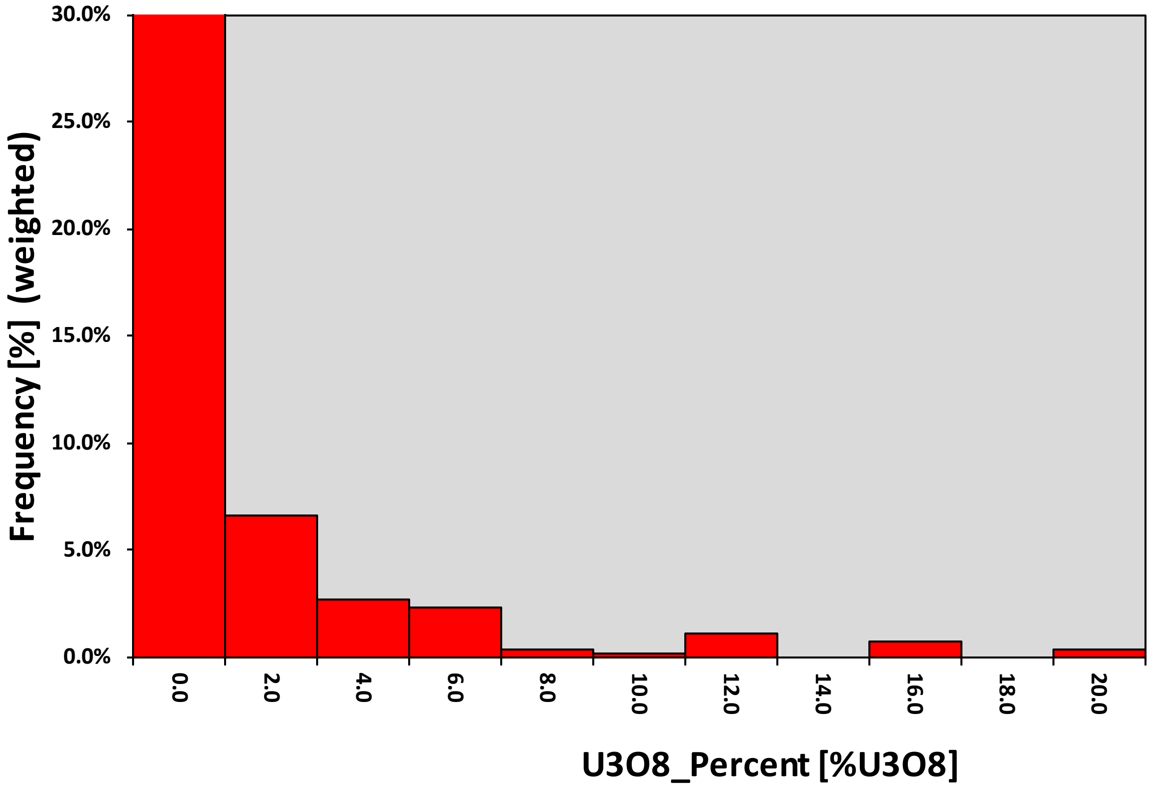


FIGURE 14-6 HISTOGRAM OF RESOURCE ASSAYS IN LOW GRADE (GROUP 5) DOMAIN



COMPOSITING

Sample lengths range from 10 cm to 3.0 m within the wireframe models, however, 91% of the samples were taken at 0.5 m intervals. Given this distribution, and considering the width of the mineralization, RPA chose to composite to two metre lengths. Assays within the wireframe domains were composited starting at the first mineralized wireframe boundary from the collar and resetting at each new wireframe boundary. Assays were capped prior to compositing. Composites less than 0.5 m, located at the bottom of the mineralized intercept, were removed from the database. Table 14-7 shows the composite statistics by domain.

TABLE 14-7 DESCRIPTIVE STATISTICS OF COMPOSITE VALUES BY DOMAIN
NexGen Energy Ltd. - Arrow Deposit

Zone	Count	Minimum (% U_3O_8)	Maximum (% U_3O_8)	Mean (% U_3O_8)	Stdev (% U_3O_8)	Variance	CV
101	22	0.02	1.17	0.18	0.26	0.07	1.41
102	180	0.00	5.11	0.29	0.50	0.25	1.71
103	34	0.00	2.58	0.28	0.47	0.22	1.68
106	21	0.01	1.31	0.34	0.37	0.14	1.08
111	34	0.04	2.52	0.63	0.70	0.50	1.11
200	22	0.00	0.66	0.19	0.19	0.03	0.95
201	47	0.00	2.72	0.25	0.44	0.19	1.79
204	978	0.00	10.00	0.58	1.09	1.20	1.90
205	79	0.00	5.40	0.72	1.15	1.32	1.59
207	12	0.00	1.31	0.48	0.41	0.17	0.84
311	103	0.00	7.06	0.83	1.54	2.36	1.85
312	36	0.00	9.29	1.50	2.45	5.99	1.63
317	399	0.00	10.00	0.98	1.86	3.46	1.90
318	12	0.01	6.26	1.81	2.03	4.10	1.12
403	45	0.00	7.96	1.13	1.91	3.66	1.70
2040	259	0.00	51.91	10.20	13.06	170.57	1.28

CONTINUITY ANALYSIS

RPA generated downhole, omni-directional, and directional variograms using the two-metre composite U_3O_8 values located within the mineralized wireframes. The downhole variogram suggests a relative nugget effect of approximately 10% (Figure 14-7). Long range directional variograms were focused in the primary plane of mineralization (204 LG and HG domains), which most commonly strikes northeast and dips steeply to the southeast. Most ranges were interpreted to be 20 m to 40 m (Figure 14-8). Ranges for the HG domain also varied between 15 m and 30 m (Figure 14-9). RPA recommends additional variography and trend analyses as new drill hole data become available.

FIGURE 14-7 DOWNHOLE VARIOGRAM

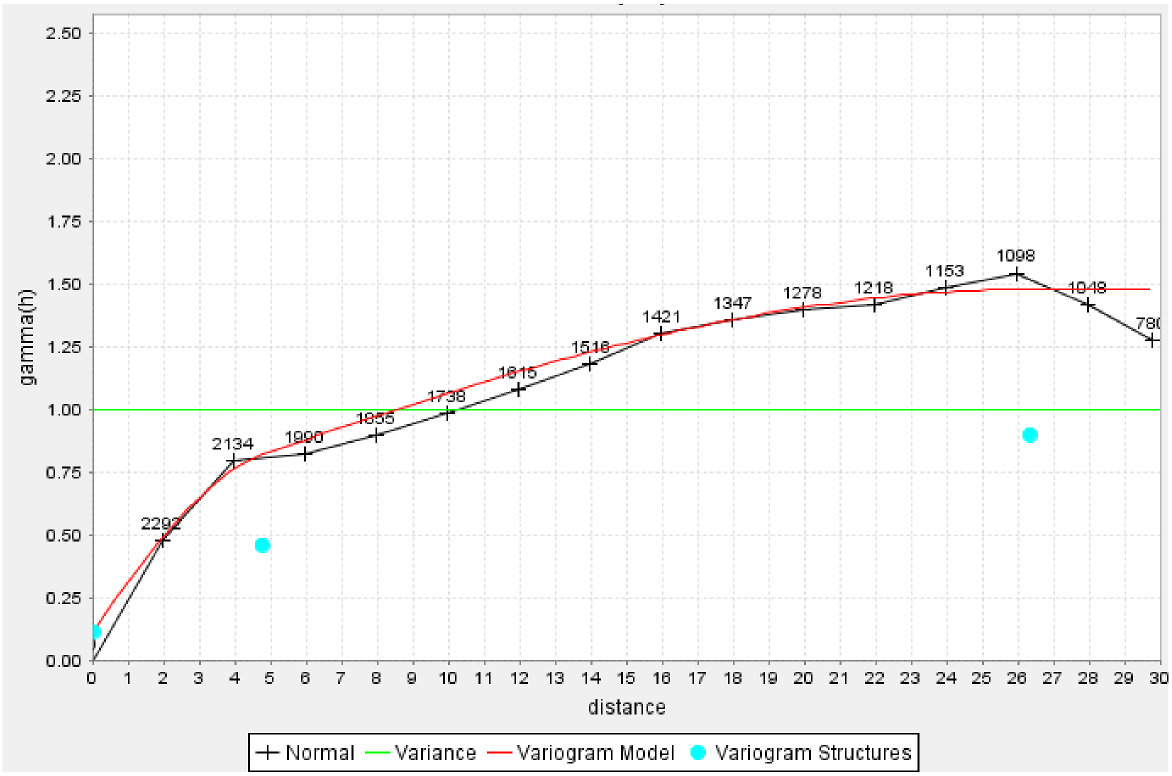


FIGURE 14-8 DIRECTIONAL VARIOGRAMS FOR LG 204 DOMAIN

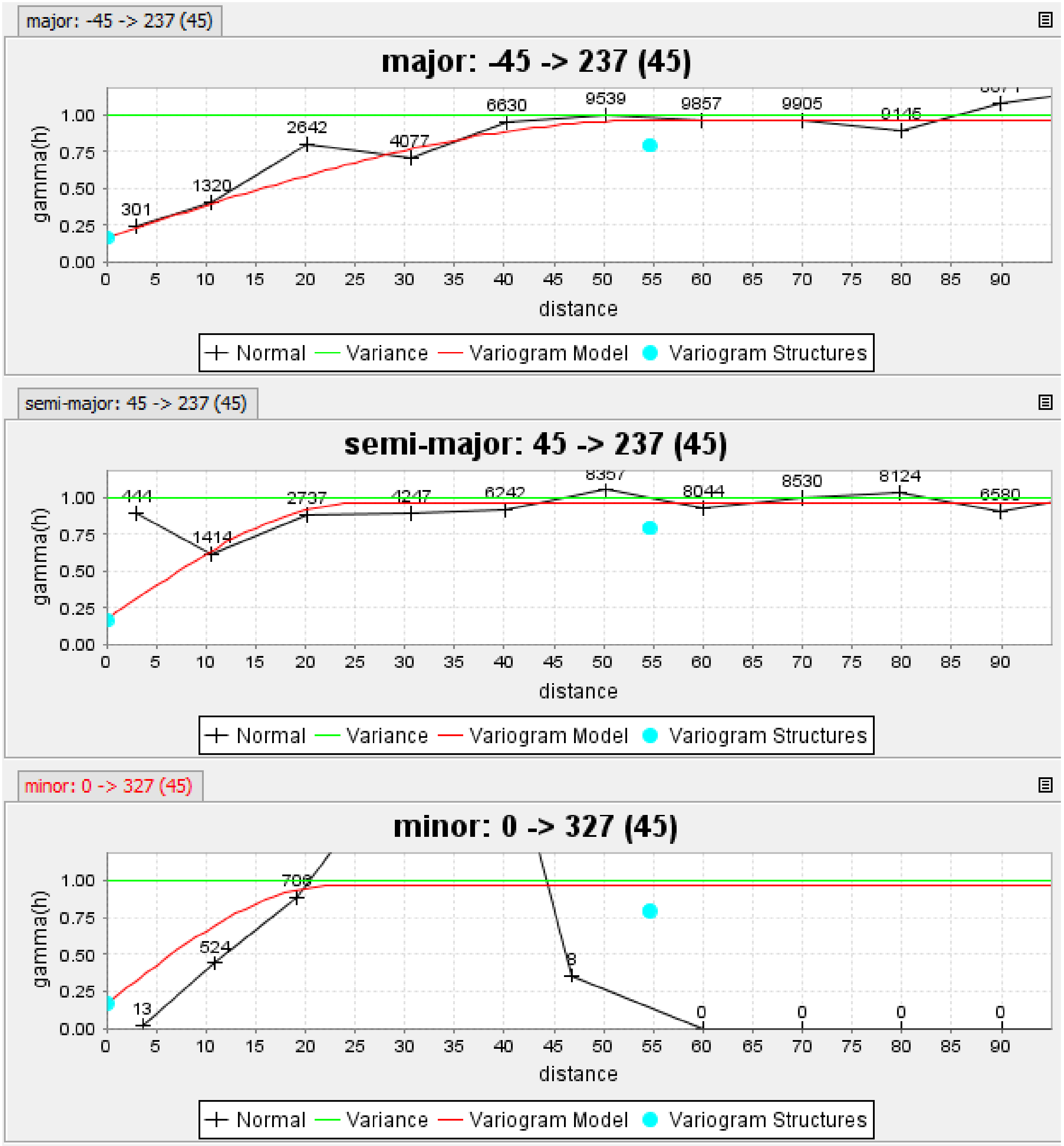
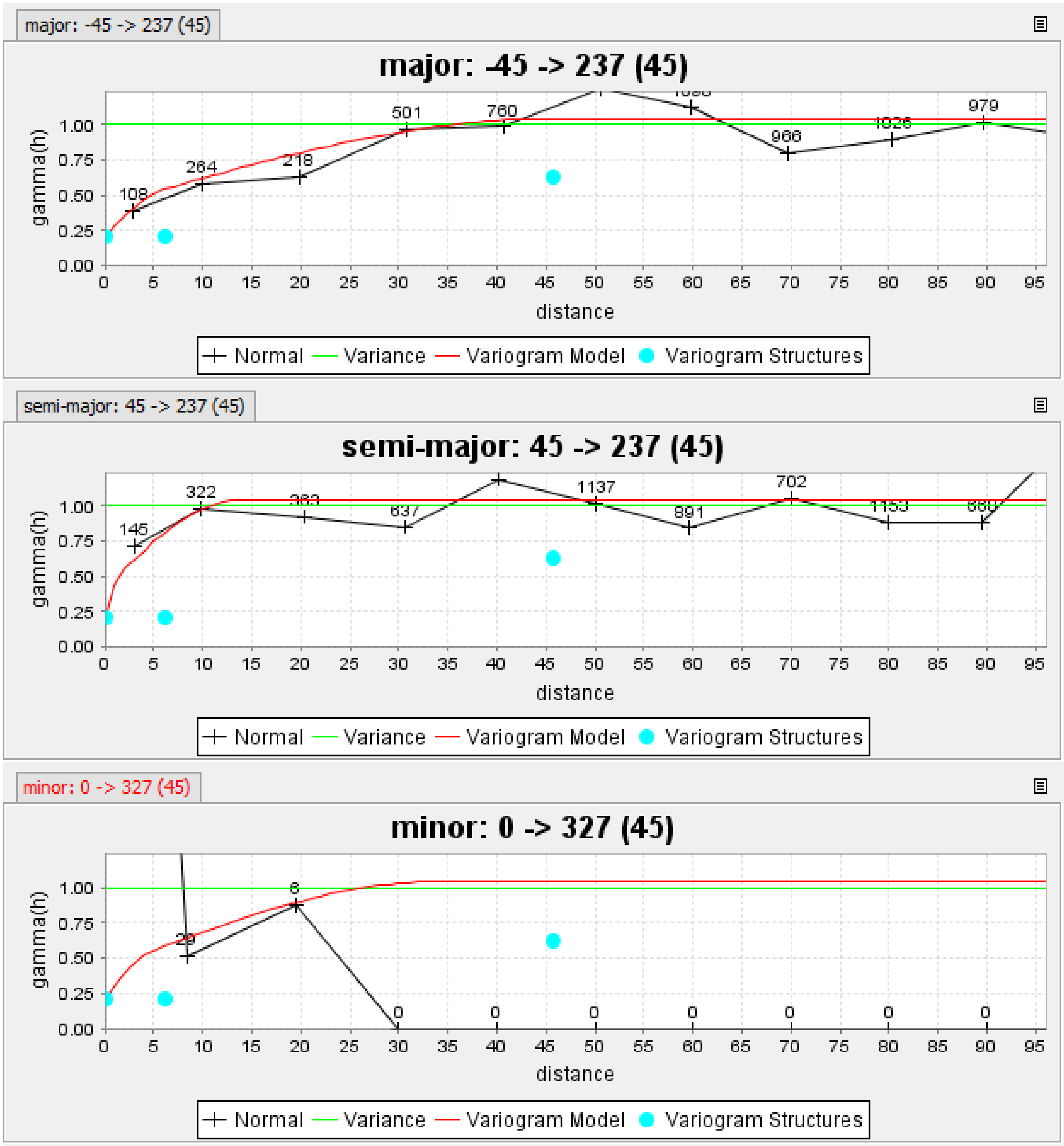


FIGURE 14-9 DIRECTIONAL VARIOGRAMS FOR HIGH GRADE DOMAIN



BLOCK MODEL

Three dimensional block models were constructed using Maptek Vulcan Mine Modelling Software. The block model (Table 14-8) is rotated 57.0° and is made up of 800 columns, 600 rows, and 1,100 levels for a total of 10,560,000 blocks. The model origin (lower-left corner at lowest elevation) is at UTM coordinates 604,253.73 mE, 6,383,169.275 mN and -500 m elevation. Each block is five metres along strike, two metres wide, and five metres high. A whole block approach was used whereby the block was assigned to the domain where its centroid was located.

TABLE 14-8 ARROW BLOCK MODEL PARAMETERS AND VARIABLES
NexGen Energy Ltd. - Arrow Deposit

Model Name	arw-rpa_5x2x5_id3_V6		
History List	arw-rpa_5x2x5_id3_V629Feb2016.bhst		
Format	extended		
Structure	regular		
Smooth	no		
Number of blocks	10,560,000		
Offset minimum (X, Y, Z)	0.00	0.00	0.00
Offset maximum (X, Y, Z)	800.00	600.00	1100.00
Blocks minimum	5.0	2.0	5.0
Blocks maximum	5.0	2.0	5.0
No of blocks	160	300	220
Origin (X, Y, Z)	604253.73	6393169.275	-500.00
Bearing/Dip/Plunge	57.00	0.00	0.00

Variables	Default Value	Type	Description
den	-99.0	double	density
gxd_d	-99.0	double	gxd/den
gxd	-99.0	double	grade(raw) x density
grade_id2	-99.0	double	%U_3O_8 interpolated grade inverse distance squared (ID^2)
grade_id3	-99.0	double	% U_3O_8 interpolated grade inverse distance cubed (ID^3)
grade_ok	-99.0	double	% U_3O_8 interpolated grade ordinary kriging
nsamp	-99.0	short	Number of samples per estimate
nholes	-99.0	short	Number of holes per estimate
strat	unclass	name	Stratigraphy
nn	-99.0	double	Nearest neighbor
nn_distance	-99.0	double	Distance to nearest neighbor
est_flag_id	-99.0	integer	Estimation flag for ID
est_flag_ok	-99.0	integer	Estimation flag for OK
ore	-99.0	integer	Shear Zones: A1=100series A2=200series A3=300series A4=400series

INTERPOLATION PARAMETERS

The interpolation strategy involved setting up search parameters in two passes for each domain. Blocks which did not receive an interpolated grade were then interpolated in the second pass, which resulted in all blocks being populated. Search ellipses were oriented with the major axis oriented at 57° parallel to the dominant northeasterly trend of the zones. The semi-major axis was oriented horizontally, normal to the major axis (across strike), and the minor axis was oriented with a plunge of 0° and dip of -88°. Hard boundaries were used to limit the use of composites between domains. First and second pass search ellipses maintained a 5:5:1 anisotropic ratio.

In order to reduce the influence of very high grade composites, grades greater than a designated threshold level for the LG and HG domains were restricted to shorter search ellipse dimensions. The threshold grade levels (5.0% for the LG domain and 30.0% for the HG domain) were chosen from the basic statistics, variography, and from visual inspection of the apparent continuity of very high grades within each domain, which indicated the need to limit their influence to approximately half the distance of the main search. Search parameters are listed in Table 14-9 for the Arrow deposit LG and HG domains.

TABLE 14-9 BLOCK ESTIMATE SEARCH STRATEGY BY DOMAIN
NexGen Energy Ltd. - Arrow Deposit

			Search Ellipse Orientation			Search Ellipse Dimensions (m)			Composite Restrictions		
Domain	Estimate Type	Pass	Bearing	Plunge	Dip	Major Axis	Semi-major axis	Minor axis	Min Samples	Max Samples	Max. per hole
LG Domains	ID^3	1	57	0	-88	50	50	10	2	7	3
	ID^3	2	57	0	-88	100	100	20	2	7	3
Restricted >5% U_3O_8			57	0	-88	25	25	5	2	7	3
HG Domain	ID^3	1	57	0	-88	50	50	10	2	7	3
		2	57	0	-88	100	100	20	2	7	3
Restricted >30% U_3O_8			57	0	-88	25	25	5	2	7	3

The variables density (D) and grade multiplied by density (GxD) were interpolated using inverse distance cubed (ID^3) with a minimum of two to a maximum of seven composites per block estimate with a maximum of three composites per drill hole. Block grade (GxD_D) was derived from the interpolated GxD value by dividing that value by the interpolated density (D) value for each block. Grades not weighted by density (grade_id3) were also interpolated to help verify the process. Based on the wide spaced drilling and further recommended analysis work on variography to be conducted, ordinary kriging was not used. Figures 14-10 and 14-11 illustrate the results.

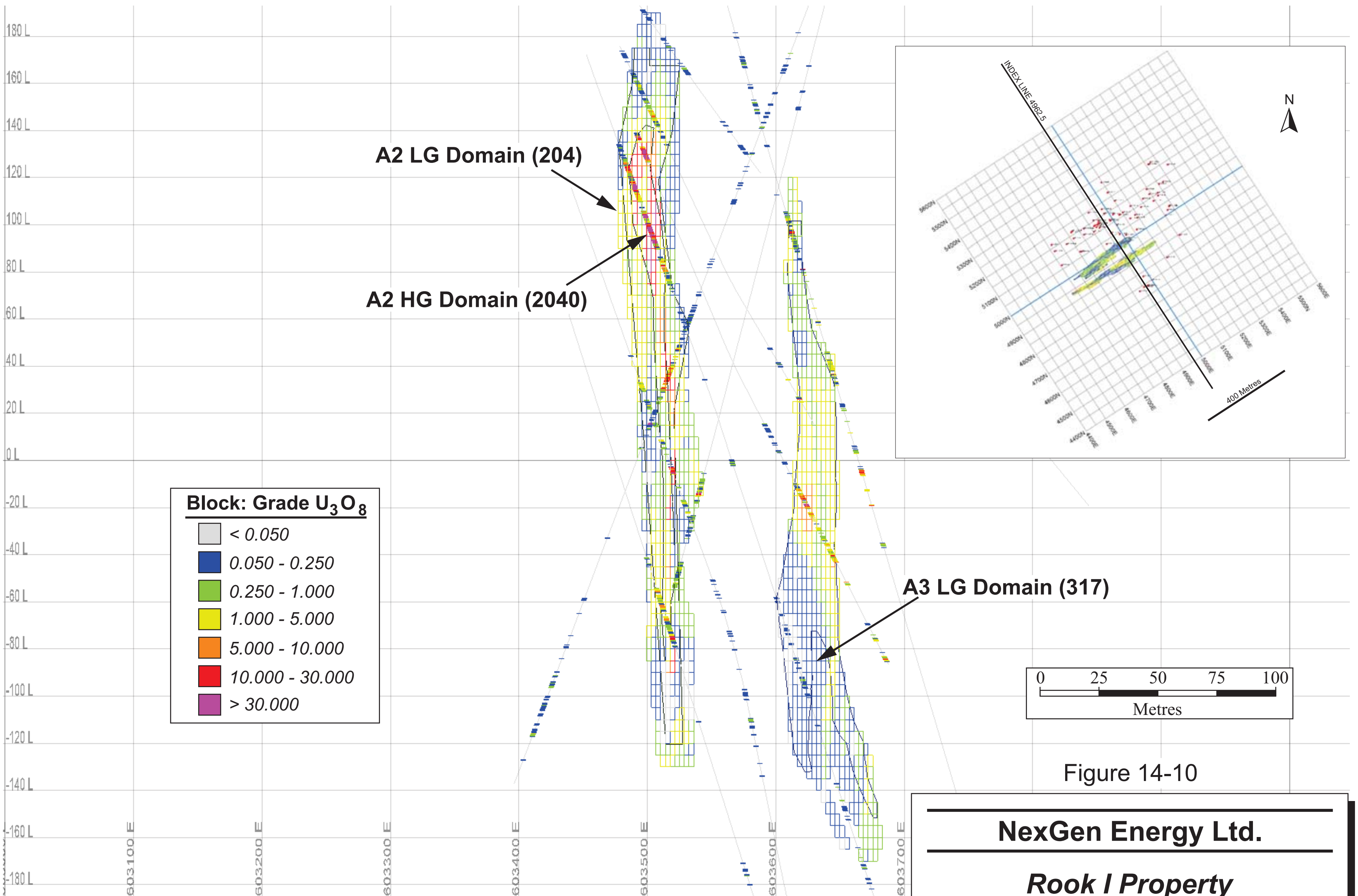


Figure 14-10

NexGen Energy Ltd.

Rook I Property

Northern Saskatchewan, Canada

Vertical Section 4962.5E (25 m Window)

April 2016

Source: RPA, 2016.

RPA

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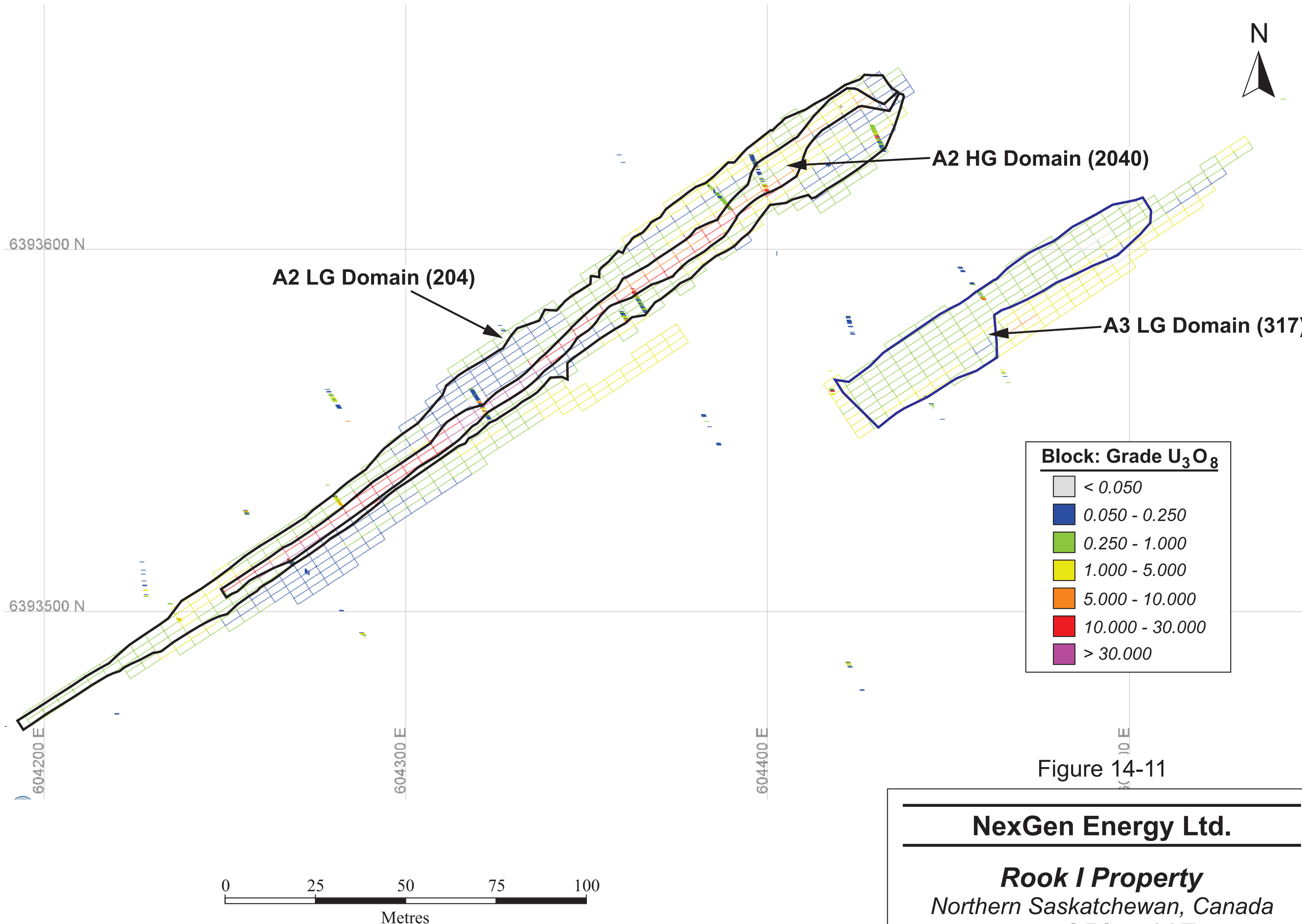


Figure 14-11

NexGen Energy Ltd.

Rook I Property

Northern Saskatchewan, Canada

Level Plan 30Z

(20 m Window Looking Down)

April 2016

Source: RPA, 2016.

DENSITY

Bulk density is used globally to convert volume to tonnage and, in some cases, weight block grade estimates. For example, high grade uranium deposits of the Athabasca Basin have bulk densities that commonly vary with grade due to the very high density of pitchblende/uraninite compared to host lithologies. Bulk density also varies with clay alteration and in situ rock porosity. When modelling high grade uranium deposits, it is common to estimate bulk density values throughout the deposit and to weight grades by density, since small volumes of high grade material contain large quantities of uranium oxide.

Bulk density is determined by NexGen with specific gravity (SG) measurements on drill core using the water immersion method according to the Archimedes principle, after the core has been sealed and shrink wrapped in cellophane. SG is calculated as: weight in air/(weight in air – weight in water). Under normal atmospheric conditions, SG (a unitless ratio) is equivalent to density in t/m3.

A total of 1,949 bulk density measurements have been collected on drill core samples from the main mineralized zones to represent local major lithologic units, mineralization styles, and alteration types. Samples were collected on full core which had been retained in the core box prior to geochemical sampling.

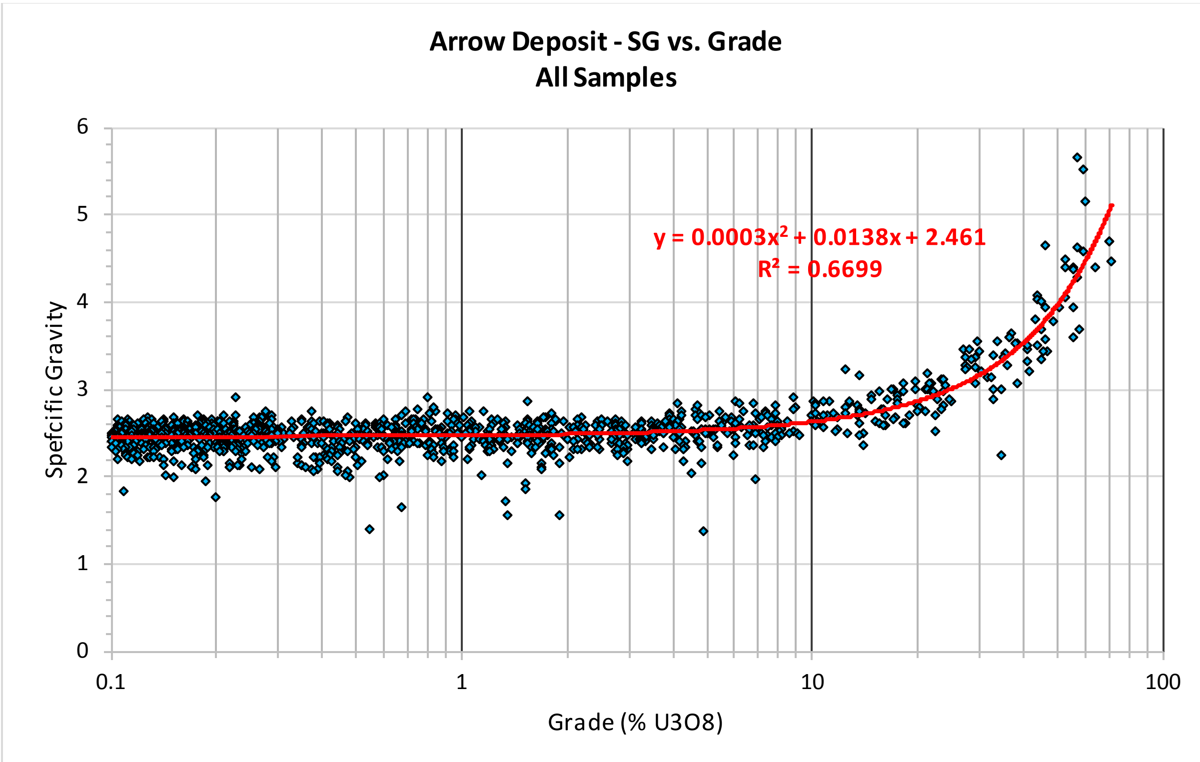
NexGen carried out correlation analyses of the bulk density values against uranium grades which indicate that a strong relationship exists between density and uranium grade (%U_3O_8) shown in Figure 14-12. The relationship can be represented by the following polynomial formula which is based on a regression fit.

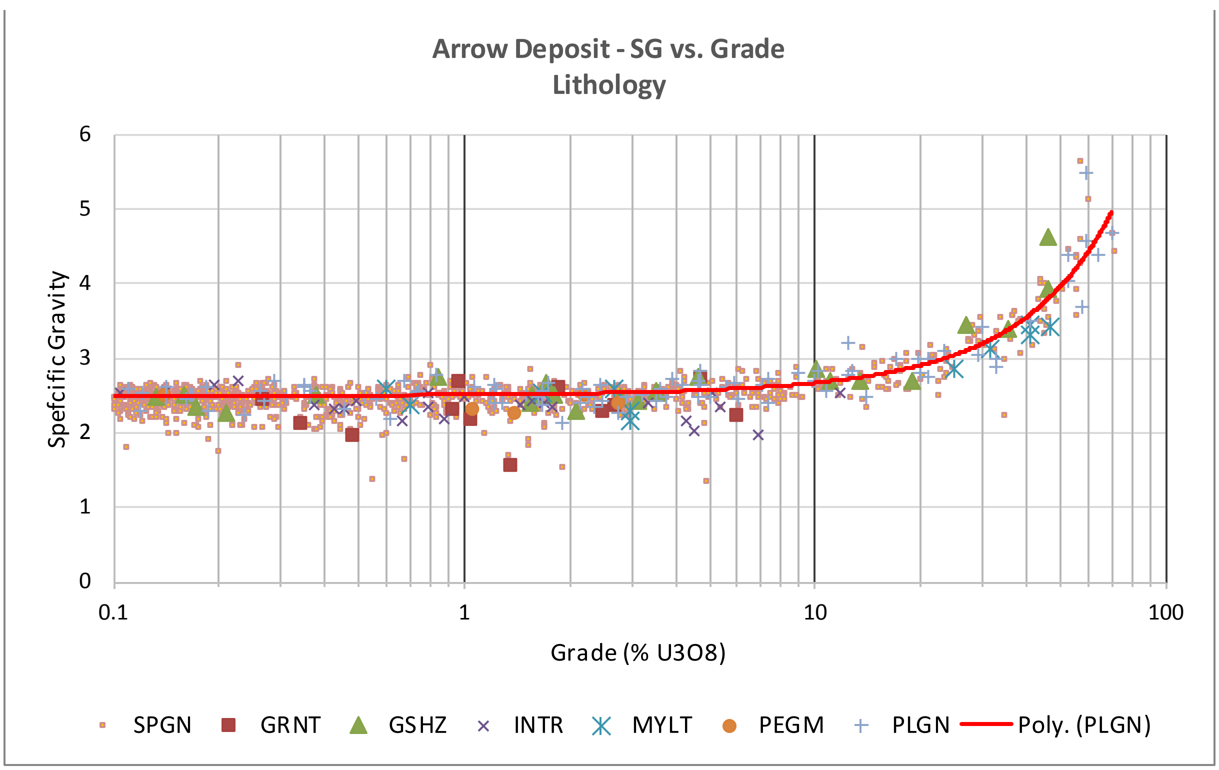
$$\mathbf{y = 0.0003x^2 + 0.0138x + 2.461}$$

where *y* is dry bulk density (g/cm^3) and *x* is the uranium grade in %U_3O_8.

The uranium grade was used to estimate the density of each sample with the polynomial formula above. Densities were then interpolated into the block model to convert mineralized volumes to tonnage, and were also used to weight the uranium grades interpolated into each block.

FIGURE 14-12 LOGARITHMIC PLOT OF BULK DENSITY VERSUS URANIUM GRADE



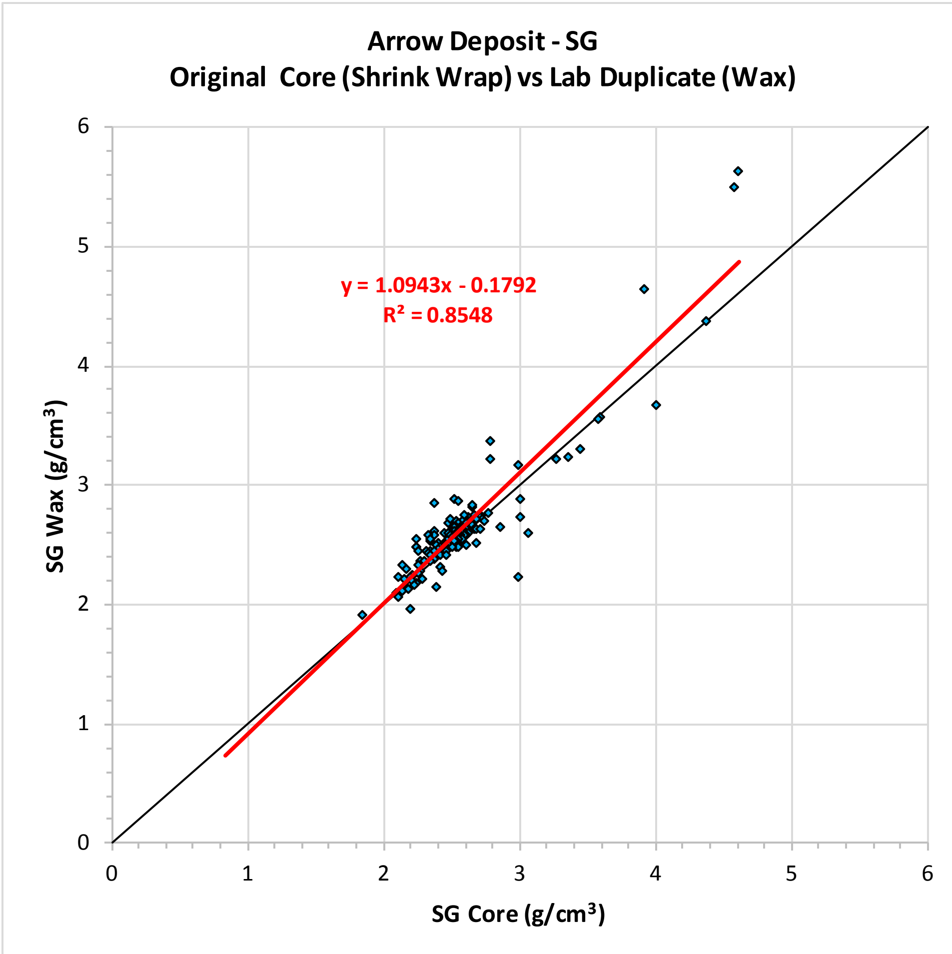


The regression curve in Figure 14-12 is relatively flat at a grade less than 10% U_3O_8, with density relatively constant at 2.462 g/cm^3 (g/cm3 is equivalent to t/m^3). At grades greater than 20% U_3O_8, dry bulk density increases with higher uranium grades. There are a number of strongly mineralized samples that have low dry bulk densities and vice versa, which results in mild scatter in dry bulk density values. The lower bulk density values associated with strongly mineralized samples may be attributed to the amount of clay alteration in the samples. Generally, clay alteration causes decomposition of feldspar and mafic minerals with resultant replacement by lighter clay minerals as well as loss of silica from feldspar that lowers the dry bulk density of the rock.

Selected density samples were tagged and placed in sample bags on site, then shipped to SRC in Saskatoon, Saskatchewan, for density testing using wax immersion. In total, SRC has performed SG measurements on a total of 185 samples.

Figure 14-13 shows a strong correlation between the methodologies and RPA is satisfied that either methodology is suitable for determining SG and resulting data are suitable for Mineral Resource estimation at Arrow.

FIGURE 14-13 DRY BULK DENSITY WAX VERSUS DRY/WET METHODS



CUT-OFF GRADE

RPA estimated a potential underground mining cut-off grade using assumptions based on historical and known operating costs for mines operating in the Athabasca Basin. Table 14-10 shows the breakeven cut-off grade estimate by RPA using a price of US$65/lb U_3O_8 and based on assumptions for process plant recovery, total operating cost, and incremental component of operating cost. The estimated cut-off grade of 0.25% U_3O_8 is in line with the cut-off grade of 0.25% that RPA used at Cameco's Rabbit Lake mine, which is basement hosted mineralization similar geologically to Arrow.

TABLE 14-10 ARROW DEPOSIT CUT-OFF GRADE CALCULATION
NexGen Energy Ltd. - Arrow Deposit

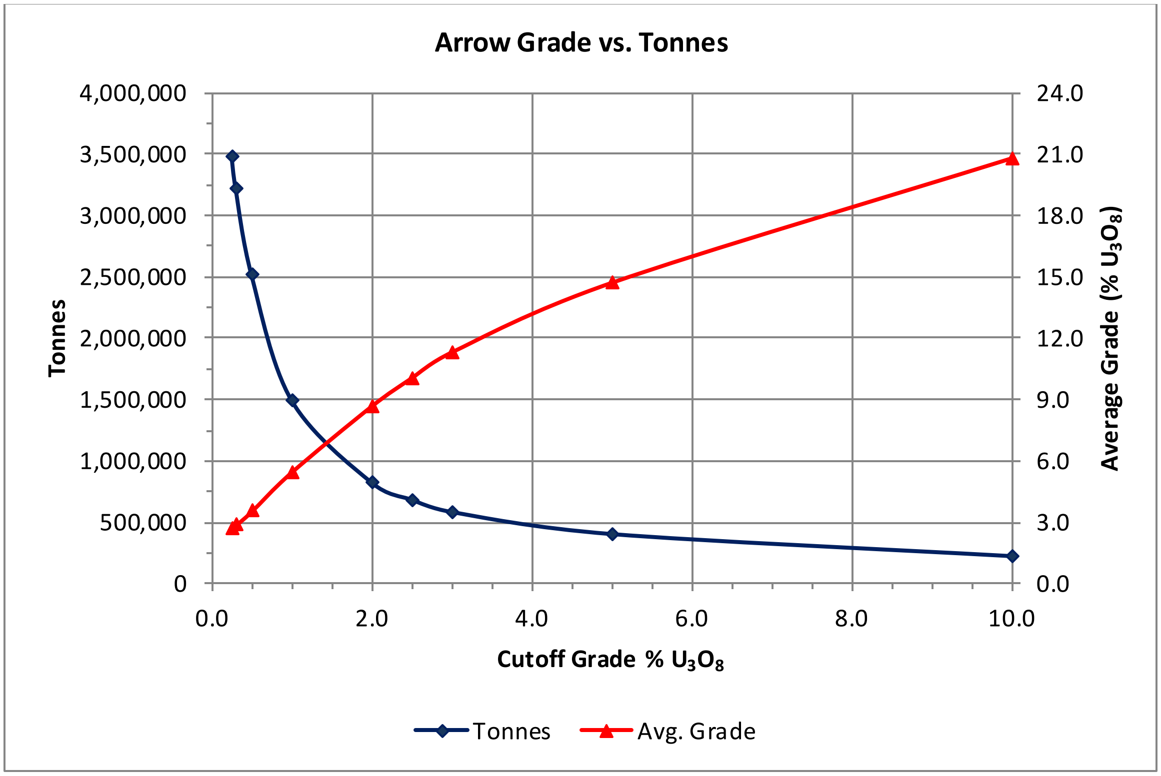
Item	Quantity
Price in US$/lb U_3O_8	US$65
Process plant recovery	95%
Mining cost per tonne	US$180
Processing cost per tonne	US$120
G&A cost per tonne	US$32
Total operating cost per tonne	US$332
Break-Even Cut-off grade	0.25%

Table 14-11 and Figure 14-14 show the sensitivity of the Arrow block model to various cut-off grades. RPA notes that, although there is some sensitivity of average grade and tonnes to cut-off grade, the contained metal is less sensitive.

TABLE 14-11 ARROW DEPOSIT INFERRED MINERAL RESOURCE SENSITIVITY TO CUT-OFF GRADE
NexGen Energy Ltd. - Arrow Deposit

Cut-off Grade (U_3O_8 %)	Tonnage (t)	Grade (U_3O_8 %)	Metal (U_3O_8 lb)
0.25	**3,480,000**	**2.63**	**201,900,000**
0.30	3,220,000	2.82	200,300,000
0.50	2,510,000	3.51	194,300,000
1.00	1,490,000	5.43	178,300,000
2.00	820,000	8.66	157,200,000
2.50	680,000	10.04	150,100,000
3.00	580,000	11.3	144,200,000
5.00	400,000	14.7	128,500,000
10.00	220,000	20.78	101,300,000

FIGURE 14-14 ARROW INFERRED MINERAL RESOURCE TONNES AND GRADE AT VARIOUS CUT-OFF GRADES



CLASSIFICATION

Definitions for resource categories used in this report are consistent with those defined by CIM (2014) and adopted by NI 43-101. In the CIM classification, a Mineral Resource is defined as "a concentration or occurrence of solid material of economic interest in or on the Earth's crust in such form, grade or quality and quantity that there are reasonable prospects for eventual economic extraction". Mineral Resources are classified into Measured, Indicated, and Inferred categories. A Mineral Reserve is defined as the "economically mineable part of a Measured and/or Indicated Mineral Resource" demonstrated by studies at Pre-Feasibility or Feasibility level as appropriate. Mineral Reserves are classified into Proven and Probable categories. No Mineral Reserves have been estimated for the Property.

Mineral Resources were classified as Inferred based on drill hole spacing and the apparent continuity of mineralization.

MINERAL RESOURCE REPORTING

Based on holes drilled and assayed to the end January 14, 2016, at a cut-off grade of 0.25% U_3O_8, the Inferred Mineral Resources for the Arrow deposit total 201.9 million pounds of U_3O_8 contained in 3.48 million tonnes of mineralization grading 2.63% U_3O_8. The effective date of the resource estimate is January 14, 2016 (Table 14-12).

TABLE 14-12 INFERRED MINERAL RESOURCE ESTIMATE FOR THE ARROW DEPOSIT, ROOK 1 PROPERTY AS OF JANUARY 14, 2016
NexGen Energy Ltd. - Arrow Deposit

Structure	Domain	Tonnage (Tonnes)	Grade (U_3O_8 %)	Contained Metal (U_3O_8 lb)
A1	101	30,000	0.49	400,000
	102	180,000	0.46	1,800,000
	103	10,000	0.51	200,000
	106	110,000	0.50	1,200,000
	111	50,000	0.68	700,000
A1 Total		**380,000**	**0.50**	**4,200,000**
A2 Low Grade	200	20,000	0.37	200,000
	201	60,000	0.69	900,000
	204 LG Domain	1,250,000	0.86	23,700,000
	205	120,000	0.90	2,400,000
	207	30,000	0.60	400,000
A2 Low Grade Total		**1,480,000**	**0.85**	**27,600,000**
A2 High Grade	**204 HG Domain**	**410,000**	**13.26**	**120,500,000**
A3	311	120,000	1.64	4,400,000
	312	70,000	1.97	3,200,000
	317	900,000	1.93	38,300,000
	318	30,000	2.00	1,400,000
A3 Total		**1,130,000**	**1.90**	**47,300,000**
A4	**403**	**80,000**	**1.35**	**2,300,000**
Grand Total		**3,480,000**	**2.63**	**201,900,000**

Notes:
1. CIM definitions were followed for Mineral Resources.
2. Mineral Resources are reported at a cut-off grade of 0.25% U_3O_8 based on a long-term price of US$65 per lb U_3O_8 and estimated mining costs.
3. A minimum mining width of 2.0 m was used.
4. Numbers may not add due to rounding.

In RPA's opinion, the estimation methodology is consistent with standard industry practice and the Arrow Inferred Mineral Resource estimate is considered to be reasonable and acceptable.

MINERAL RESOURCE VALIDATION

RPA validated the block model by visual inspection, volumetric comparison, and swath plots. Visual comparison on vertical sections and plan views, and a series of swath plots found good overall correlation between the block grade estimates and supporting composite grades.

VOLUME COMPARISON

Wireframe volumes were compared to block volumes for each domain at the Arrow deposit. This comparison is summarized in Table 14-13 and results show that there is good agreement between the wireframe volumes and block model volume. The difference is less than 2%, except for the 101, 103, 111, 207, and 311 domains where the difference ranges from 2.1% to 4.1% due to the small volume of the wireframes combined with the whole block approach.

The estimated total volume of the wireframe models is 2,323,900 m^3, while the volume of the block model at a zero grade cut-off is 2,329,700 m^3.

TABLE 14-13 VOLUME COMPARISON
NexGen Energy Ltd. - Arrow Deposit

Domain	# Points	# Triangles	Surface Area (m²)	Wireframe Volume (m³)	# of Blocks	Block Model Volume (m³)	%∆
101	72	140	23,772	43,605	854	42,700	-2.1%
102	452	900	61,769	258,229	5,255	262,750	1.8%
103	20	36	8,568	16,521	322	16,100	-2.5%
106	832	1,660	43,428	82,414	1,640	82,000	-0.5%
111	32	60	8,134	23,309	447	22,350	-4.1%
200	80	156	14,236	27,225	553	27,650	1.6%
201	179	354	35,404	89,185	1,754	87,700	-1.7%
2,040	917	1,830	72,918	156,355	3,098	154,900	-0.9%
204	2,210	4,432	258,313	789,306	15,864	793,200	0.5%
205	408	812	30,358	69,966	1,407	70,350	0.5%
207	203	402	13,594	16,166	336	16,800	3.9%
311	164	324	31,086	48,874	1,004	50,200	2.7%
312	122	240	16,629	34,033	694	34,700	2.0%
317	2,826	5,648	161,849	614,491	12,269	613,450	-0.2%
318	118	232	11,945	12,595	249	12,450	-1.1%
403	63	122	11,710	41,623	847	42,350	1.7%
Total	**8,698**	**17,348**	**803,711**	**2,323,898**	**46,593**	**2,329,650**	**0.2%**

VISUAL COMPARISON

Block grades were visually compared with drill hole composites on cross-sections, longitudinal sections, and plan views. The block grades and composite grades correlate very well visually within the Arrow deposit. ID^3 was used for interpolation of gxd_d (grade) and d (density) rather than ordinary kriging because of the relatively wide spaced drilling. Further variography analysis is recommended once more infill drilling is carried out.

STATISTICAL COMPARISON

Statistics of the block grades are compared with statistics of composite grades in Table 14-14 for all blocks and composites within the Arrow deposit domains. Block grades are weighted by density for the composites and tonnage for the blocks. In some cases, the average block grades are higher than the average composite grades, which RPA attributes to density weighting of the block grades or distribution of the drill holes within relatively small zones.

TABLE 14-14 STATISTICS OF BLOCK GRADES COMPARED TO COMPOSITE GRADES BY DOMAIN
NexGen Energy Ltd. - Arrow Deposit

Domain	101		102		103		106	
	Comps	Block	Comps	Block	Comps	Block	Comps	Block
Count	22	854	180	5255	34	322	21	1640
Minimum (U_3O_8%)	0.02	0.03	0.00	0.02	0.00	0.00	0.01	0.02
Maximum (U_3O_8%)	1.17	0.87	5.11	2.12	2.58	1.02	1.31	0.84
Mean (U_3O_8%)	0.18	0.22	0.29	0.23	0.28	0.25	0.34	0.29
Stdev (U_3O_8%)	0.26	0.20	0.50	0.20	0.47	0.22	0.37	0.23
Variance	0.07	0.04	0.25	0.04	0.22	0.05	0.14	0.05
CV	1.41	0.88	1.71	0.86	1.68	0.89	1.08	0.79

Domain	111		200		201		204 LG Domain	
	Comps	Block	Comps	Block	Comps	Block	Comps	Block
Count	34	447	22	553	47	1754	978	15865
Minimum (U_3O_8%)	0.04	0.07	0.00	0.03	0.00	0.02	0.00	0.00
Maximum (U_3O_8%)	2.52	2.17	0.66	0.55	2.72	1.59	10.00	6.52
Mean (U_3O_8%)	0.63	0.62	0.19	0.22	0.25	0.28	0.58	0.60
Stdev (U_3O_8%)	0.70	0.34	0.19	0.14	0.44	0.31	1.09	0.65
Variance	0.50	0.12	0.03	0.02	0.19	0.10	1.20	0.42
CV	1.11	0.56	0.95	0.65	1.79	1.12	1.90	1.08

Domain	205		207		311		312	
	Comps	Block	Comps	Block	Comps	Block	Comps	Block
Count	79	1407	12	336	103	1004	36	694
Minimum (U_3O_8%)	0.00	0.00	0.00	0.02	0.00	0.06	0.00	0.02
Maximum (U_3O_8%)	5.40	3.15	1.31	1.30	7.06	8.99	9.29	9.45
Mean (U_3O_8%)	0.72	0.66	0.48	0.51	0.83	1.51	1.50	1.62
Stdev (U_3O_8%)	1.15	0.65	0.41	0.27	1.54	1.68	2.45	1.57
Variance	1.32	0.42	0.17	0.07	2.36	2.81	5.99	2.48
CV	1.59	0.98	0.84	0.53	1.85	1.11	1.63	0.97

Domain	317		318		403		204 HG Domain	
	Comps	Block	Comps	Block	Comps	Block	Comps	Block
Count	399	12269	12	249	45	847	259	3098
Minimum (U_3O_8%)	0.00	0.00	0.01	0.16	0.00	0.02	0.00	0.04
Maximum (U_3O_8%)	10.00	11.81	6.26	6.92	7.96	6.50	51.91	48.07
Mean (U_3O_8%)	0.98	1.11	1.81	2.66	1.13	0.96	10.20	11.82
Stdev (U_3O_8%)	1.86	1.62	2.03	2.04	1.91	1.17	13.06	9.85
Variance	3.46	2.63	4.10	4.17	3.66	1.36	170.57	97.04
CV	1.90	1.47	1.12	0.77	1.70	1.21	1.28	0.83

15 MINERAL RESERVE ESTIMATE

There is no current Mineral Reserve estimate on the Arrow deposit.

16 MINING METHODS

This section is not applicable.

17 RECOVERY METHODS

This section is not applicable.

18 PROJECT INFRASTRUCTURE

This section is not applicable.

19 MARKET STUDIES AND CONTRACTS

This section is not applicable.

20 ENVIRONMENTAL STUDIES, PERMITTING, AND SOCIAL OR COMMUNITY IMPACT

This section is not applicable.

21 CAPITAL AND OPERATING COSTS

This section is not applicable.

22 ECONOMIC ANALYSIS

This section is not applicable.

23 ADJACENT PROPERTIES

This section is not applicable.

24 OTHER RELEVANT DATA AND INFORMATION

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

25 INTERPRETATION AND CONCLUSIONS

The Rook I Property has a long history of grassroots exploration, as do many of the properties which adjoin or are in the area of the Property. Recorded work started in 1968. The lack of outcrop, the flat lying Cretaceous sedimentary rocks, and the generally thick glacial deposits have made it difficult to explore this area. Despite this, exploration has continued to the present day.

The drilling completed by NexGen from 2013 to 2015 on the Property has resulted in the discovery and rapid growth of the Arrow deposit. Uranium mineralization was intersected in 80 of 82 holes and NexGen was able to expand the footprint of high grade mineralization extensively. The discovery of the Arrow deposit was the result of drill testing a circular gravity anomaly (gravity low) with an approximate diameter of one kilometre coincident with a steep magnetic gradient and a disrupted VTEM conductor. It is thought that the gravity low present at Arrow is the result of desilicification of the sandstone above the deposit and clay alteration (illite/dravite/sudoite) of the basement rocks within and adjacent to the deposit. The Arrow deposit consists of multiple high grade, basement hosted uranium lenses concentrated within four horizons, known as the A1 through A4 shears. It currently has dimensions of 645 m (strike) by 235 m (width) by 820 m (vertical). Dravite breccia veins are a key indicator for mineralization at Arrow.

The drilling completed by NexGen in 2015 also identified a new uranium discovery at Bow located approximately 3.7 km northeast of the Arrow deposit.

NexGen's protocols for drilling, sampling, analysis, security, and database management meet industry standard practices. The drill hole database was verified by RPA and is suitable for Mineral Resource estimation work.

RPA estimated Mineral Resources for the Arrow deposit using drill hole data available as of January 14, 2016. Inferred Mineral Resources total 3.48 million tonnes grading 2.63% U_3O_8 containing 201.9 million pounds of U_3O_8

26 RECOMMENDATIONS

The Rook 1 Property hosts a significant uranium deposit and merits considerable exploration and development work. The primary objectives are to expand the Arrow Mineral Resource and explore elsewhere on the Property. The proposed Phase I budget of $29 million is listed in Table 26-1. Phase II totalling $65 million is contingent on results from Phase I.

TABLE 26-1 PROPOSED BUDGET
NexGen Energy Ltd. – Rook I Property

Phase and Item	C$M
Phase I	
Infill and expansion drilling (70 holes for 35,000 m)	14.0
Drilling on the Patterson corridor (20 holes, 10,000 m)	4.0
Drilling southwest and northeast of the Arrow deposit (30 holes, 20,000 m)	8.0
Drilling at the Bow discovery (5 holes, 2,500 m)	1.0
Metallurgical Test Study	0.5
Site Characterization and Geotechnical Study	1.0
Preliminary Economic Assessment (PEA) and resource update	0.5
Total Phase I	**29.0**
Phase II	
Permitting and Engineering Studies	8.0
Pre-Feasibility Study (PFS)	2.0
Additional exploration drilling	55.0
Total Phase II	**65.0**

Details on the Phase I proposed budget are provided below.

<u>Phase I Drilling</u>

1. Winter/Spring 2016 ($15 million)
    a. Arrow deposit infill and expansion drilling: 40 holes, 20,000 m – estimated $8.0 million
    b. Drilling southwest and northeast of the Arrow deposit: 15 holes, 10,000 m – estimated $4.0 million
    c. Drilling on the Patterson corridor: 10 holes, 5,000 m – estimated $2.0 million
    d. Drilling at the Bow discovery: 5 holes, 2,500 m – estimated $1.0 million (ice conditions permitting)

2. Summer/Fall 2016 ($12 million)
    a. Arrow deposit infill and expansion drilling: 30 holes, 15,000 m – estimated $6.0 million.

b. Drilling southwest and northeast of the Arrow deposit: 15 holes, 10,000 m – estimated $4.0 million.
c. Drilling on the Patterson corridor: 10 holes, 5,000 m – estimated $2.0 million

As part of the infill drilling campaign, RPA recommends that a drilling density study program be undertaken on the Arrow deposit to assist in upgrading the Inferred Mineral Resource to Indicated category. The program should be designed with the following parameters:

- Use a 25 m staggered drilling pattern to ensure estimation of block grades are within 20 m or less of the mineralized intersections.
- Complete infill drilling from the southeast to evaluate the distance between the hanging wall and footwall contact points.
- Use a 25 m or less drill hole spacing on the northeast end of the high grade zone to test for apparent bifurcation of mineralization towards northeast.

<u>Metallurgical Test Study (part of Phase I)</u> – Estimated $0.5 million

RPA recommends that a mineralogy and metallurgical study be completed on the Arrow deposit in support of preparing a Preliminary Economic Assessment (PEA) or Pre-feasibility Study (PFS) on the deposit. The objectives of this study should include: (1) investigating the metallurgical characteristics of the uranium mineralization and its relationships to the gangue mineralogy, (2) assessing how these characteristics and relationships vary spatially and between different rock types, and (3) developing a uranium leaching process with optimum leaching efficiency.

<u>Site Characterization and Geotechnical Study (part of Phase I)</u> – Estimated $1.0 million

Also in support of preparing a PEA and PFS, RPA recommends that site characterization and geotechnical studies be completed. The objectives of these studies should include: (1) collecting baseline environmental and wildlife data, (2) assessing site suitability for mine infrastructure, and (3) assessing the geotechnical characteristics of the Arrow deposit and its host lithologies.

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28 DATE AND SIGNATURE PAGE

This report titled "Technical Report on the Rook I Property, Saskatchewan, Canada" dated April 13, 2016, was prepared and signed by the following authors:

(Signed & Sealed) "*Mark B. Mathisen*"

Dated at Denver, CO
April 13, 2016

Mark B. Mathisen, P.Geo.
Principal Geologist

(Signed & Sealed) "*David A. Ross*"

Dated at Toronto, ON
April 13, 2016

David A. Ross, M.Sc., P.Geo.
Principal Geologist

29 CERTIFICATE OF QUALIFIED PERSON

I, Mark B. Mathisen, CPG, as an author of this report entitled “Technical Report on the Rook I Property, Saskatchewan, Canada”, prepared for NexGen Energy Ltd. and dated April 13, 2016, do hereby certify that:

1. I am Senior Geologist with RPA (USA) Ltd. of Suite 505, 143 Union Boulevard, Lakewood, Co., USA 80228.

2. I am a graduate of Colorado School of Mines in 1984 with a B.Sc. degree in Geophysical Engineering.

3. I am a Registered Professional Geologist in the State of Wyoming (No. PG-2821) and a Certified Professional Geologist with the American Institute of Professional Geologists (No. CPG-11648). I have worked as a geologist for a total of 20 years since my graduation. My relevant experience for the purpose of the Technical Report is:

    - Mineral Resource estimation and preparation of NI 43-101 Technical Reports.
    - Director, Project Resources, with Denison Mines Corp., responsible for resource evaluation and reporting for uranium projects in the USA, Canada, Africa, and Mongolia.
    - Project Geologist with Energy Fuels Nuclear, Inc., responsible for planning and direction of field activities and project development for an in situ leach uranium project in the USA.
    - Design and direction of geophysical programs for US and international base metal and gold exploration joint venture programs.

4. I have read the definition of "qualified person" set out in National Instrument 43-101 (NI 43-101) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I am a "qualified person" for the purposes of NI 43-101.

5. I visited the Rook I Property on January 19 to 20, 2016.

6. I share responsibility with my co-author for all of the sections of the Technical Report.

7. I am independent of the Issuer applying the test set out in Section 1.5 of NI 43-101.

8. I have had no prior involvement with the property that is the subject of the Technical Report.

9. I have read NI 43-101, and the Technical Report has been prepared in compliance with NI 43-101 and Form 43-101F1.

10. At the effective date of the Technical Report, to the best of my knowledge, information, and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated this 13th day of April, 2016

(Signed & Sealed) "*Mark B. Mathisen*"

Mark B. Mathisen

DAVID A. ROSS

I, David A. Ross, M.Sc., P.Geo., as an author of this report entitled “Technical Report on the Rook I Property, Saskatchewan, Canada”, prepared for NexGen Energy Ltd. and dated April 13, 2016, do hereby certify that:

1. I am a Principal Geologist and Director, Resource Estimation, with Roscoe Postle Associates Inc. of Suite 501, 55 University Ave., Toronto, ON, M5J 2H7.
2. I am a graduate of Carleton University, Ottawa, Canada, in 1993 with a Bachelor of Science degree in Geology and Queen’s University, Kingston, Ontario, Canada, in 1999 with a Master of Science degree in Mineral Exploration.
3. I am registered as a Professional Geologist in the Province of Ontario (Reg. #1192) and the Province of Saskatchewan (Reg. #31868). I have worked as a geologist for a total of 21 years since my graduation. My relevant experience for the purpose of the Technical Report is:
   - Review and report as a consultant on numerous mining and exploration projects around the world for due diligence and regulatory requirements
   - Exploration geologist on a variety of gold and base metal projects in Canada, Indonesia, Chile, and Mongolia.
4. I have read the definition of "qualified person" set out in National Instrument 43-101 (NI 43-101) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I am a "qualified person" for the purposes of NI 43-101.
5. I did not visit the Property.
6. I share responsibility with my co-author for all of the sections of the Technical Report.
7. I am independent of the Issuer applying the test set out in Section 1.5 of NI 43-101.
8. I have had no prior involvement with the property that is the subject of the Technical Report.
9. I have read NI 43-101, and the Technical Report has been prepared in compliance with NI 43-101 and Form 43-101F1.
10. At the effective date of the Technical Report, to the best of my knowledge, information, and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated this 13th day of April, 2016

(Signed & Sealed) “*David A. Ross*”

David A. Ross, M.Sc., P.Geo.