

January 31, 2014

VIA EMAIL & COURIER

Aboriginal Affairs and Northern Development Canada

Land Administration

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Gjoa Haven, NU X0B 1J0

Government of Nunavut - Department of Environment

PO Box 1000 Station 200

Iqaluit, NU X0A 0H0

Nunavut Impact Review Board

PO Box 1360

Cambridge Bay, NU X0B 0C0

Dear All:

Re: Kiggavik Project Field Program 2013 Annual Report: AANDC Land Use Permit N2009C0017; KIA Land Use Licence KVL306C02; NWB Water Licence 2BE-KIG1318; NIRB File No. 06AN085

Please find enclosed the 2013 AREVA Resources Canada Inc. (AREVA) Annual Report for the Kiggavik Project Field Program and corresponding operational plans for your review, comment and distribution. The hard copies of these documents and CD have been sent via courier.

This report fulfills the Nunavut Impact Review Board (NIRB) screening recommendation; Aboriginal Affairs and Northern Development Canada (AANDC) permit condition No. 5, and Nunavut Water Board (NWB) Licence Part B, Item 2 for an annual report submitted by January 31 and March 31 respectively, which addresses the previous year of operation.

AREVA trusts that this annual report is an adequate summary of the activities conducted in 2013. Should you have any questions or comments, please do not hesitate to contact John Robbins at 306-343-4513 or John.Robbins@areva.ca or myself at 306-343-4520.

Yours truly,

Kim Jackson

SHEQ Supervisor, Exploration

Enclosure:

Kiggavik Project Field Program 2013 Annual Report

CC:

Workers' Safety and Compensation Commission

ARC Distribution





AREVA Resources Canada Inc.

KIGGAVIK PROJECT FIELD PROGRAM

2013 ANNUAL REPORT

Date of issue: January 2014

APPROVAL FOR USE

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AREVA Resources Canada Inc. - Kiggavik Project Field Program

2013 Annual Report

January 2014

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ARC Environment, SHEQ Dept.	1
ARC Regulatory and Legal Affairs Dept.	1
ARC Baker Lake Office	1





Kiggavik Project Field Program 2013 Annual Report

EXECUTIVE SUMMARY

The following Annual Report provides a summary of the 2013 Kiggavik Project exploration field program conducted by AREVA Resources Canada Inc. (AREVA). This submission is required by Part B, Item 2 of Licence no. 2BE-KIG1318 issued by the Nunavut Water Board (NWB) and condition #5 of the original Land Use Permit N2006C0037, which remains applicable to the current Land Use Permit N2009C0017 issued by Aboriginal Affairs and Northern Development Canada (AANDC).

The field program focused on diamond drilling to further evaluate potential deposits. Drilling operations were conducted out of the Kiggavik camp with support provided by helicopter services and the Baker Lake office. Drilling commenced on June 19, 2013 and was completed on September 1, 2013. During this period, a total of 10,596 metres were drilled in 39 drill holes using HQ and NQ sized diamond core equipment.

The Kiggavik Project Environmental Management Plans were implemented throughout the field program to prevent or reduce any potential adverse effects from exploration activities. There were no lost time incidents involving AREVA personnel or contractors. Occupational health, safety and radiation protection programs were implemented to ensure workers performed in a safe and responsible manner and were not exposed to adverse effects from uranium exploration activities. AREVA also maintained its ISO 14001:2004 and OHSAS 18001:2007 certifications for the Integrated Management System.

A community engagement program was carried out to support all aspects of the Kiggavik Project, including the exploration field program.

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የጐሀታጐሀያና ላናሀና ር፡Lናፖበር ኦዮታናቴሮኦየተደላየ Δ ይ የተረጓጋቱ Δ ር ጊዜ 2013 የ፡ሁልቱር ለናርሊ ላጐሁታ የዮታቴኒ የልኦተር Δ ር ይነት የነተል ለናርሊል የተመለከተ ለናርሊል የተመለከተ ነው ለር ለተመለከተ ለናር ተመለከተ ነው ለር ለተመለከተ ነው ለር ለመለከተ ነው ለር ለተመለከተ ነው ለር ለመለከተ ነው ለር ለተመለከተ ነው ለር ለመለከተ ነው ለር ለመለከተ

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1 SUMMARY OF KIGGAVIK 2013 FIELD PROGRAM

1.1 GENERAL

The Kiggavik Project is a uranium exploration project located 80 kilometres (km) west of Baker Lake, Nunavut. The Kiggavik Project consists of the Kiggavik leases and the St. Tropez claims as indicated in Figure 1.1-1. Throughout the 2013 field season, AREVA and its contractors conducted geological exploration drilling on the Kiggavik lease which includes both the Kiggavik and Sissons sites. Ground geophysics was also completed on ten grid areas for a total of 297.85 km. No prospecting, geological mapping, thermistor installation and monitoring, or packer-testing were conducted during the 2013 field program. To address the Nunavut Impact Review Board (NIRB) request for additional aquatic baseline data, field work investigations were conducted from August 30, 2013 to September 9, 2013 to support the Kiggavik Project *Final Environmental Impact Statement* (FEIS).

A small crew was mobilized to the Kiggavik site to open camp on June 10, 2013. Due to issues with finalization of the Nunavut Water Board (NWB) licence, the crew resided in Baker Lake and traveled to site each day to accommodate the lack of licence. Following issuance of the licence on June 14, 2013, the remaining drilling and support staff mobilized to site on June 15, 2013 to commence drilling on June 19, 2013. Operations were based out of the Kiggavik camp which consisted of temporary tents, sea containers, and wooden structures. The camp accommodated a maximum of 42 persons. Support was provided by the Baker Lake office and transport was provided by helicopter services. Following the completion of drilling on September 1 and the aquatic baseline data on September 9, 2013 the Kiggavik camp was closed and personnel demobilized on September 9, 2013. Main Project contributors are shown in Table 1.1-1.

Table 1.1-1 Kiggavik Project Contributors

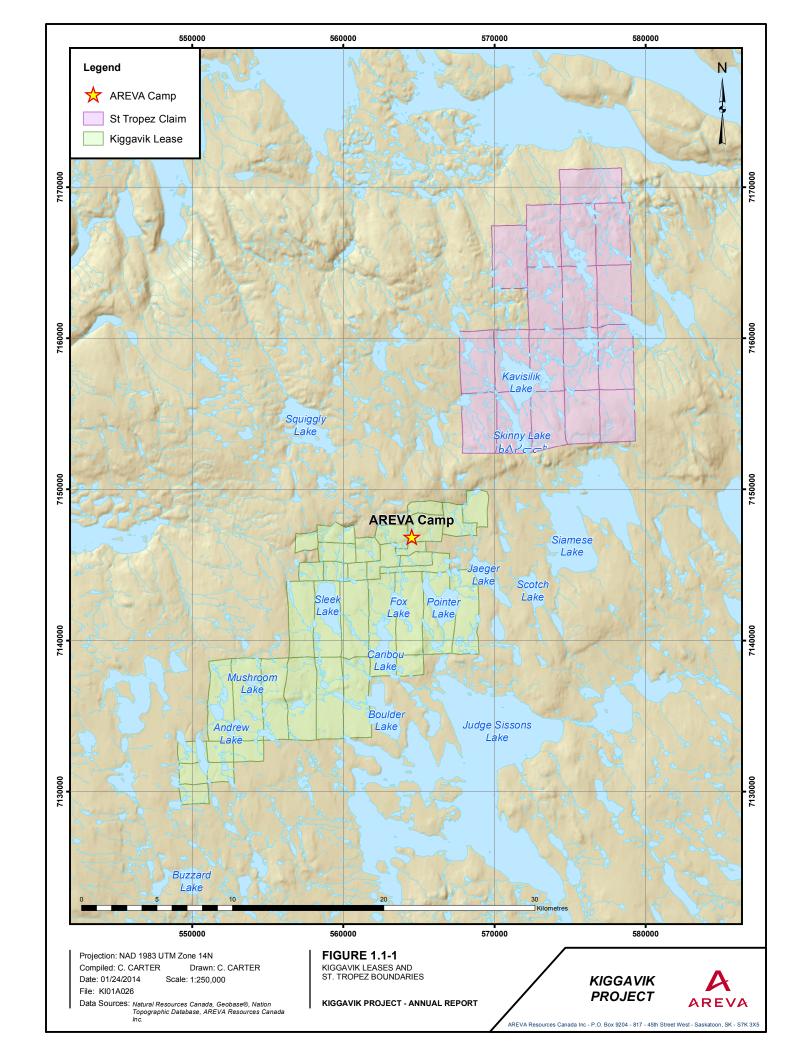
Activity	Contributors
Management	AREVA
Drilling	Boart Longyear
Geological logging and probing	AREVA
Wildlife Monitoring	AREVA & Peter's Expediting Ltd.
Helicopter and Logistics	Forest Helicopters*
Environment, Safety and Radiation Protection	AREVA
Occupational First Aid & Catering	1984 Inc.**



Activity	Contributors
Camp Operations & Maintenance	AREVA & Peter's Expediting Ltd.
Fuel and other Overland Transportation	Peter's Expediting Ltd.
Expediting	AREVA, Peter's Expediting Ltd
Ground Geophysics	MWH Geo-Surveys Inc.
Ground Surveying	Sub-Arctic Surveys
Baseline Aquatics and Archeology	Golder Associates

^{*}Forest Helicopters is partnered with the Inuit Firm Forest North Aviation and Logistics Inc.

^{**1984} is partnered with the Inuit Firm 5136 Nunavut Ltd.





1.2 DRILLING, SAMPLING AND TESTING

Geological exploration focused on diamond drilling in the Bong Prospect, Bong North, End Deposit, End North, Jane-Drew area, Kiggavik East, Kiggavik North, Kiggavik South-West and Pizza Grid of the Kiggavik lease. With the exception of the End Deposit and Bong Prospect, the remaining seven areas were greenfield exploration drilling. From June 19, 2013 to September 1, 2013, a total of 10,596.4 metres (m) was completed in 39 drill holes using HQ or NQ sized diamond core equipment.

As per the NWB Licence, Part F, Item 7, AREVA must record the depth of permafrost where drilling activity has penetrated below the permafrost layer. The pneumatic packer testing and installation of thermistors was not necessary in 2013, as these are activities specific to mine development. As indicated from previous thermistor readings, the estimated depths of permafrost range from 208 to 280 metres below ground surface. As further mine development activities are conducted, the relevant data will be provided in subsequent annual reports.

Diamond drilling on the Kiggavik lease included the following:

- Bong North; six drill holes (1,457 m)
- Bong Prospect; three drill holes (1,065 m)
- End North; four drill holes (1,387 m)
- End Deposit; five drill holes (1,695 m)
- Jane-Drew; four drill holes (1,231 m)
- Kiggavik East; seven drill holes (1,631.4 m)
- Kiggavik North; five drill holes (964 m)
- Kiggavik South-west; three drill holes (743 m)
- Pizza Grid; two drill holes (423 m)

All drill core was logged and core samples (non-mineralized and mineralized) were collected for laboratory testing. Refer to Table 1.2-1 for a summary of the 2013 drilling program.



Table 1.2-1 Summary of 2013 Drill Holes

HOLE ID	Zone	Grid Coordinates	UTM X Easting	UTM Y Northing	Azimuth /Dip	Start	Finish	Depth (m)
BN-01	BONG North	na	562396	7144760	070/-75	Jul-19	Jul-20	38
BN-01A	BN-01A BONG North		562396	7144760	070/-75	Jul-20	Jul-24	195
BN-02	BONG North	na	562111	7145123	020/-75	Jul-25	Jul-27	135
BN-03	BONG North	na	561853	7145439	070/-80	Jul-27	Aug-5	261
BN-04	BONG North	na	561623	7145977	090/-80	Aug-6	Aug-17	405
BN-05	BONG North	na	561900	7145404	090/-80	Aug-18	Aug-29	423
BONG-061	BONG Prospect	L0+50N	562217	7144013	110/-82	Jun-23	Jun-30	372
BONG-062	BONG Prospect	L1+00N	562231	7144061	000/-90	Jul-02	Jul-13	369
BONG-063	BONG Prospect	L1+37S/1+59W	562224	7143811	110/-84	Jul-13	Jul-18	324
EN-01	END North	na	553903	7136788	150/-75	Jul-23	Jul-27	358
EN-02	END North	na	554048	7136756	150/-75	Jul-28	Aug-2	381
EN-03	END North	na	553105	7136464	150/-80	Aug-2	Aug-6	354
EN-04	END North	na	552706	7136424	150/-80	Aug-7	Aug-10	294
END-13-01	END Deposit	L3+00S/0+45W	554605	7136178	150/-82	Jun-27	Jun-28	60
END-13-01A	END Deposit	L3+00S/0+45W	554604	7136178	150/-82	Jun-28	Jul-5	450
END-13-02	END Deposit	L2+50S/0+44W	554652	7136201	150/-70	Jul-6	Jul-11	396
END-13-03	END Deposit	L6+50S/0+50E	554351	7135917	150/-71	Aug-4	Aug-9	333
END-13-04	END Deposit	L6+00S/0+50E	554396	7135939	150/-80	Aug-9	Aug-17	456
JD-01	JANE-DREW	na	551977	7132964	270/-80	Jul-12	Jul-16	282
JD-02	JANE-DREW	na	552345	7133449	270/-80	Jul-16	Jul-21	330
JD-03	JANE-DREW	na	552492	7133580	270/-80	Jul-21	Jul-29	379
JD-04	JANE-DREW	na	552766	7134153	300/-75	Jul-30	Aug-3	240
KE-01	KIGGAVIK E	na	566859	7148055	155/-80	Jul-2	Jul-5	240
KE-02	KIGGAVIK E	na	566895	7147972	155/-80	Jul-5	Jul-9	226.8
KE-03	KIGGAVIK E	na	566820	7148150	155/-80	Jul-9	Jul-12	261
KE-04	KIGGAVIK E	na	567134	7148062	155/-80	Jul-13	Jul-16	243
KE-05	KIGGAVIK E	na	567000	7148051	155/-80	Aug-21	Aug-23	108
KE-05A	KIGGAVIK E	na	567000	7148051	155/-80	Aug-23	Aug-28	285.6
KE-06	KIGGAVIK E	na	567125	7147786	155/-80	Aug-28	Sept-1	267



HOLE ID	Zone	Grid Coordinates	UTM X Easting	UTM Y Northing	Azimuth /Dip	Start	Finish	Depth (m)
KN-01	KIGGAVIK N	na	564773	7148199	145/-75	Jun-19	June 24	273
KN-02	KIGGAVIK N	na	564862	7148468	145/-75	Jun-24	June 28	255
KN-03	KIGGAVIK N	na	564919	7148385	145/-75	Jun-29	Jul-1	177
KN-04	KIGGAVIK N	na	564837	7148114	145/-75	Aug-18	Aug-20	139
KN-05	KIGGAVIK N	na	565015	7147444	115/-75	Aug-21	Aug-24	120
KSW-01	KIGGAVIK SW	na	564213	7146068	090/-70	Jul-16	Jul-19	209
KSW-02	KIGGAVIK SW	na	564372	7145904	260/-70	Jul-19	Jul-23	291
KSW-03	KIGGAVIK SW	na	564079	7145877	090/-70	Aug-24	Aug-29	243
PG-01	PIZZA Grid	na	551296	7136010	150/-80	Aug-11	Aug-14	243
PG-02	PIZZA Grid	na	551435	7136064	150/-80	Aug14	Aug-19	180
_							TOTAL:	10596.4 m

1.2.1 Bong North

Six holes (BN-01 to BN-05, including one restart hole BN-01A) were drilled north of the Bong Prospect testing prospective geology and geophysical lineaments within a NNW-SSE trending gravity anomaly (see Figure 1.2-1) Most of the holes intersected micaceous quartzite and metavolcanics (Keyet River/Amer Group?) overlying Woodburn Group psammo-pelites. Numerous narrow structures, usually less than 20 metres thick, were encountered in the upper sequence, habitually coupled with moderate to strong alteration, clay replacement, quart dissolution and local core loss. Due to ground conditions and technical issues only BN-01A and BN-04 were completed to target depth. None of the six boreholes drilled in this area were mineralized.

1.2.2 Bong Prospect

On the Bong Prospect, two holes tested the Bong North pod mineralization (Bong-061 and 062) while a third hole, Bong-063, tested a geophysical target, south-west of the prospect (see Figure 1.2-1). Due to ground conditions only Bong-061 was completed to target depth.

- Bong-061 and 062 completed in the vicinity of Bong-060, drilled in 2012, encountered strong alteration consisting of argillization and fault gouges in the target areas but no mineralization.
- Bong-63 testing a resistivity anomaly from a survey completed in 2010, intersected a large zone of argillization, fault gouges and intervals of silica healed breccias. Trace

A AREVA

mineralization was encountered within this zone associated with organic rich intervals and redox fronts.

1.2.3 End North

Four holes (EN-01 to EN-04) tested the geology and magnetic lineaments within an ENE-WSW trending gravity anomaly located north-east of the End Deposit (see Figure 1.2-2). EN-01, 02 and 03 intersected predominantly Archean granitic gneisses with minor metasediment intervals from the Woodburn Group and intrusions from the Hudson suite. EN-04, drilled further to the west, encountered essentially Hudsonian granite and minor granitic gneiss. None of the boreholes were mineralized.

1.2.4 End Deposit

In 2013, three holes (END-13-01, 01A and 02) tested the north-west extension of the North Pod mineralization and two holes (END-13-03 and 04) were collared between the North and South Pods to provide insight into the structural features between the pods (see Figure 1.2-2).

 END-13-01 was stopped due to deviation problems at 60 metres depth. END-13-01A, the re-start hole, consisted entirely of moderately chloritized metasediments along with intervals of patchy hematization. Intermittent mineralization was intersected between 307.0 and 389.9 metres associated with fractures, micro-fractures and micro-brecciation sub-parallel to the foliation.

• END-13-02 intersected essentially metasediments with patchy hematite alteration throughout and moderate to strong argillization between 139.2-153.0 metres and 182.9-202.0 metres. Intermittent mineralization was encountered between 144.9 and 367.0 metres depth. The mineralization was generally observed as disseminated pitchblende blebs of 1 to 2 mm in diameter along foliation planes.

• END-13-03 and END-13-04 intersected mainly psammo-pelitic gneisses weakly chloritized with patchy hematite and minor syenite and lamprophyre intrusions. Only END-13-04 encountered trace mineralization hosted in a fracture at 424.8 metres depth.



1.2.5 Jane-Drew

Four holes (JD-01 to JD-04) were drilled in 2013 located between the Jane Prospect and the Andrew Lake Deposit to investigate the geology and geophysical lineaments within an extensive NE-SW trending gravity anomaly (see figure 1.2-2). The boreholes intersected Archean granitic gneiss, minor Hudsonian intrusions and Woodburn meta-sediments. Out of the four holes, only JD-03 encountered structurally controlled trace mineralization at 316 metres depth.

1.2.6 Pizza Grid

Two boreholes PG-01 and PG-02) were collared near the western limits of the Kiggavik Property to test a small gravity anomaly located approximately 2.6 kilometres east of the Tatiggag Prospect within the Judge Sissons Fault corridor (see Figure 1.2-2). The holes intersected predominantly Archean granitic gneisses with minor metasediments from the Woodburn Lake Group and intrusives from the Hudson suite. No mineralization was intersected in this area.

1.2.7 Kiggavik East

Seven boreholes (KE-01 to KE-06, including one re-start KE-5A) were collared east of the Kiggavik deposits to investigate favorable geology, geophysical lineaments and test historical mineralization at depth (see Figure 1.2-3). The lithologies intersected consisted of alternation of metasediments, metavolcanics and quartzite with minor Hudsonian intrusions. Intermittent and or patchy trace to weak mineralization was intersected in:

- KE-01 between 133.9 and 138.9 metres, foliation controlled.
- KE-04 between 116.1 and 119.1 metres, associated with fractures and veins
- KE-05A between 147.7 and 161.4 metres, mineralization noted both along fractures and foliation planes.

1.2.8 Kiggavik North

Five holes (KN-01 to KN-05) were drilled north of the Kiggavik deposits to test favorable geology and magnetic lineaments within an extensive gravity anomaly (see Figure 1.2-4). KN-01 to 04 intersected variable amounts of quartzite, metavolcanics and psammo-pelitic gneiss overlying Hudsonian granite. KN-05 intersected only psammo-pelitic gneiss and granite. None of the five holes drilled in this area intersected mineralization.



1.2.9 Kiggavik Southwest

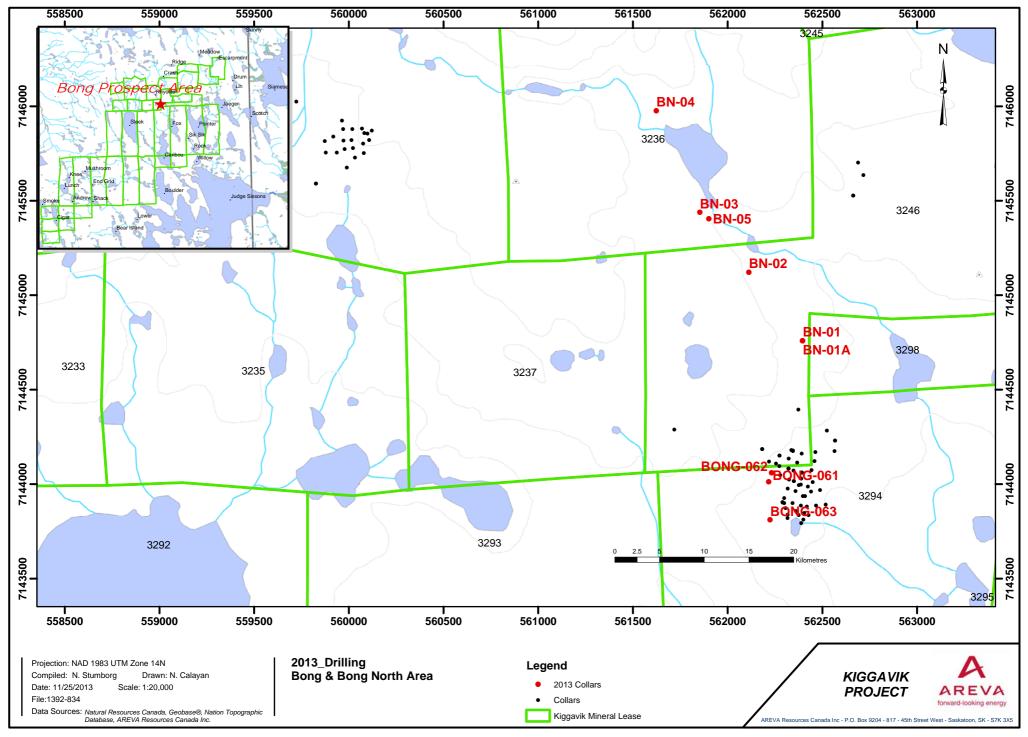
Three holes (KSW-01 to KSW-03) were collared southwest of the Kiggavik deposits to test an N-S trending gravity anomaly (see Figure 1.2-4). The boreholes intersected essentially metasediments from the Woodburn Lake group with minor Hudsonian intrusions. The metasediments were generally fresh to moderately chloritized and silicified with common disseminated pyrite. Only KSW-02 intersected trace mineralization over two narrow intervals at 200 metres depth associated with a narrow quartz vein and at 220.7 metres depth coupled with a small quartz-hornblende breccia.

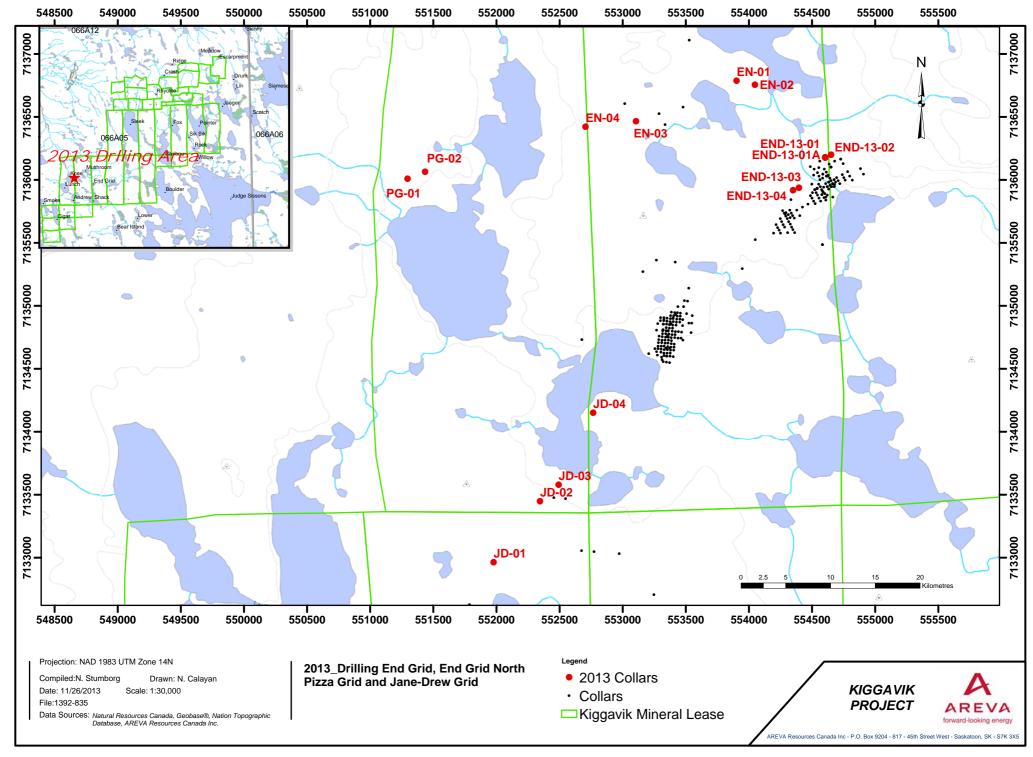
1.3 GEOPHYSICS

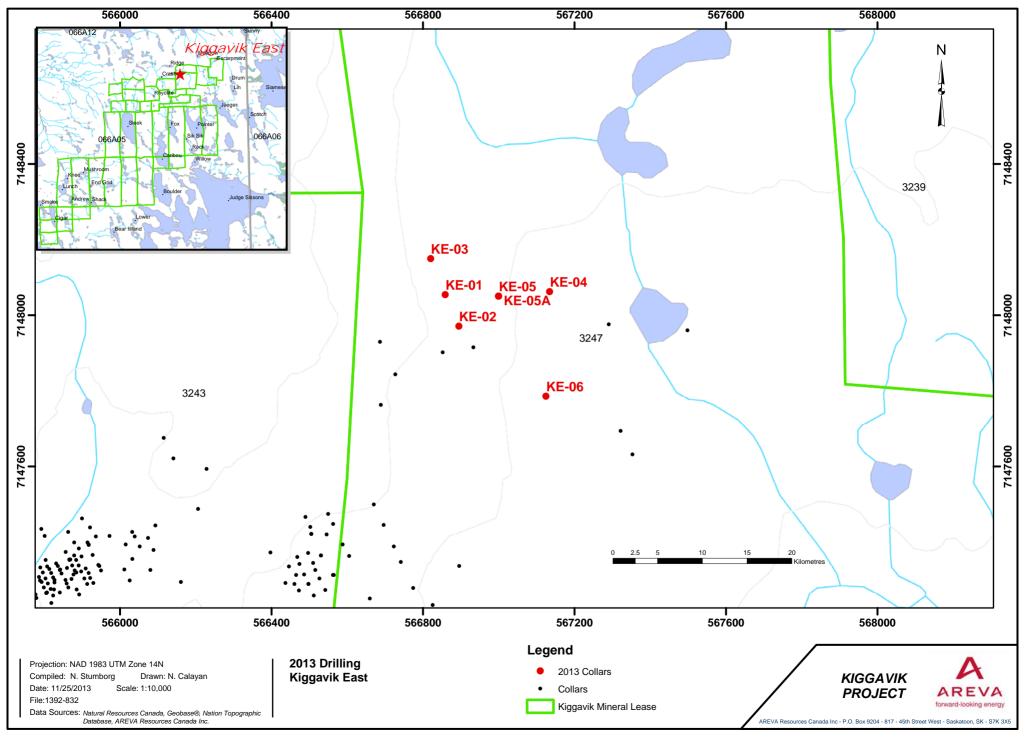
A program of ground geophysics was completed in 2013 on ten different grids as listed in Table 1.3-1 2013 Ground Geophysics Program. These grids are current areas of interest that do not have ground gravity data but have significant airborne gravity lows or other structural or geophysical signatures of interest (see Figure 1.3-1). MWH Geo-Surveys Inc. was the contractor who performed the ground gravity while the magnetic and VLF surveys were completed by AREVA personnel.

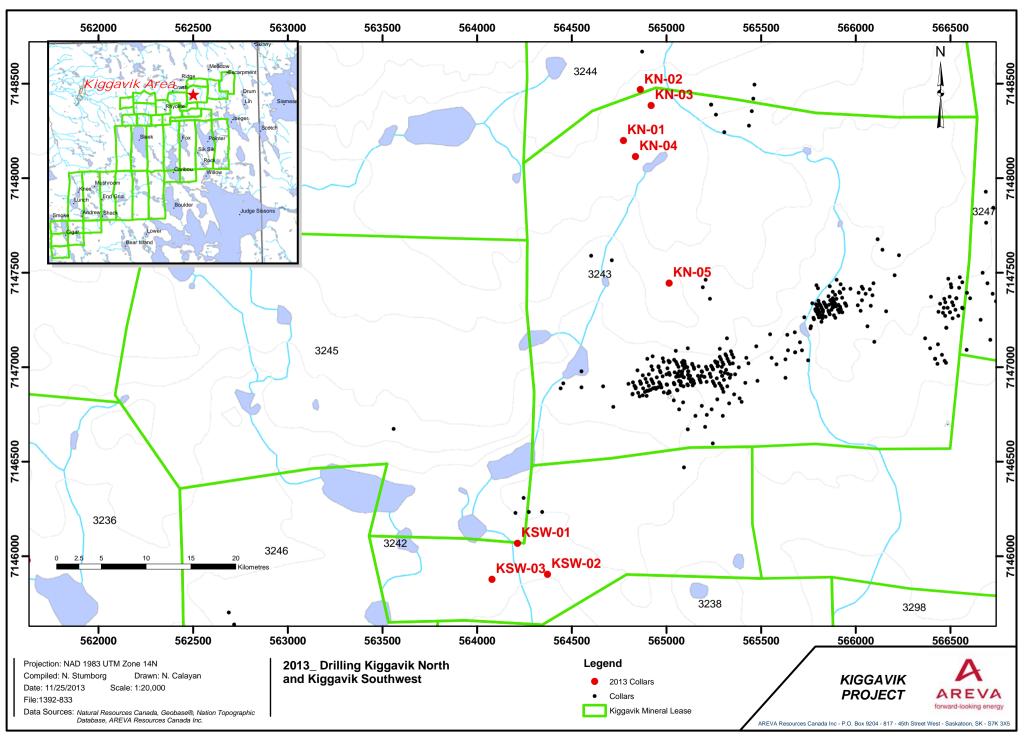
Table 1.3-1 2013 Ground Geophysics Program

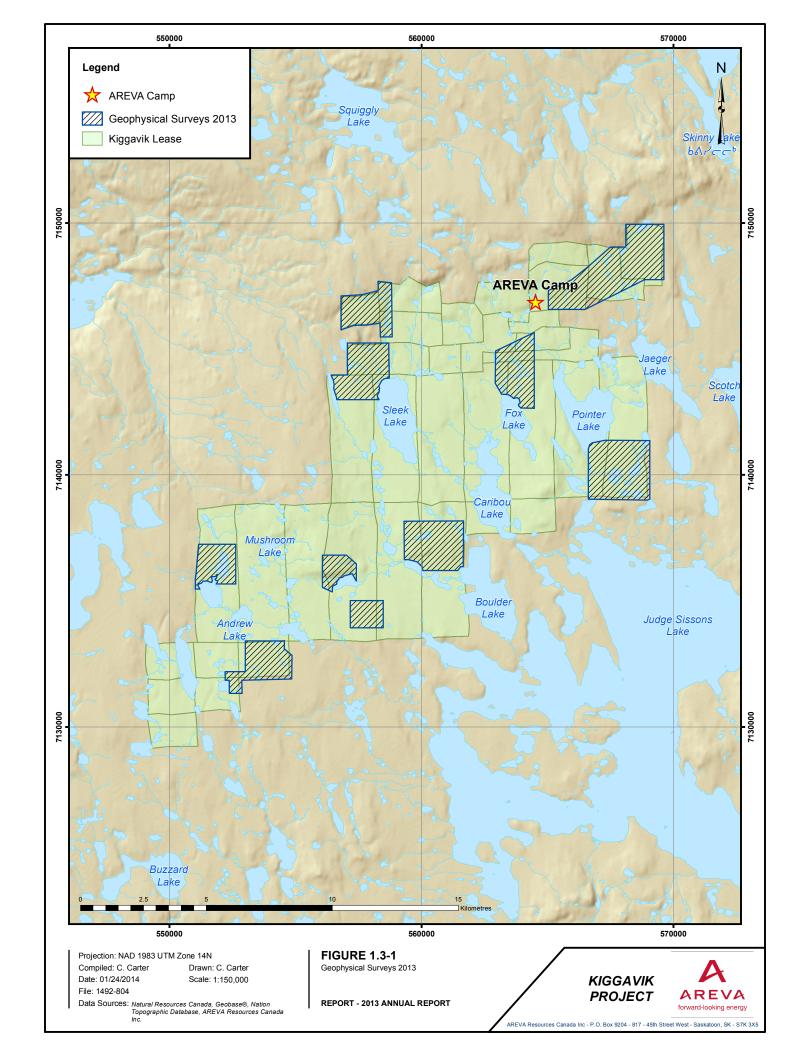
Area	Gravity (incl. repeats)	Magnetics & VLF-EM (kilometres)		
Kiggavik East	0	79.85		
Lucky13	687 st.	29.00		
Bong South-East	0	37.70		
85West North	0	40.80		
Caribou	1260 st.	58.25		
Igloo West	1073 st.	44.65		
End East	236 st.	16.05		
Pizza	0	24.20		
South	0	13.00		
Jane1 Extension	797 st.	34.20		
TOTAL	4053 stations	297.85		













1.4 ENVIRONMENTAL BASELINE WORK

1.4.1 Atmospheric

One high volume air quality monitor operated continuously throughout the field season. The filters will undergo analysis for total particulate, metals and radionuclides for incorporation into the Kiggavik Project FEIS.

1.4.2 Aquatic - Freshwater

Following the community roundtable and preliminary hearing conference held in June, the NIRB issued their preliminary hearing conference report on July 5, 2013. Within the report, the NIRB requested additional aquatic baseline data in the Northwest and East Basins of the Judge Sissons Lake where the effluent diffusers are proposed to be located. Golder Associates Ltd. was on site from August 30 to September 9 conducting aquatic field investigations that included the collection of benthic invertebrates, sediment chemistry, aquatic habitat, and water samples.

1.4.3 Archaeological

Archaeological data was collected August 12 to 14, 2013 by Golder Associates Ltd. under a Class 2 Nunavut Archaeologist Permit (No. 2013-27A) with the help of one local Baker Lake resident. The three day archaeological survey included the proposed dock location, proposed ferry crossing location, and a portion of proposed south winter road (~ 8 km) near the mouth of the Thelon River. A full report will be submitted to Government of Nunavut Culture and Heritage Department, as per the permit requirements.



1.5 INSPECTIONS

Inspections of the Kiggavik Project 2013 field activities were carried out by AANDC (July 19, 2013), KIA (August 21, 2013), and WSCC (August 27, 2013). For further detail regarding compliance, refer to Appendix A – Compliance with Conditions.

1.5.1 Aboriginal Affairs and Northern Development Canada (AANDC)

An environmental inspection was conducted by AANDC on July 19, 2013 for the Land Use Permit N2009C0017. The inspectors visited the Kiggavik camp, fuel cache, and one drill rig. The recommendations and/or concerns were noted in the Environmental Inspection Report, and are outlined in Table 1.5-1. In addition to the inspection, the AANDC District Geologist, Mineral Resources was on site August 19, 2013 and August 20, 2013 and the Water Resources Technician was on site July 2, 2013.

Table 1.5-1 AANDC Inspection – July 19, 2013

RECOMMENDATIONS/CONCERNS	ACTION TAKEN
During the 2012 inspection, AANDC	During the 2013 inspection, the inspector
recommended that AREVA engineer an	indicated that the sump constructed by
acceptable sump management system at the	AREVA was built to the satisfaction of the
camp.	inspector (Photograph 1.5-1).
The inspector visited one drill on July 19, 2013	AREVA completed a survey of the Bong
and did not note any unacceptable conditions. The	area, and cut off ten drill collars on
inspector saw some drill holes and could not	August 23, 2013.
determine if the pipes exposed above ground	
would be cut or were even cut off. The inspector	
suggests that AREVA look at some of their collar	
locations and cut any pipes that may be exposed	
above ground.	





Photograph 1.5-1 Kiggavik Grey Water Sump - 2013 field season

1.5.2 Kivalliq Inuit Association (KIA)

The KIA conducted an inspection of the Kiggavik camp and one drill site on August 21, 2013 for the Land Use Licence KVL306C02. The inspector noted the improved organization, and the absence of surface staining from fuels or chemicals. There were no issues identified during the inspection.

1.5.3 Workers Safety and Compensation Commission (WSCC)

The Mines Inspector for the WSCC conducted a safety inspection on August 27, 2013. The findings of the inspection are outlined in Table 1.5-2.

Table 1.5-2 WSCC Inspection – August 27, 2013

RECOMMENDATIONS/CONCERNS	ACTION TAKEN
Please review the incinerator operations and determine the minimum personal protective equipment and systems required by the incinerator operators.	During the upcoming field season, AREVA will communicate the risks to incinerator operators and recommend immunization. It was recommended that AREVA request employees to provide their immunization record to AREVA which will be kept at the Baker Lake Health Centre. Hepatitis B and Tetanus shots are also provided at the Health Centre free of charge.



2 SUMMARY OF PLANNED ACTIVITIES FOR 2014

2.1 GENERAL

The upcoming 2014 field season will be similar to the 2013 season, with primary focus on exploration drilling for potential mineral deposits and for further evaluation of known deposits. Similar to the 2013 season, the program of diamond drilling will consist of approximately 80% greenfield exploration and approximately 20% brownfield exploration. The Kiggavik camp will accommodate an estimated maximum of 59 people in 2014. The drill and support crews will likely commence mobilization in early June, with drilling completed and camp prepared for the winter season by the end September. All operations will be conducted out of the Kiggavik camp with support provided by helicopter services and the Baker Lake office.

2.2 DRILLING, SAMPLING AND TESTING

Although the 2014 drilling program has not been fully defined at this time, it will likely include drilling at Bong Grid, END Grid, Kiggavik East, Igloo West, Caribou, Granite-Bong Corridor, Lucky 13, BS Grid, and ED-2 Grid. These areas are shown in Figure 2.2-1.

- a. The objectives of the drilling campaign will be to collect resource data in untested areas for mineralizing systems
- b. Diamond drilling will include a total of 25 to 35 drill holes
- c. Total meterage is expected to be approximately 11,500 m
- d. The drill hole size will be NQ, though HQ is being considered in some areas
- e. Core orientation will be conducted using the ACT core orientation system, or equivalent
- f. Holes will be inclined (between -86° and -45°)
- g. Hole length is expected to range between 200 m and 500 m
- h. Drill locations will be picked in the spring of 2014

2.3 GEOPHYSICS

Ground gravity, magnetics, and VLF-EM geophysical surveys will be carried out throughout the lease areas to identify potential for additional mineral deposits.. Currently AREVA expects to conduct surveys on the Pizza Grid, BS Grid, End North, Bong Southeast and St. Tropez claims as shown in Figure 2.3-1.



2.4 PROSPECTING AND GEOLOGICAL MAPPING

Prospecting and geological mapping may take place on the Kiggavik Lease and St. Tropez claims.

2.5 THERMISTOR INSTALLATION AND MONITORING

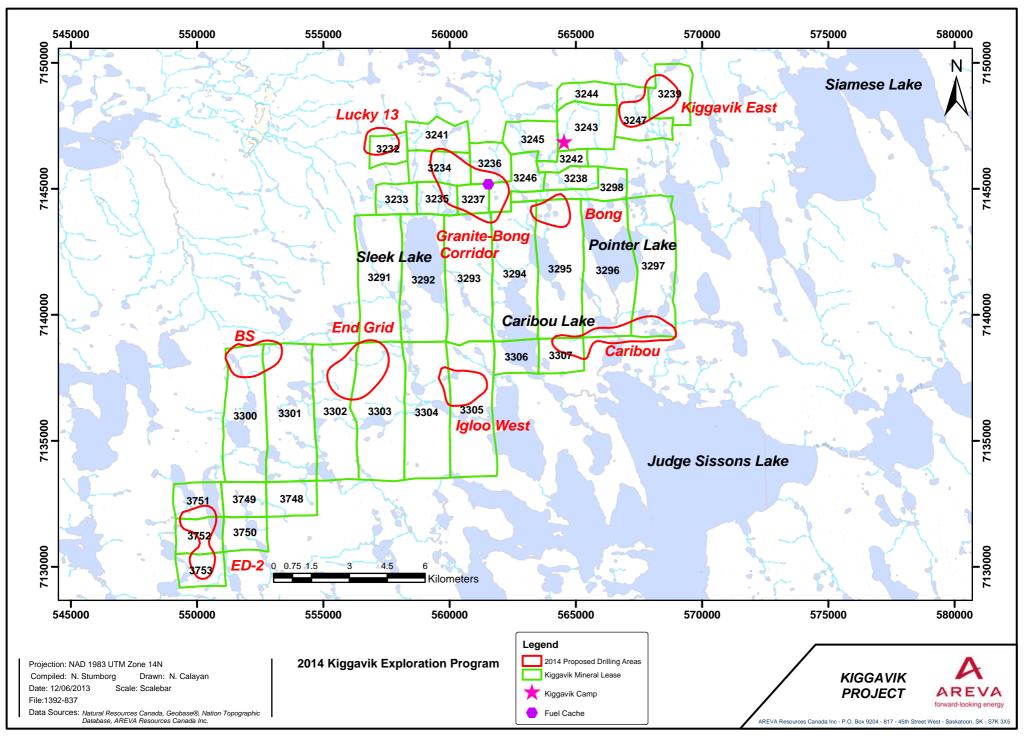
Currently there are no plans for the installation of additional thermistors in 2014. Monitoring of the existing thermistor network within the Project area may be conducted.

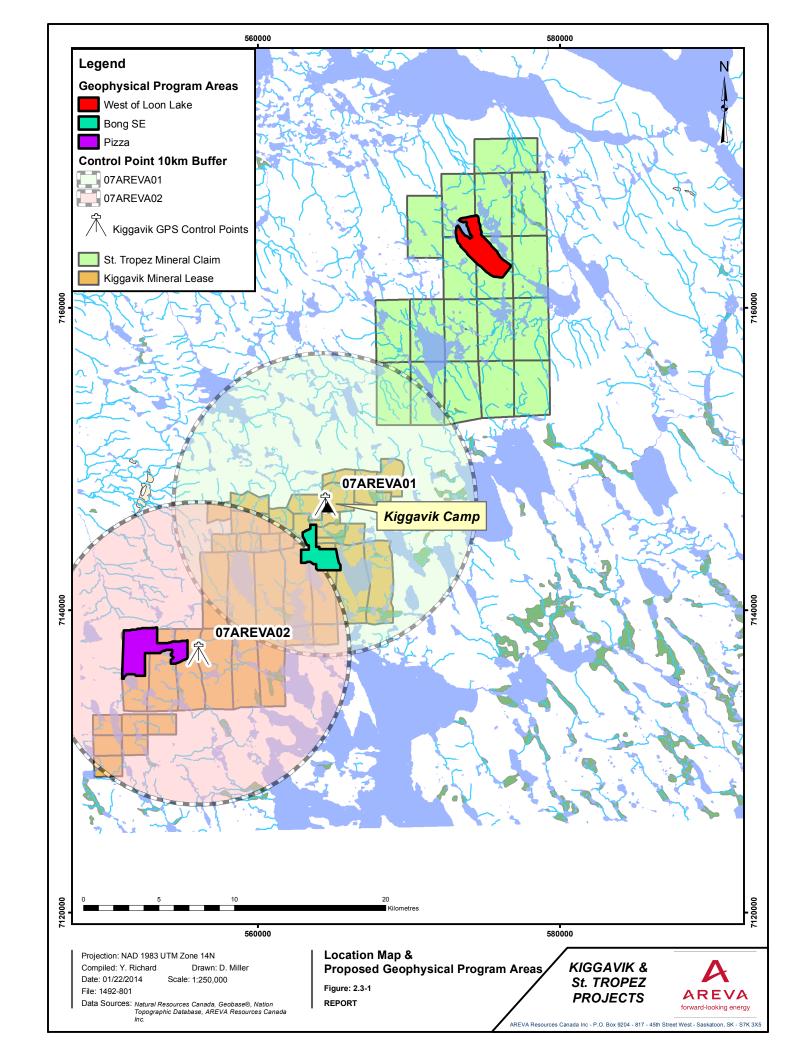
2.6 ENVIRONMENT AND RADIATION MONITORING

The 2014 environment and radiation monitoring program will continue to be conducted by AREVA staff with support provided by contractors if necessary. Wildlife monitoring will involve Wildlife Monitors from the Baker Lake community and Kiggavik personnel. AREVA staff will be responsible for the implementation of the Environmental Management Plans which were designed to ensure compliance with regulatory conditions and internal AREVA requirements.

2.7 ENVIRONMENTAL BASELINE WORK

As the completion of the FEIS progresses, additional environmental studies may be scheduled for the 2014 field season, however there are currently no studies anticipated.







3 ENVIRONMENTAL MONITORING AND PROTECTION

AREVA is committed to taking every reasonable precaution toward ensuring the protection and conservation of the natural environment. This commitment is reflected in AREVA's Environmental Policies and is supported through a comprehensive Environmental Program for the exploration activities at the Kiggavik Project.

The 2013 field season was conducted in accordance with the ISO 14001:2004 certification for the Exploration Department's Environmental Management System. The ISO 14001 standard outlines the requirements for an Environmental Management System which enable an organization to implement a policy and objectives which address legal requirements and significant environmental aspects. The standard supports environmental protection and prevention of pollution in balance with socio-economic needs. The external third party, SGS, conducted the ISO 14001:2004 recertification audit from March 5 to March 8, 2013, which concluded that the program continues to meet requirements.

The following seven Environmental Management Plans, originally prepared in 2007, were updated and submitted to the regulatory agencies prior to commencing the field season.

- Abandonment and Restoration Plan
- Noise Abatement Plan
- Radiation Protection Plan
- Spill Contingency Plan
- Uranium Exploration Plan
- Waste Management Plan
- Wildlife Mitigation and Monitoring Plan

These Plans ensure compliance with regulatory conditions and internal AREVA requirements and guide the development of best management practices and procedures to mitigate any potential adverse environmental impacts. AREVA intends to operate in accordance with commitments made in the Plans; however, such Plans are living documents and lessons learned during the field season and AREVA's commitment to continual improvement occasionally warrant revision of these Plans. The Plans were made available to personnel throughout the 2013 field season, and have been included with the submission of this Annual Report (refer to Appendix B – Environmental Management Plans). The following sections summarize the implementation and overall effectiveness of these plans during the field season.



3.1 URANIUM EXPLORATION PLAN

The Uranium Exploration Plan is designed to meet the requirements of the Water Licence issued by the Nunavut Water Board (2BE-KIG1318) and the *Mineral Exploration Guidelines of Saskatchewan*, also referred to as Best Management Practices (BMPs). Although current activities are not regulated by the Canadian Nuclear Safety Commission (CNSC), the Uranium Exploration Plan is designed in accordance with the CNSC Regulations. The Plan discusses activities related to uranium exploration including:

- Training requirements
- Drilling practices
- Core storage and logging
- Radioisotopes
- Spills
- Shipping radioactive material
- Site abandonment and restoration

Drill core samples (low specific activity) were shipped on September 10, 2013 via air from Kiggavik to Thompson, Manitoba. The core samples were then transported by truck to the Saskatchewan Research Council (SRC) located in Saskatoon, Saskatchewan. The Shipper's Declaration for Dangerous Goods were completed by appropriately trained AREVA staff.

3.2 WASTE MANAGEMENT PLAN

In accordance with AREVA's Environmental Policy, a Waste Management Plan was developed to guide waste segregation, storage, and disposal while mitigating any potential adverse environmental impacts. AREVA is committed to ensuring waste generated at the Kiggavik Project site is collected, stored, transported and disposed of in accordance with regulatory requirements. The Waste Management Plan is reviewed and revised upon the identification of new waste streams, new handling methods or requirements and improved logistics.

In the development of this Plan, potential waste streams were identified, followed by identification of a treatment strategy and disposal plan. All site staff and contractors are trained in the aspects required to effectively adhere to the Plan (i.e. proper identification of waste, proper storage methods, proper handling and transport methods).

All drill cuttings with a uranium concentration greater than 0.05 percent are collected and stored in the radioactive storage compound (See Photograph 3.2-1) for future handling. Food, paper



and non-treated wood waste are incinerated in an approved incinerator shown in Photograph 3.2-2.



Photograph 3.2-1 Kiggavik Radioactive Storage Compound



Photograph 3.2-2 Kiggavik Camp Incinerator

As required, an inventory of all waste and material remaining on site was recorded upon seasonal shutdown and is summarized in Table 3.2-1.



Table 3.2-1 Kiggavik Site End of Season Inventory 2013

Type of Waste/Product	Quantity	Storage Method		
		Stored in secondary containment at site		
Waste oil and fuel	12 - 205 L bung drums	inside a sea container to be transported to		
		Baker Lake over the winter road in 2014		
		Drums are stored inside sea container to be		
Incinerator Ashes	5 – 205 L ring top drums	transported to Baker Lake over the winter		
		road in 2014		
	6 – 205 L drums	Stored outside in secondary containment at		
Diesel Fuel	5 – 379 L double walled slip tanks	site		
Caren reatal and saven drilling		Loaded inside two sea containers at site to		
Scrap metal and scrap drilling	Approximately 10,000 pounds	be transported to Baker Lake over the winter		
supplies (rubber hose)		road in 2014		
		60,000 pounds loaded on a trailer, 20,000		
Scrap drill rods	Approximately 80,000 pounds	pounds stacked on ground. Plans are to		
Scrap unii rous	Approximately 60,000 pounds	transport back to Baker Lake over the winter		
		road in 2014		
		Stored inside a sea container to be		
Engine filters Oil and Fuel	24 – 205 L ring top drum	transported to Baker Lake over the winter		
		road in 2014		
		Stored inside a sea container at site to be		
Oil cans Empty	1 – 205 L ring top drum	transported to Baker Lake over the winter		
		road in 2014		
		Stored inside a sea container to be		
Oil contaminated rags	4 – plastic lined rock bags	transported to Baker Lake over the winter		
		road in 2014		
Empty/used paint cans	1 – 205 L ring top drum	Stored inside wooden storage building.		
Empty/dood paint dans	200 E mig top dram	Upright in mini berm with top secured		
Small Generator and small	0.41.	In secondary containment in generator		
engine Oil	6 – 1 L jugs	building		
		Stored in the Enviro-tanks at fuel cache for		
Jet Fuel	8000 L	2014 use.		
D: 15 :	18500 L plus 20 - 379 L double	Stored in the Enviro-tanks at fuel cache for		
Diesel Fuel	walled slip tanks	2014 use.		
Concline	2 201 plastic icom com	Stored inside wooden storage building at		
Gasoline	3 – 20 L plastic jerry cans	site in mini berm		
Propane	30 – 100 lb bottle	Upright in a locked fence compound		



Type of Waste/Product	Quantity	Storage Method
Aerosol cans – empty and punctured	1 – 205 L ring top drum	Stored inside wooden storage building. Upright in mini berm with top secured
Empty Plastic 20 L pails and various size other empty plastic bottles in bags		Inside sea container to be hauled into Baker Lake over the winter road 2014
Boart Longyear Supplies	Left @ Camp Fall 2013 6 pails -Hydrex MV-36 10 cases - Motor oil 15-40 x 16L 8 cases - 2 cycle oil x 12L 3 - Linseed Soap 5 gallon pails 1 -Natural blue 5 gallon pail 1 case - Orange spray paint 1 case - Black Spray Paint 1 case - White spray paint	In sea-can storage container for use in 2014
Boart Longyear Supplies	Shipped up for 2014 30 pails - Hydrex MV-36 40 cases -15-40 Motor oil x 16L 10 cases - 2 cycle oil x 12L 8 cases - Kleen flow fuel x 12L 30 - Linseed Soap 5 gallon pails 12 - Natural blue 5 gallon pails 3 cases - Orange spray paint 1 case - Black spray paint 2 cases - Red spray paint 3 cases - White spray paint	In sea-can storage container in Baker Lake for use in 2014. To be transported to site during winter haul.
AREVA Supplies	Shipped up for 2014 12 – 20 litre pails 15/40 generator motor oil	In Sea container in Baker Lake for use in 2014. To be transported to site during winter haul.

3.2.1 Canada Wide Standards

Efforts are being made to meet the Canada-wide Standard (CWS) for Dioxins and Furans and the Canada-wide Standard for Mercury Emissions. These include the development and implementation of a Waste Management Plan involving waste inventory, diversion and sorting prior to incineration. Authorized materials are incinerated which include food waste, paper, untreated wood products and toilet wastes. Remaining wastes are sorted and stored in sea



containers on site until they are removed via the winter haul to be shipped to a licensed disposal facility.

3.3 WATER CONSUMPTION AND MANAGEMENT

Water consumption and management was compliant with the conditions of the Nunavut Water Board Licence No. 2BE-KIG1318. As outlined in the conditions of the licence, the domestic camp water is limited to 10 cubic metres per day (m³/day), and the drill water is limited to 289 m³/day for a total maximum consumption of 299 m³/day. Drilling during low flow artesians was compliant with Part F, Item 6 of the Licence and is further described in Section 3.3.2.

3.3.1 Camp and Drill Water Use

Domestic camp water was drawn from the local unnamed lake for hygienic use, and water sources proximal to drilling activities were used to support drilling. The locations and use of these water sources are listed below in Table 3.3-1 below.

Table 3.3-1 Water Source Coordinates

Location Name	Use	Coord	linates
Location Name	Use	Lat/Long	UTM
Comp	Emergency water	64º 26' 31.78" N	14W 7146969N
Camp	source (i.e. Firefighting)	97º 39' 30.83" W	564570E
Unnamed Lake	Hygionia water course	64° 26′ 36.93″ N	14W 7147123N
Ullianieu Lake	Hygienic water source	97° 39' 49.51" W	564317E
		64° 25′ 37.56″ N	14W 7145240N
Dona North	Drill water	97° 42′ 34.99″ W	562142E
Bong North	Dilli water	64º 25' 50.85" N	14W 7145645N
		97º 42' 57.77" W	561829E
		64º 25' 16.66" N	14W 7144587N
Dona	Drill water	97° 42' 57.05" W	561860E
Bong		64º 25' 16.20" N	14W 7144573N
		97° 42′ 56.03″ W	561874E
End North	Drill water	64º 21' 7.67" N	14W 7136713N
Ena North	Dilli Water	97° 54′ 2.85″ W	553085E
End Grid	Drill water	64º 20' 36.56" N	14W 7135840N
Elia Glia	Dilli Water	97° 52′ 4.69″ W	554686E
		64º 19' 31.84" N	14W 7133735N
Iona Drow	Drill water	97º 54' 54.56" W	552442E
Jane-Drew	Drill water	64º 19' 29.52" N	14W 7133671N
		97° 54' 21.43" W	552888E



Location Name	Use	Coordinates				
Location Name	USE	Lat/Long	UTM			
		64° 19' 34.62" N 97° 54' 59.66" W	14W 7133820N 552372E			
Kiggavik East	Drill water	64° 27' 3.13" N 97° 36' 0.32" W	14W 7148000N 567363E			
Kiggavik North	Drill water	64° 27' 9.39" N 97° 38' 59.81" W	14W 7148142N 564960E			
Kiggavik South- west	Drill water	64º 26' 6.25" N 97º 40' 13.14" W	14W 7146167N 564021E			
Pizza Grid	Drill water	64° 20' 38.96" N 97° 56' 2.79" W	14W 7135797N 551491E			

Domestic camp water was pumped from the unnamed lake into holding tanks with marked volumes. These tanks were filled daily, and a water meter measured the cumulative amount of water used. The water meter values were recorded and calculated to ensure the daily allowance was not exceeded. The daily domestic water use limit of 10 m³ was not exceeded at any time during season. The maximum amount of water use recorded was 6.43 m³ during the initial fill and 6.42 m³ on July 16 when the tanks were cleaned.

The drilling contractor, Boart Longyear, used water pumps at each drill capable of pumping a maximum of 15 GPM (0.05678 m³/min or 81.76 m³/day), but the pumps did not operate at this rate consistently throughout the season. In the event all three pumps ran for 24 hours at the maximum rate, the volume of water pumped to the drills would be 245.29 m³ per day, which falls below the permitted limit of 289 m³ per day. Flow meters were installed within the drills to determine the water quantities used, however there was degree of error depending on the person recording the values. The flow meter seasonal average was 6 m³/day for three drill rigs, which indicates that water used during the drilling process was significantly lower than the estimated quantity pumped from the lakes using the maximum pumping capacity. The values presented below represent the conservative estimate where the maximum pumping capacity of 81.76 m³/day was assumed. The daily water usage from the 2013 field season is summarized in Table 3.3-2 below.

Table 3.3-2 Water Use 2013 Season

Month	Date	Total camp (m³)	Drill 1 (m³)	Drill 2 (m³)	Drill 3 (m³)	Total
luna	14	6.43	0	0	0	6.43
June	15	2.87	0	0	0	2.87



Month	Date	Total camp (m³)	Drill 1 (m³)	Drill 2 (m³)	Drill 3 (m³)	Total
	16	2.31	0	0	0	2.31
	17	1.99	0	0	0	1.99
	18	2.89	0	0	0	2.89
	19	3.47	0	0	81.76	85.23
	20 2.53 21 2.94		0	0	81.76	84.29
	21	2.94	0	0	81.76	84.70
	22	3.44	0	0	81.76	85.20
	23	3.38	0	81.76	81.76	166.90
	24	3.38	0	81.76	40.88	126.02
	25	3.48	0	81.76	81.76	167.00
	26	3.4	0	81.76	81.76	166.92
	27	3.52	81.76	81.76	81.76	248.80
	28	3.05	81.76	81.76	40.88	207.45
	29	3.77	81.76	81.76	81.76	249.05
	30	2.4	81.76	81.76	81.76	247.68
	1	4.54	81.76	0	40.88	127.18
	2	2.59	81.76	81.76	0	166.11
	3	4.35	81.76	81.76	0	167.87
	4	3.56	81.76	81.76	0	167.08
	5	3.52	40.88 [†]	40.88	81.76	126.16
	6	3.11	81.76	81.76	81.76	248.39
	7	4.61	81.76	81.76	81.76	249.89
	8	4.12	81.76	81.76	81.76	249.40
	9	3.31	81.76	81.76	40.88	207.71
	10	2.83	81.76	81.76	81.76	248.11
lists	11	2.63	40.88	81.76	81.76	207.03
July	12	4.13	81.76	81.76	40.88	208.53
	13	3.46	81.76	40.88	81.76	207.86
	14	3.98	81.76	81.76	81.76	249.26
	15	0	81.76	81.76	81.76	245.28
	16	6.42	40.88	81.76	40.88	169.94
	17	3.83	81.76	81.76	81.76	249.11
	18	2.89	81.76	40.88	81.76	207.29
	19	3.21	81.76	81.76	40.88	207.61
	20	3.12	81.76	40.88	81.76	207.52
	21	3.39	40.88	81.76	81.76	207.79
	22	3.92	81.76	81.76	81.76	249.20



Month	Date	Total camp (m³)	Drill 1 (m³)	Drill 2 (m³)	Drill 3 (m³)	Total
	23	2.67	81.76	81.76	40.88	207.07
	24	3.45	81.76	81.76	81.76	248.73
	25	3.56	81.76	40.88	81.76	207.96
	26	2.42	81.76	81.76	81.76	247.70
	27	2.57	81.76	40.88	40.88	166.09
	28	3.43	81.76	81.76	81.76	248.71
	29	3.6	40.88	81.76	81.76	208.00
	30	3.36	81.76	81.76	81.76	248.64
	31	4.22	81.76	81.76	81.76	249.50
	1	3.49	81.76	81.76	81.76	248.77
	2	3.28	81.76	81.76	40.88	207.68
	3	3.76	40.88	81.76	81.76	208.16
	4	3.67	81.76	81.76	81.76	248.95
	5	3.79	81.76	40.88	81.76	208.19
	6	3.8	81.76	81.76	40.88	208.20
	7	3.75	81.76	81.76	81.76	249.03
	8	3.45	81.76	81.76	81.76	248.73
	9	3.82	40.88	81.76	81.76	208.22
	10	3.46	81.76	81.76	40.88	207.86
	11	3.65	81.76	81.76	81.76	248.93
	12	4.31	81.76	81.76	81.76	249.59
	13	3.05	81.76	81.76	81.76	248.33
A	14	3.06	81.76 81.76		40.88	207.46
August	15	2.74	81.76	81.76	81.76	248.02
	16	2.65	81.76	81.76	81.76	247.93
	17	2.75	40.88	40.88	81.76	166.27
	18	3.27	81.76	81.76	81.76	248.55
	19	3.27	81.76	81.76	40.88	207.67
	20	2.77	40.88	81.76	0	125.41
	21	3.25	81.76	81.76	81.76	248.53
	22	3.9	81.76	81.76	81.76	249.18
	23	3.17	81.76	81.76	40.88	207.57
	24	3.27	40.88	81.76	81.76	207.67
	25	3.42	81.76	81.76	81.76	248.70
	26	3.29	81.76	81.76	81.76	248.57
	27	3.1	81.76	81.76	81.76	248.38
	28	2.8	81.76	81.76	40.88	207.20



Month	Date	Date Total camp (m³) Drill 1 (m³) Drill 2 (m³)		Drill 2 (m³)	Drill 3 (m³)	Total
	29 2.97 30 6.29		40.88	40.88	81.76	166.49
			-	1	81.76	88.05
	31	1.77	-	-	81.76	83.53
September	1	3.43	-	-	40.88	44.31

[†] Lesser values were calculated based on the estimated hours necessary during drill moves and subsequent pump shutdown

3.3.2 Artesians

As per the NWB Licence, Part F, Item 6 (c), AREVA must provide information on all artesian flows encountered, with GPS coordinates, dates, and flow rates, depth, permafrost, aquifer and Packer testing data and associated water quality analytical results. As mentioned previously, pneumatic packer testing and thermistor installation is specific to mine development and are not standard practices for exploration drilling. The definitive permafrost depths were unknown for the artesians discussed below. Should there be packer testing data available or thermistors installed in the future, AREVA will provide the associated data when artesians are encountered.

While drilling in the Bong area, four artesian flows were intercepted. Water samples were taken directly from the artesian flows, and the corresponding water analysis results are shown in Table 3.3-4. As per the amended NWB licence, please find the relevant artesian information in Table 3.3-3. Upon completion, each drill hole was permanently sealed and capped to prevent further outflow.

Table 3.3-3 Artesian Location, Date, Flow and Depth

	Coordin	ates	_	Flow Rate	Depth
	Lat/Long	UTM	- Date	(L/min)	(m)
				27	291
Dana 061	64º 24' 57.89" N	14W 7144013N	luna 20, 2042	13	294
Bong-061	97º 42' 31.40" W	562215E	June 29, 2013	48	317
				40	372
Bong-062	64º 24' 59.46" N 97º 42' 30.28" W	14 W 7144062N 562229E	July 6, 2013	40	282
BN-04	64º 26' 1.84" N 97º 43' 12.66" W	14 W 7145981N 561623E	August 17, 2013	*	405
BN-05	64° 25' 43.19" N 97° 42' 49.98" W	14 W 7145410N 561938E	August 24, 2013	5	333

^{*}The artesian was encountered while pulling out the rods before sealing and capping. No flow rate was recorded.



Table 3.3-4 Artesian Water Results

Analyte	Units	Bong-061	Bong-062	BN-04	BN-05	CCME*
Bicarbonate	mg/L	117	65	72	34	
Carbonate	mg/L	<1	<1	<1	<1	
Chloride	mg/L	263	98	36300	4240	
Hydroxide	mg/L	<1	<1	<1	<1	
P. alkalinity	mg/L	<1	<1	<1	<1	
рН	pH units	7.21	8.19	8.19	7.21	6.5-9
Specific conductivity	uS/cm	1020	356	79800	11500	
Sum of Ions	mg/L	575	239	55200	6680	
Total alkalinity	mg/L	96	53	59	28	
Total hardness	mg/L	358	136	44100	5570	
Nitrate (calc. from NO ₂ +NO ₃ -N)	mg/L	<0.04	<0.04	<0.04	<0.04	13
Nitrite+Nitrate nitrogen	mg/L		<0.01	<0.01	<0.01	
Mercury	ug/L	0.02	<0.02	0.03	<0.02	0.026
Fluoride	mg/L	0.15	0.18	0.04	0.05	
Total dissolved solids	mg/L	1210	247	58600	9080	
Total suspended solids	mg/L	601	1390	430	245	
Calcium	mg/L	84	28	17600	2230	
Magnesium	mg/L	36	16	60	2.3	
Potassium	mg/L	8	16	740	117	
Sodium	mg/L	66	14	450	55	
Sulfate	mg/L	1.2	1.7	30	2.6	
Aluminum	mg/L	5.3	63	0.52	0.11	0.005 (pH <6.5) 0.1 (pH >6.5)
Antimony	mg/L	0.0008	0.06	0.0004	<0.002	
Arsenic	ug/L	3.4	20	13	<1	5
Barium	mg/L	1.09	0.58	0.46	0.11	
Beryllium	mg/L	0.0004	<0.01	<0.0001	<0.001	
Boron	mg/L	0.10	<1	3.0	0.6	29 Short-term 1.5 Long-term
Cadmium	mg/L	0.00008	<0.001	0.00018	<0.0001	0.000005
Chromium	mg/L	0.046	0.17	0.0058	<0.005	
Cobalt	mg/L	0.027	0.07	0.0011	<0.001	
Copper	mg/L	0.14	0.6	0.0090	0.013	0.002
Iron	mg/L	7.8	130	3.13	4.2	0.3
Lead	mg/L	0.19	0.04	0.0030	0.058	0.001
Lithium	ug/L	33	90	14700	1800	
Manganese	mg/L	0.36	1.8	0.081	0.047	
Molybdenum	mg/L	0.011	0.03	0.017	<0.001	0.073
Nickel	mg/L	0.023	0.19	0.0079	0.002	0.025
Selenium	mg/L	<0.0001	<0.01	0.0010	<0.001	0.001
Silver	mg/L	0.0017	0.024	0.00029	<0.0005	0.0001



Analyte	Units	Bong-061	Bong-062	BN-04	BN-05	CCME*
Strontium	mg/L	6.8	0.52	302	38.2	
Thallium	mg/L	<0.0002	<0.02	0.0004	<0.002	0.0008
Tin	mg/L	0.0002	0.02	0.0003	<0.001	
Titanium	mg/L	0.017	0.16	0.0057	<0.002	
Uranium	ug/L	3.9	<10	4.1	<1	33 Short-term 15 Long-term
Vanadium	mg/L	0.0055	0.14	0.0016	<0.001	
Zinc	mg/L	0.11	<0.5	0.0098	0.037	0.03

^{*} Canadian Council Ministers of Environment. Canadian Water Quality Guidelines for the Protection of Aquatic Life. 1999.

3.4 SPILL CONTINGENCY PLAN

In accordance with existing legislation and requirements, AREVA maintains a Spill Contingency Plan for the Kiggavik Project. The objectives of the Spill Contingency Plan are to:

- Identify the potential for and the appropriate response to spills at the Project
- Provide procedures for prevention or mitigate adverse environmental effects through effective and efficient response
- Identify personnel and their responsibilities
- Identify emergency contacts
- Describe reporting requirements

To implement the Plan effectively, all site staff and contractors receive orientation on the location of the Material Safety Data Sheets (MSDS), spill kit locations, and spill response supplies and tools. Personnel are trained to identify the probable location of potential leaks and spills and the response should leaks or spills be identified. Additional training for mock spill scenarios is provided as necessary.

Spill prevention is implemented through use of secondary containment, availability of spill kits where hazards exist, conducting inspections at all storage locations, and providing MSDS sheets. Spill response is reviewed with all site personnel, and the site supervisors or designates are aware of spill reporting procedures.

3.4.1 Fuel Cache

The primary fuel storage location is at the Kiggavik fuel cache which consists of eight 50,000 L double walled steel Envirotanks. The Envirotanks are registered with Environment Canada, and were originally installed in 2008 and 2009 by an approved installer and in accordance with Canadian Council for Ministers of the Environment (CCME) – *Environmental Code of Practice*



for Aboveground and Underground Storage Tank Systems Containing Petroleum and Allied Petroleum Products. Three Envirotanks are used for jet fuel and five for diesel fuel. Photograph 3.4-1 shows an aerial photo of the Kiggavik fuel cache.



Photograph 3.4-1 Kiggavik Fuel Cache

A small number of 205 L diesel fuel drums are used to fuel the camp stove and incinerator, and are stored within secondary containment berms. Five double walled slip tanks containing diesel are used to fuel the camp generator. All fuel containers are labeled, identifying the contents and AREVA's name. Two primary fuel cache locations were utilized in 2013:

Fuel cache at esker:

64° 25' 37.98" N, 97° 43' 22.07" W (14W 561512, 7145240)

Fuel cache at Kiggavik camp:

64° 26' 25.82" N, 97° 39' 39.05" W (14W 564464, 7146782)

3.4.2 Hydraulic Oil Releases

Two separate incidents occurred where hydraulic oil was released, however the hydraulic oil was not near or in surrounding water bodies. Although the quantities released were less than those identified in Schedule B of the Nunavut *Spill Contingency Planning and Reporting Regulations*, a summary of the incidents have been provided below. Both incidents were responded to and cleaned up in accordance with the *Spill Contingency Plan*.

On July 11, a hydraulic hose was improperly disconnected from the drill head while dismantling the drill setup at END-13-02 (14W 7136202N 554649E). This resulted in approximately 30 litres



of hydraulic oil being released to the ground. The oil was immediately contained with absorbent socks (See Photograph 3.4-2) and cleaned up with absorbent matting (See Photograph 3.4-3).



Photograph 3.4-2 Hydraulic Oil END-13-02 - July 11, 2013



Photograph 3.4-3 Hydraulic Oil END-13-02 - Post Cleanup July 13, 2013

On August 27, a high pressure hydraulic hose leaked approximately 60 litres (L) at the drill hole BN-05 (14W 7145410N 561938E). The night shift driller noticed problems with hydraulic pressure near the end of his shift, and upon shift change the mechanic noticed the hydraulic fluid was low. While checking the drill further, it was discovered that a high pressure hose, operating at 3500 PSI, was leaking through a crack and the hydraulic fluid was spilling on to the floor boards of the drill. The oil was immediately cleaned up, and a final cleanup occurred on September 4 after the drill was moved off the setup.





Photograph 3.4-4 Hydraulic Oil BN-05 - August 27, 2013



Photograph 3.4-5 Hydraulic Oil BN-05 - Post Cleanup September 4, 2013



3.5 NOISE ABATEMENT PLAN

A Noise Abatement Plan was developed to mitigate the effects from noise generated during camp set-up, camp operation, winter road use, and drilling activities. Noise controls and abatement serve a combination of environmental and occupational health and safety purposes. The focus of the Plan is the control of environmental noise for the protection of wildlife.

Implementation of the Plan ensures that drill rigs and vehicles are equipped with mufflers and/or silencers and is subject to commitments made in the Wildlife Mitigation and Monitoring Plan regarding minimum flying altitudes required and the take-off and landing of aircraft.

The Plan is reviewed by all site staff, contractors, and head office contract administrators to ensure all contractors operating drill rigs, vehicles or aircraft are aware of the Noise Abatement Plan requirements. Frequent review allows for revision to occur with the expansion of infrastructure, changing field programs and the identification of improved practices.



3.6 WILDLIFE MITIGATION AND MONITORING PLAN

The Wildlife Mitigation and Monitoring Plan (WMMP) was developed to monitor and reduce disturbance to wildlife, particularly caribou. The Plan incorporated recommendations from the Government of Nunavut – Department of Environment (GN-DoE), Environment Canada (EC) and the Beverly and Qamanirjuaq Caribou Management Board (BQCMB); as well as conditions from the NIRB, Kivalliq Inuit Association (KIA), Aboriginal Affairs and Northern Development Canada (AANDC) and the Nunavut Water Board (NWB). The Plan is designed to protect wildlife from Project activities, increase the current understanding of wildlife interactions with human development and aid in determining the effectiveness of mitigation measures. Following the 2010 field season, the Plan underwent contractor, biologist, and AREVA review to further detail caribou mitigating actions and the responsibilities of the Independent Wildlife Monitor (Wildlife Monitor).

The WMMP was implemented during the 2013 field program to prevent or reduce any potential adverse effects from exploration activities on wildlife. The plan was implemented by Wildlife Monitors from the Baker Lake community, as well as AREVA staff. Wildlife monitoring was conducted during the season from June 15 to September 9, 2013. Wildlife observations and mitigation measures were summarized in monthly reports, and distributed to the Baker Lake Hunter and Trapper's Organization (HTO), the KIA, the Baker Lake Conservation Officer, and the GN-DoE Regional Biologist.

3.6.1 Summary of 2013 Monitoring Activities and Results

The AREVA staff and Wildlife Monitors provided detailed wildlife information throughout the field program. In addition to the Wildlife Monitor, Kiggavik personnel recorded wildlife observations through aerial observations from the helicopter, sightings around the Kiggavik camp, and the incidental sightings during field work. The observation details varied depending on the observer and method of recording. AREVA employees and contractors were encouraged to record wildlife observations on the wildlife logs available in the camp kitchen and office. Animals present regularly around camp such as the ptarmigan, siksik and arctic hare were often not recorded each day they were observed, thus being under recorded by this method. Wildlife observed during routine helicopter flights were noted by passengers in booklets located in each helicopter. These aerial helicopter sightings often occurred during routine flights to drill locations or Baker Lake, and accounted for a large number of the sightings.



Ground-based monitoring was primarily conducted by the Wildlife Monitor, however additional data was collected from incidental field observations by personnel. The Wildlife Monitors discussed sightings with the Safety, Health, Environment, and Quality (SHEQ) Supervisor, while the remainder of Kiggavik personnel recorded sightings which were collected weekly. The Wildlife Monitor regularly monitored wildlife activity from five height-of-land (HOL) locations around camp and occasionally visited the operating drill rigs. While caribou were observed in the area, the Wildlife Monitor was responsible for determining herd movements and proximity to activity. Occasionally the Wildlife Monitor was flown to elevated locations for ease of monitoring the herd movements.

The SHEQ Supervisor and designate recorded all observations in a spreadsheet for inclusion in the monthly reports. As shown in Table 3.6-1, there was a total of 18 species documented from 244 wildlife sightings.

Table 3.6-1 Summary of Wildlife Sightings, Kiggavik 2013

				Timeline of Sightings Observation M		Observation Method			
Species (common name)	Wildlife Sightings	Total Number Observed	Range of Individuals per Sighting	Initial	Final	Incidental (Field)	Aerial	Monitor	Camp
Arctic Fox	23	38	1 - 9	Jun-17	Aug-26	Х	Х		Х
Arctic Hare	12	15	1 - 4	Jun-16	Aug-20	Х	Х		Х
Birds (Various)*	4	6	1 - 3	Jun-17	Aug-25		Х		
Bald Eagle	3	3	1	July-21	Aug-14		Х		Х
Canadian Geese	5	44	2 - 30	Jun-22	Aug-31	X	X		X
Caribou**	61	10,392	1 – 8,500	Jun-16	Aug-25	Х	Χ	Х	Χ
Ducks	1	2	2	Jun-27	Jun-27	Х			
Grizzly Bear	1	1	1	Sept-5	Sept-5				X
Lemming	1	1	1	Jun-23	Jun-23	Х			
Loon	2	3	1 - 2	Aug-13	Aug-13	Х			
Muskox	96	1,228	1 - 100	Jun-19	Sept-2	Х	Χ	Х	Χ
Peregrine Falcon	1	1	1	Aug-15	Aug-15	Х			
Sandhill	9	27	1 - 6	Jun-26	Aug-25	Х	Χ	X	Χ



				Timeline of Sightings		Observation Method			
Species (common name)	Wildlife Sightings	Total Number Observed	Range of Individuals per Sighting	Initial	Final	Incidental (Field)	Aerial	Monitor	Camp
Cranes									
Savannah Sparrow	1	1	1	Aug-25	Aug-25				Х
Siksik (Ground Squirrel)	1	1	1	Aug-26	Aug-26				Х
Snow Geese***	9	2,200	100 – 2,000	Aug-16	Sept-1		Х		Х
Wolf	13	14	1 - 2	Jun-15	Aug-3	Х	Х	Х	Х
Wolverine	1	1	1	Jun-19	Jun-19	Х			
Total	244	13,978		-		-			

^{*}Ptarmigan were commonly seen throughout camp, but were not always recorded.

3.6.2 Summary of 2013 Wildlife Mitigation

Occasionally individual caribou are observed throughout the Kiggavik lease, and caribou herds are observed infrequently. Helicopter pilots abided by the flight restrictions identified in the WMMP, and avoided flights over caribou whenever possible. During a regular trip to Baker Lake at greater than 2000 feet (ft), the pilot informed the Kiggavik camp that caribou herds were observed between Baker Lake and Kiggavik. This communication, in combination with collar locations provided by the government, was adequate for confirming the potential for herds within the Kiggavik lease area. Caribou herds were observed intermittently from July 7 to July 13.

As required by the Nunavut Impact Review Board (NIRB) 2007 screening decision and the WMMP, activity will be suspended when concentrations of caribou are within two kilometres (km) of drill rigs during the months of June and July. Aircraft are also not permitted to take off or land within 1 km of a herd. Drilling was shut down on July 8 and July 10 when caribou approached within the two km range. On August 3, the Wildlife Monitor observed approximately 300 caribou within 1 km of the Kiggavik camp, thus causing the helicopters to remain grounded for 45 minutes. Drilling was also temporarily suspended until the Wildlife Monitor determined that the herd had moved beyond 2 km towards Aberdeen Lake.

As per the Aboriginal Affairs and Northern Development Canada (AANDC) Land Use Permit and the WMMP, when caribou cows calve outside the designated caribou protection areas

^{**}Caribou herds ranged from 60 to 8,500 animals throughout July.

^{***}There were thousands of snow geese near the end of August to the beginning of September.

A AREVA

operations will be suspended if cows and/or calves are present within ten km of operations between May 15 and July 15. Activities were suspended when caribou cows and/or calves were present within ten km of operations on July 7, July 8, and July 10. The Wildlife Monitor indicated to the Project Geologist and/or SHEQ Supervisor when the herds were sufficient distance to recommence drilling activities. Three herds were later observed on July 11, July 12, and July 13 which necessitated the temporary shutdown of drilling. The summary of mitigation activities and caribou migrations were provided with the monthly Wildlife Report.

One incident occurred on July 2 when a fox was killed by a drill helper. The intent was not to kill the fox; however, the helper used a wooden board to block repeated advances by the animal which subsequently killed the fox. Detailed reports were provided to both the KIA and the Baker Lake Conservation Officers. The Conservation Officers later determined that the fox was rabid.

As shown in Table 3.6-1 above, fourteen wolves were observed during the season. Although the sightings likely include duplicates of the same animal, there was an increase of wolf sightings over previous years. On two occasions wolves were a safety concern to field employees and they called the helicopter to deter the wolves away. Upon discussion with the Conservation Officer, it was advised that bear bangers be used as deterrence where possible. Training was later provided on the use of bear bangers for field employees, and the helicopter remained an option for support. There were no instances of physical interaction with wolves.

3.7 ABANDONMENT AND RESTORATION PLAN

An Abandonment and Restoration Plan has been developed to address conditions of permits, regulations and industry standards throughout the operational season, during seasonal shut-down and for final closure of the site. This Plan is frequently reviewed and revised to reflect the expansion of infrastructure, cost estimates, changing field programs and the identification of improved reclamation practices.

The objectives of the Plan are to:

- Protect human health
- Reduce or eliminate environmental effects
- Re-establish conditions which permit the land to return to a similar pre-exploration land use
- Establish physical and chemical stability of disturbed areas



3.7.1 Seasonal Shutdown

As required by the Abandonment and Restoration Plan, the following activities were conducted for the seasonal shutdown of the Kiggavik camp during the first week of September:

- All equipment stored in secure buildings or containers
- Plywood nailed over windows and doors have been secured to prevent inadvertent opening
- Pumps and hoses drained and dismantled
- Full inventory of chemicals, products and wastes remaining on site recorded
- Final inspection of all storage areas and secondary containment
- Removal of chemicals or storage in secure buildings
- Drill rigs dismantled and stored appropriately
- · Generator shut down and winterized
- Waterlines drained, flushed and winterized with antifreeze

All personnel vacated the site by September 9, 2013. Photograph 3.7-1 shows the Kiggavik camp during seasonal shutdown.



Photograph 3.7-1 Kiggavik Camp Seasonal Shutdown



3.7.2 Progressive Reclamation

AREVA intends to implement progressive restoration practices and incorporate new abandonment and/or reclamation methods and procedures, when applicable. The current Abandonment and Restoration Plan has been implemented at all drill sites to ensure site stability. During the field season, radiologically or chemically contaminated soil or cuttings are collected inside industrial bulk bags and stored in the radioactive storage compound for future handling, which may include transfer to an operating mine site. The gamma radiation 1 m from the boundary of the radioactive storage compound is reduced as much as practical to less than 1 μ Sv/h and in no instances exceeding 2.5 μ Sv/h.

3.7.2.1 Physical Reclamation

Challenges surrounding physical reclamation of disturbed surfaces include lack of local knowledge or available information. To minimize the affected footprint and therefore the amount of required physical reclamation there is a focused effort on proper planning of infrastructure placement and drill sites. Proper reclamation techniques are currently being investigated and will be implemented under the direction and approval of experienced consultants, community members and regulatory agencies. Following a meeting between AREVA representatives and available members of the Baker Lake Community, Land and Resources Committee (CLARC), the CLARC stated a preference that any re-vegetation occurs without seeding or fertilization interventions.

3.7.2.2 Chemical and Radiological Restoration

Drill sites are inspected for fuel stained soil and undergo a gamma survey for radioactive contamination. Gamma surveys are conducted prior to commencing drilling activities and following the completion of drilling. Should it be required, drill sites are remediated to the greatest extent possible to ensure the gamma dose rate 1 m above surface is less than 1 micro Sievert per hour (μ Sv/h) above background. Following remediation activities, another gamma survey would be conducted to ensure levels have been reduced to below 1 μ Sv/h above background.

As shown in Table 3.7-1, gamma surveys were conducted for each drill location. Readings with the Ludlum 2221 Scaler Ratemeter and Trimble GPS PRO-XRT were made at 1 second intervals at one meter above ground. As mentioned in the 2012 Annual Report, the pre gamma



survey was completed for drill hole END-12-03/04, however there was an error in collecting the post gamma survey data. The post gamma survey was completed in 2013, and the gamma survey dose rate was below 1 μ Sv/h. Following completion of the BN-03 post gamma survey, completed August 11, 2013, it was noted that the readings were above normal ranges. Due to absence of mineralization, this was determined to be an error. The area was resurveyed on September 4, 2013, however the area then appeared lower than normal background ranges. The area will be resurveyed during the 2014 field season and checks will be done on the gamma surveys which were completed between August 11 and September 4, 2013 to ensure accurate results were obtained. During the 2013 field season, all gamma survey dose rates were below 1 μ Sv/h as shown in Figure 3.7-1 to Figure 3.7-36.

Table 3.7-1 Gamma Surveys Dates for the 2013 Drill Holes

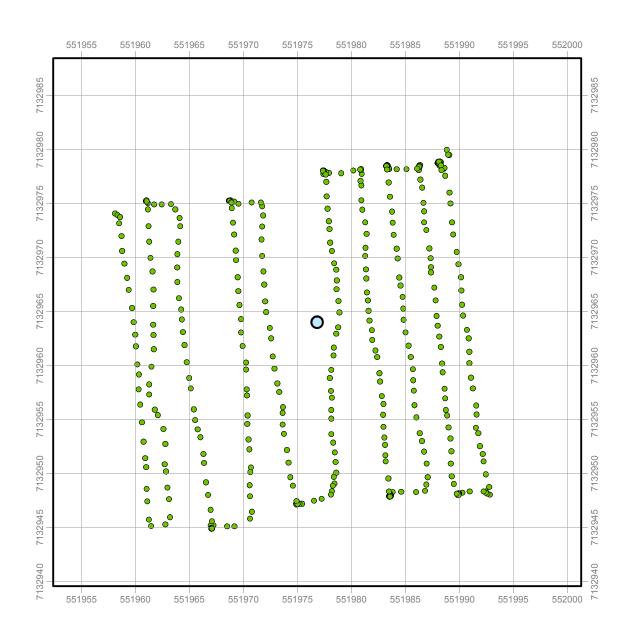
5 20 to 1	Pre Gamma	Post Gamma Date		
Drill Hole	Date			
BN-01	l 00 0040	August 11, 2013		
BN-01A	June 22, 2013			
BN-02	June 22, 2013	August 11, 2013		
BN-03	June 22, 2013	September 4*		
BN-04	June 22, 2013	September 1, 2013		
BN-05	August 11, 2013	September 1, 2013		
BONG-061	June 18, 2013	July 19, 2013		
BONG-062	June 18, 2013	July 19, 2013		
BONG-063	June 18, 2013	July 19, 2013		
EN-01	July 20, 2013	August 8, 2013		
EN-02	July 27, 2013	August 8, 2013		
EN-03	June 21, 2013	August 8, 2013		
EN-04	June 21, 2013	August 15, 2013		
END-13-01	1 40 0040	11.44.0040		
END-13-01A	June 16, 2013	July 14, 2013		
END-13-02	June 16, 2013	July 14, 2013		
END-13-03	August 2, 2013	August 15, 2013		
END-13-04	August 2, 2013	August 24, 2013		
JD-01	June 20, 2013	July 25, 2013		

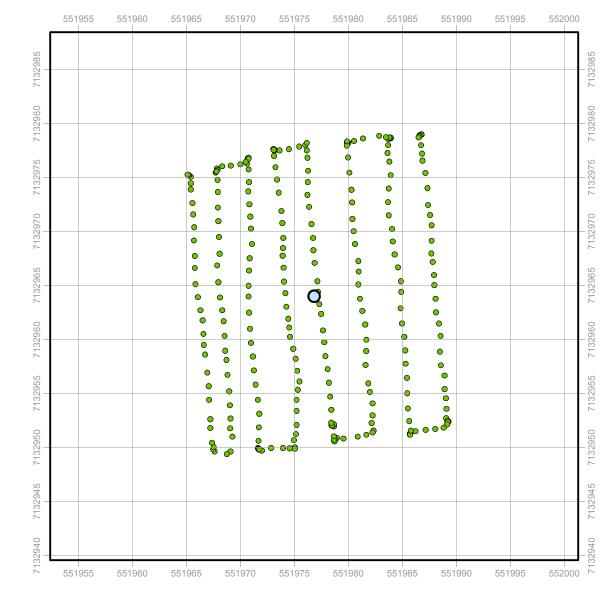


Drill Hole	Pre Gamma	Post Gamma		
Drill Hole	Date	Date		
JD-02	June 20, 2013	June 26, 2013		
JD-03	July 20, 2013	August 8, 2013		
JD-04	July 20, 2013	August 15, 2013		
KE-01	June 19, 2013	July 10, 2013		
KE-02	July 4, 2013	July 10, 2013		
KE-03	July 4, 2013	July 17, 2013		
KE-04	July 10, 2013	July 17, 2013		
KE-05		September 1, 2013		
KE-05A	August 4, 2013			
KE-06	August 4, 2013	September 1, 2013		
KN-01	June 15, 2013	July 5, 2013		
KN-02	June 24, 2013	July 5, 2013		
KN-03	June 28, 2013	July 5, 2013		
KN-04	August 4, 2013	August 21, 2013		
KN-05	August 20, 2013	August 25, 2013		
KSW-01	June 23, 2013	June 25, 2013		
KSW-02	July 19, 2013	July 25, 2013		
KSW-03	August 2, 2013	September 1, 2013		
PG-01	June 20, 2013	June 24, 2013		
PG-02	June 20, 2013	August 23, 2013		
END-12-03/04	June 30, 2012	June 16, 2013		

^{*}BN-03 will be resurveyed in 2014

- O Drill Hole
- 0.0 0.3 μSv
- O.3 0.6 μSv
- O.6 1.0 μSv
- 1.0 2.5 μSv
- > 2.5 μSv



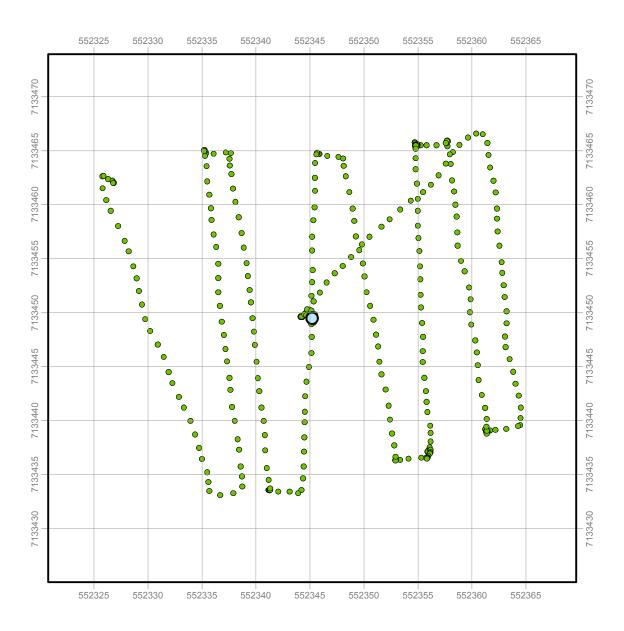


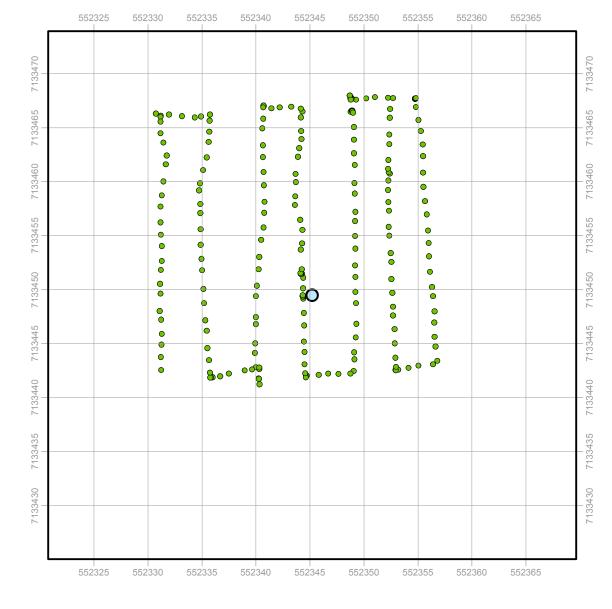
JD-01 Pre Gamma Survey

Point Count: 972 Min-Max: 0.046 - 0.084 μSv JD-01 Post Gamma Survey

Point Count: 590 Min-Max: 0.057 - 0.105 μSv

- O Drill Hole
- 0.0 0.3 μSv
- O.3 0.6 μSν
- O.6 1.0 μSv
- 1.0 2.5 μSv
- > 2.5 μSv





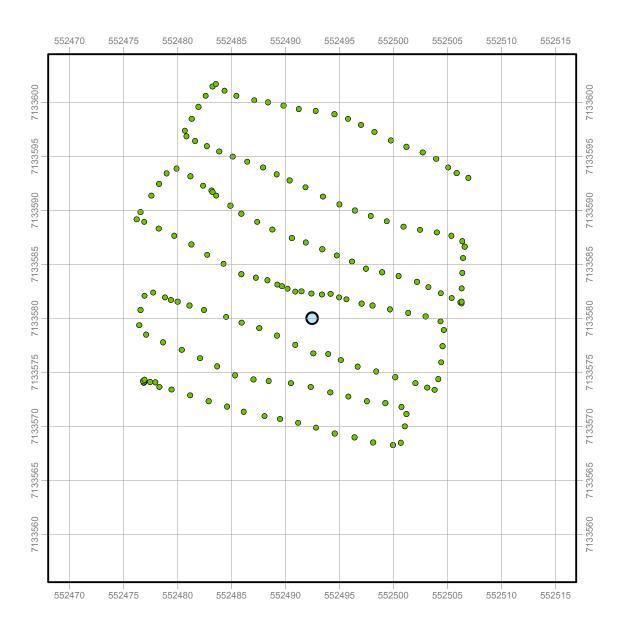
JD-02 **Pre Gamma Survey**

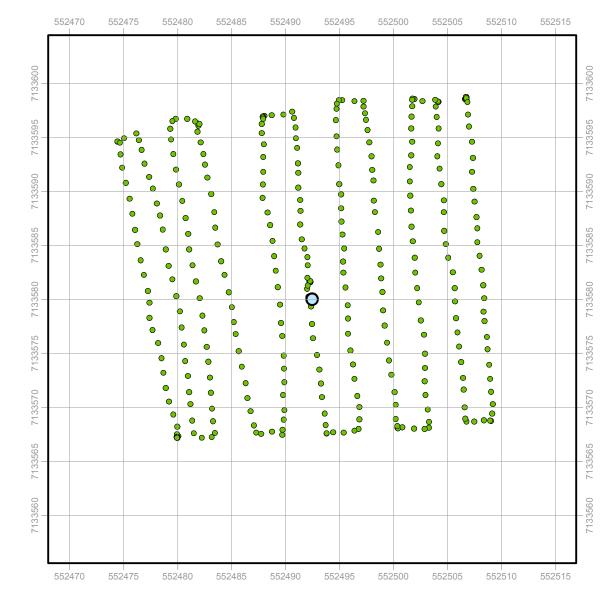
Point Count: 864 Min-Max: 0.051 - 0.089 μSv

JD-02 **Post Gamma Survey**

Point Count: 472 Min-Max: 0.058 - 0.130 μSv

- O Drill Hole
- 0.0 0.3 μSv
- O.3 0.6 μSν
- O.6 1.0 μSv
- 1.0 2.5 μSv
- > 2.5 μSv





JD-03 Pre Gamma Survey

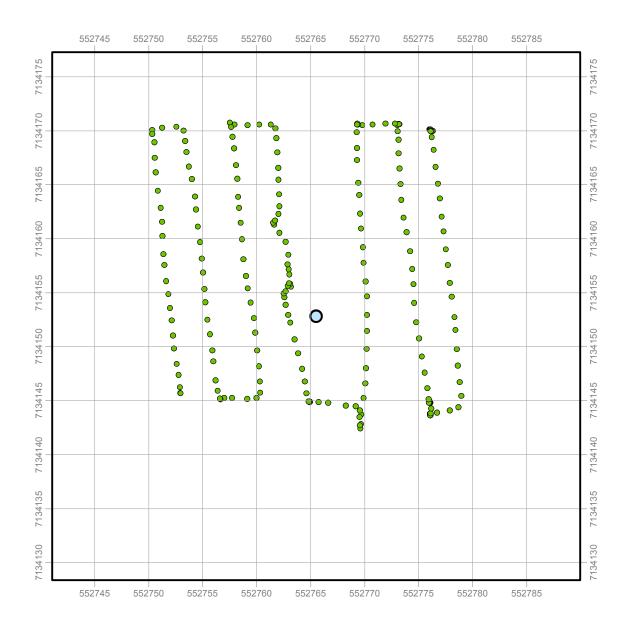
Point Count: 356 Min-Max: 0.040 - 0.080 μSv

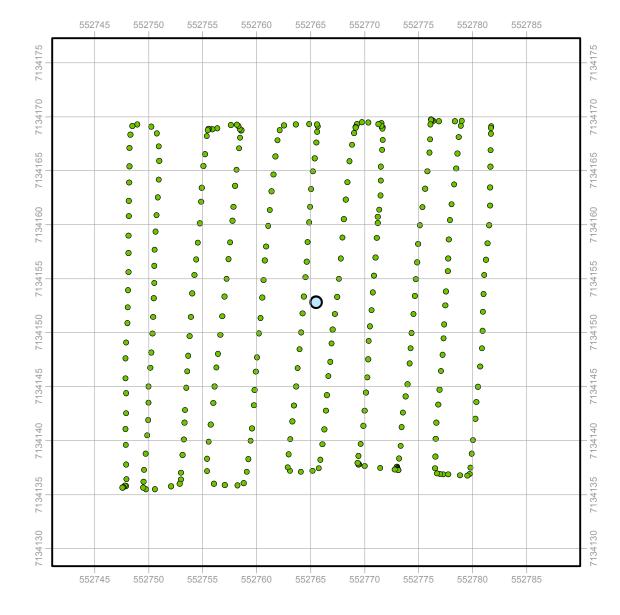
JD-03 **Post Gamma Survey**

Point Count: 784 Min-Max: 0.006 - 0.017 μSv



- O Drill Hole
- 0.0 0.3 μSv
- O.3 0.6 μSν
- 0.6 1.0 μSv
- 1.0 2.5 μSv
- > 2.5 μSv





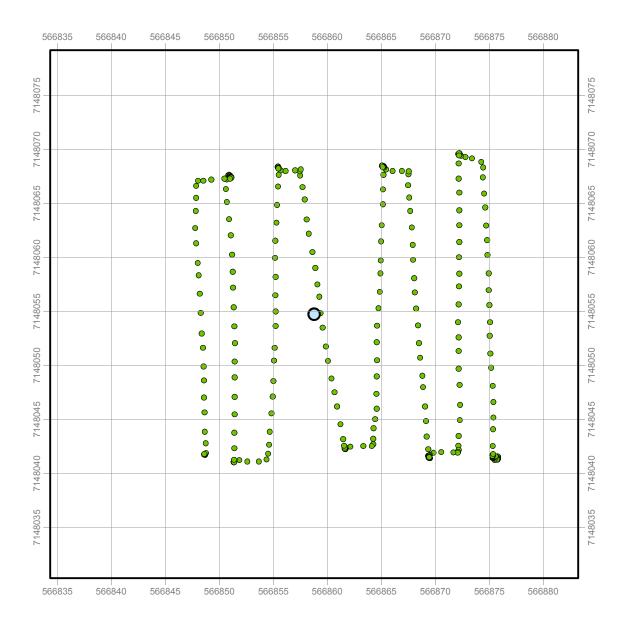
JD-04 Pre Gamma Survey

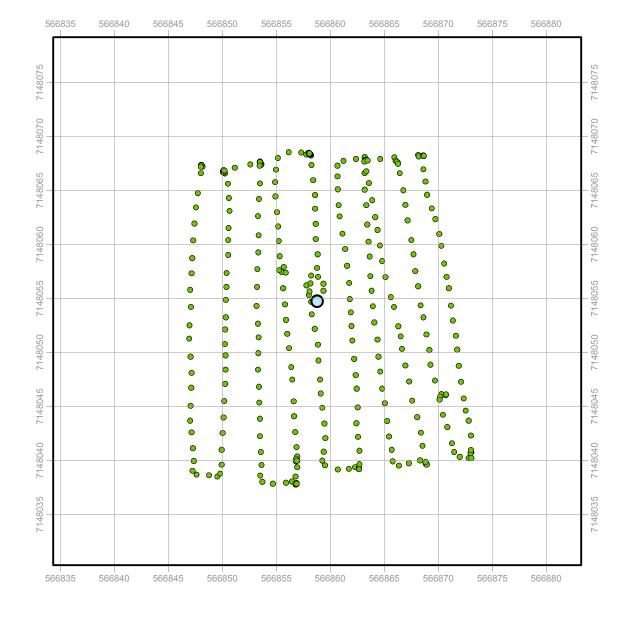
Point Count: 440 Min-Max: 0.044 - 0.081 μSv JD-04 Post Gamma Survey

Point Count: 626 Min-Max: 0.045 - 0.083 μSv



- O Drill Hole
- 0.0 0.3 μSv
- O.3 0.6 μSν
- 0.6 1.0 μSv
- 1.0 2.5 μSv
- > 2.5 μSv





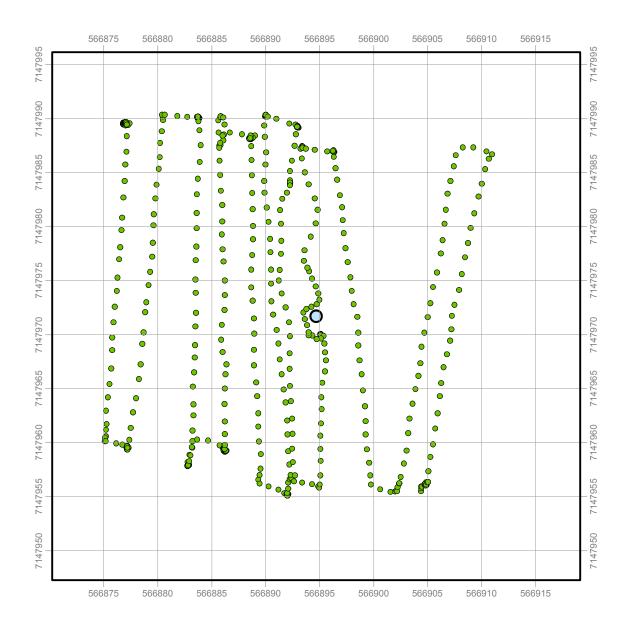
KE-01 Pre Gamma Survey

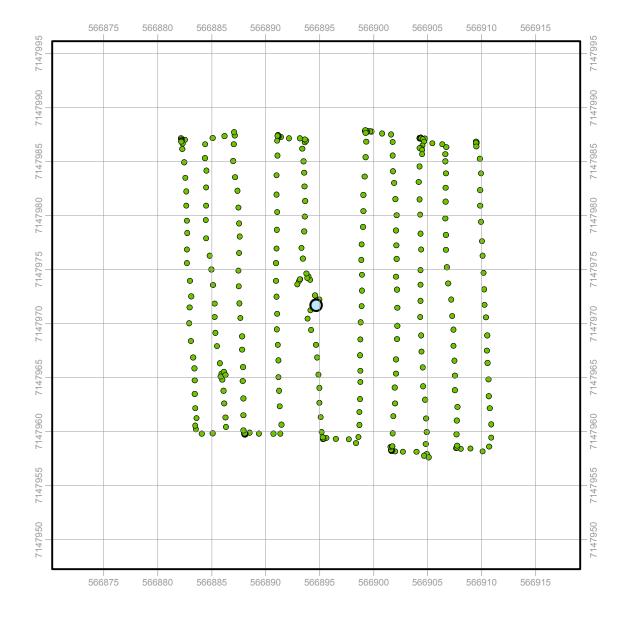
Point Count: 886 Min-Max: 0.051 - 0.078 μSv KE-01 Post Gamma Survey

Point Count: 740 Min-Max: 0.054 - 0.089 μSv



- O Drill Hole
- 0.0 0.3 μSv
- O.3 0.6 μSν
- O.6 1.0 μSv
- 1.0 2.5 μSv
- > 2.5 μSv





KE-02 Pre Gamma Survey

Point Count: 1334 Min-Max: 0.055 - 0.094 μSv KE-02 Post Gamma Survey

Point Count: 750 Min-Max: 0.056 - 0.094 μSv

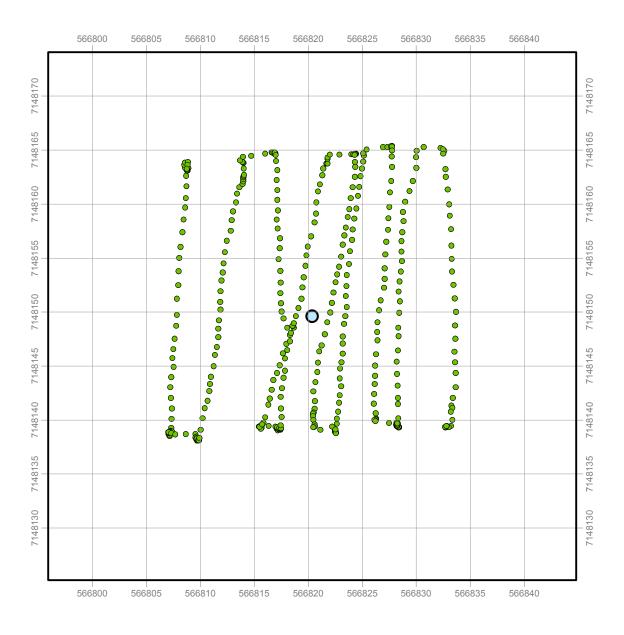
Projection: NAD 1983 UTM Zone 14N
Creator: C. Carter
Date: 01/01/2013 Scale: 5m x 5m Grid
File: KI08F094

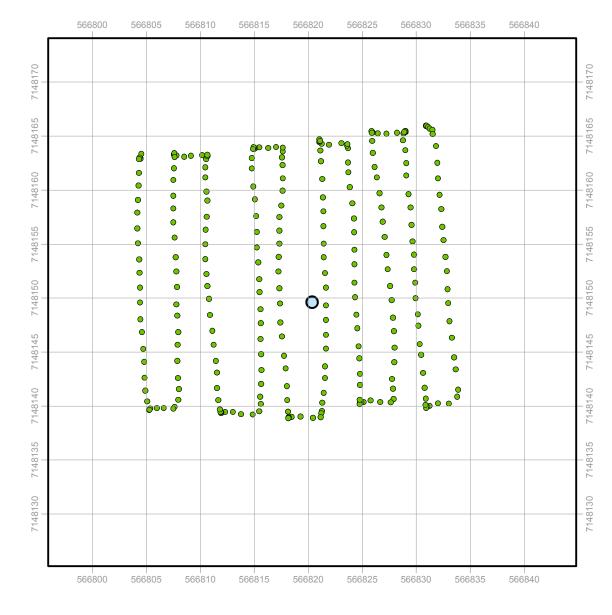
FIGURE 3.7-6
PRE AND POST GAMMA SURVEY
DRILL HOLE KE-02

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- O Drill Hole
- 0.0 0.3 μSv
- 0.3 0.6 μSv
- 0.6 1.0 μSv
- 1.0 2.5 μSv
- > 2.5 μSv





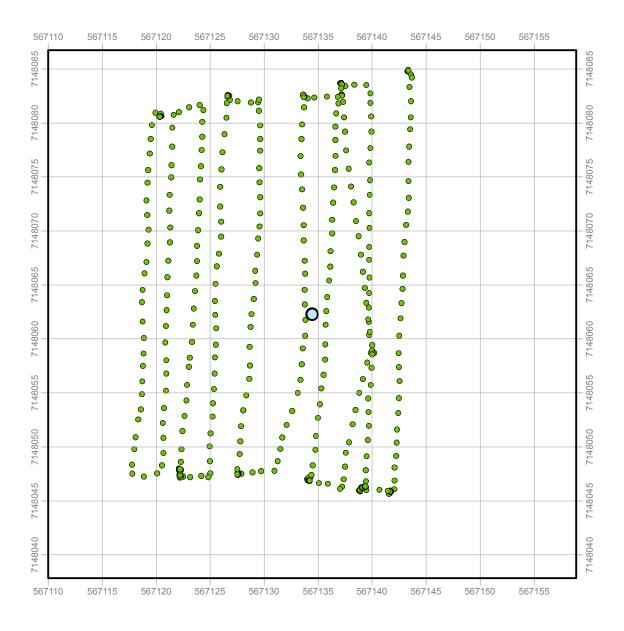
KE-03 Pre Gamma Survey

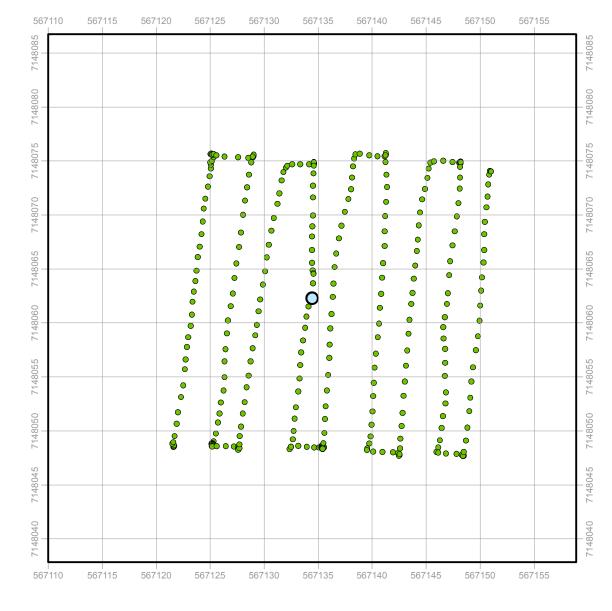
Point Count: 986 Min-Max: 0.060 - 0.107 μSv KE-03 Post Gamma Survey

Point Count: 576 Min-Max: 0.064 - 0.102 μSv



- O Drill Hole
- 0.0 0.3 μSv
- O.3 0.6 μSν
- O.6 1.0 μSv
- 1.0 2.5 μSv
- > 2.5 μSv





KE-04 Pre Gamma Survey

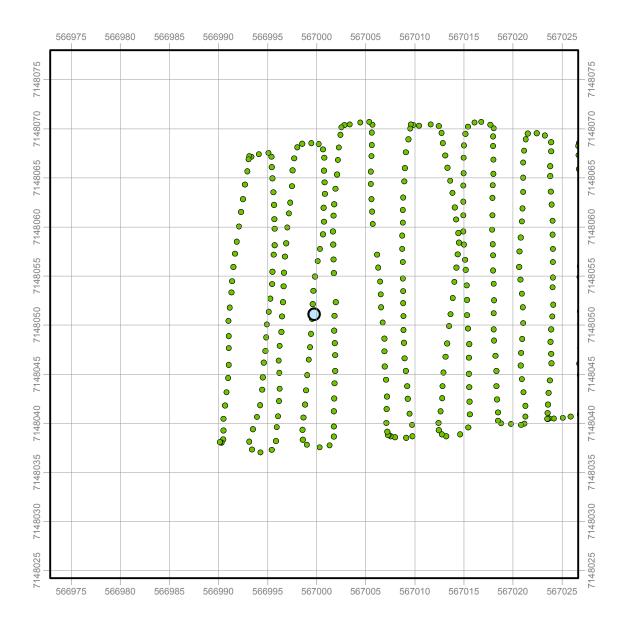
Point Count: 1032 Min-Max: 0.049 - 0.089 μSv

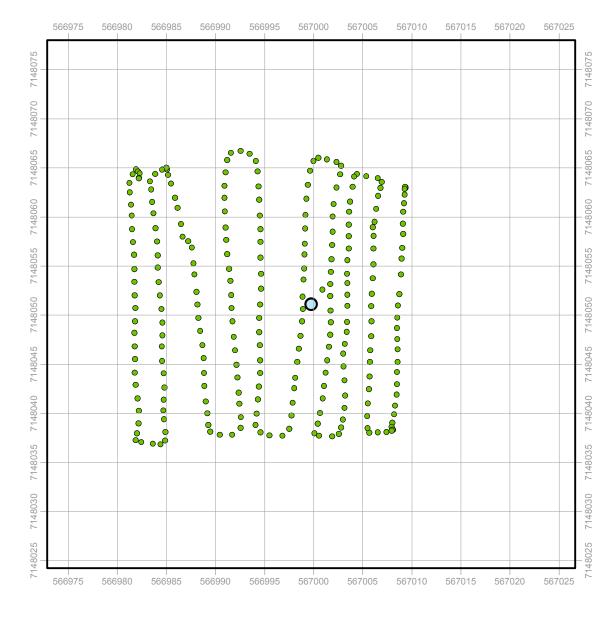
KE-04 **Post Gamma Survey**

Point Count: 576 Min-Max: 0.064 - 0.102 μSv



- O Drill Hole
- 0.0 0.3 μSv
- O.3 0.6 μSν
- 0.6 1.0 μSv
- 1.0 2.5 μSv
- > 2.5 μSv





KE-05A Pre Gamma Survey

Point Count: 696 Min-Max: 0.062 - 0.111 μSv KE-05A Post Gamma Survey

Point Count: 516 Min-Max: 0.057 - 0.091 μSv

Projection: NAD 1983 UTM Zone 14N
Creator: C. Carter
Date: 01/01/2013 Scale: 5m x 5m Grid

File: KI08F097

Data Sources: AREVA Resources Canad

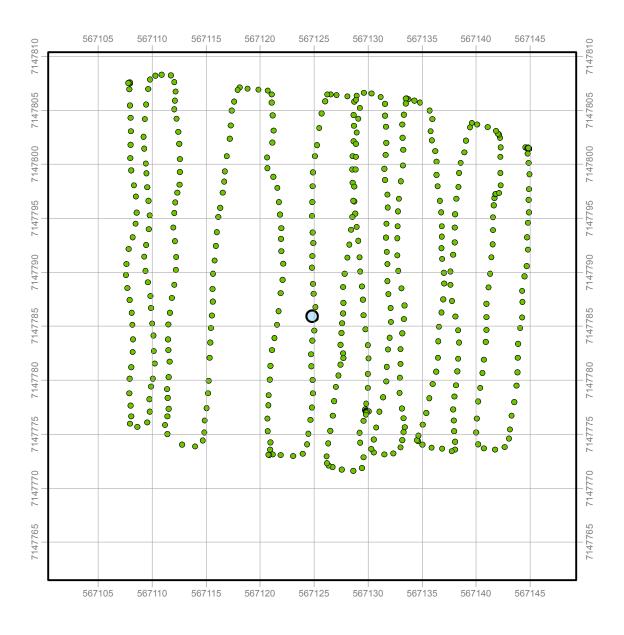
FIGURE 3.7-9
PRE AND POST GAMMA SURVEY
DRILL HOLE KE-05A

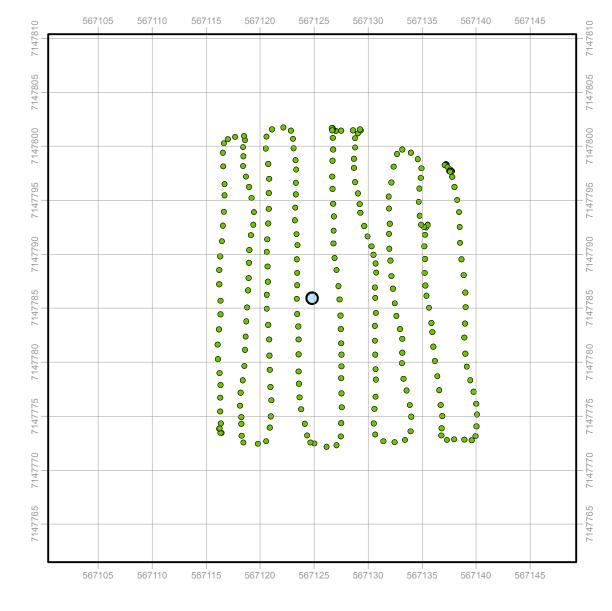
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- O Drill Hole
- 0.0 0.3 μSv
- O.3 0.6 μSν
- O.6 1.0 μSv
- 1.0 2.5 μSv
- > 2.5 μSv





KE-06 Pre Gamma Survey

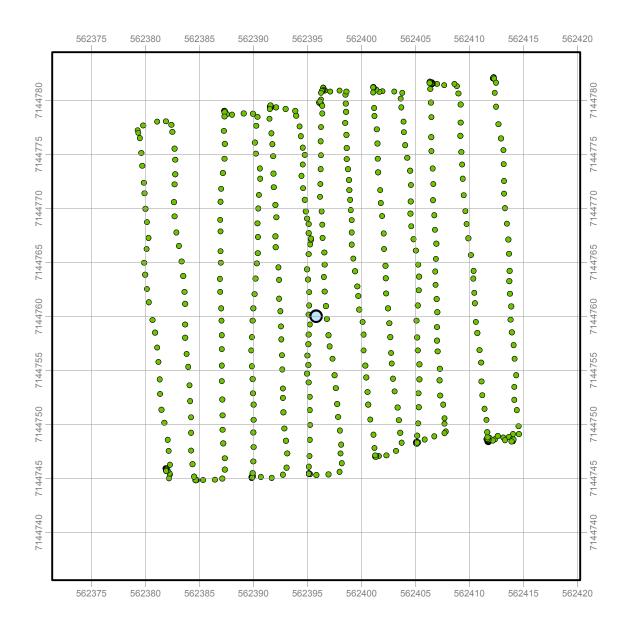
Point Count: 946 Min-Max: 0.046 - 0.109 μSv KE-06 Post Gamma Survey

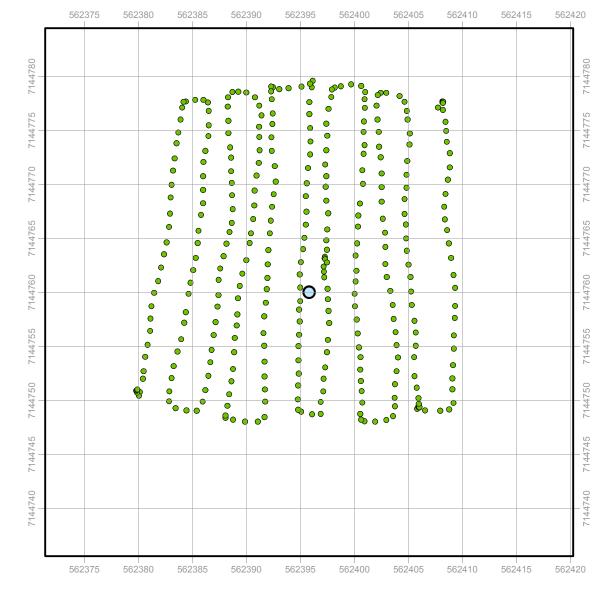
Point Count: 560 Min-Max: 0.047 - 0.102 μSv



- O Drill Hole
- 0.0 0.3 μSv
- O.3 0.6 μSν
- O.6 1.0 μSv • 1.0 - 2.5 μSv







BN-01A Pre Gamma Survey

Point Count: 1250 Min-Max: 0.051 - 0.107 μSv

BN-01A **Post Gamma Survey**

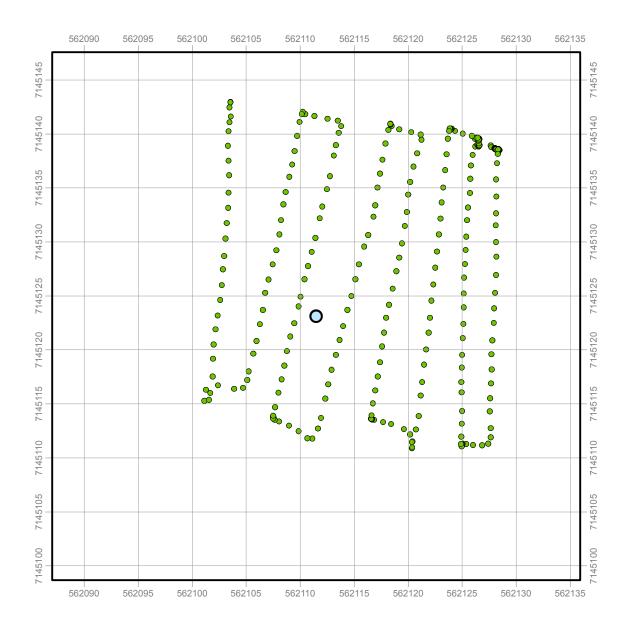
Point Count: 696 Min-Max: 0.060 - 0.120 μSv

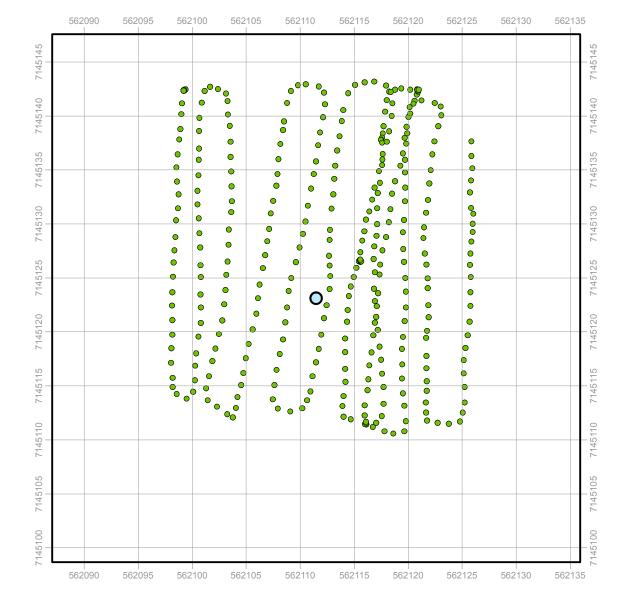
FIGURE 3.7-11



- O Drill Hole
- 0.0 0.3 μSv
- O.3 0.6 μSv
- O.6 1.0 μSv • 1.0 - 2.5 μSv







BN-02 **Pre Gamma Survey**

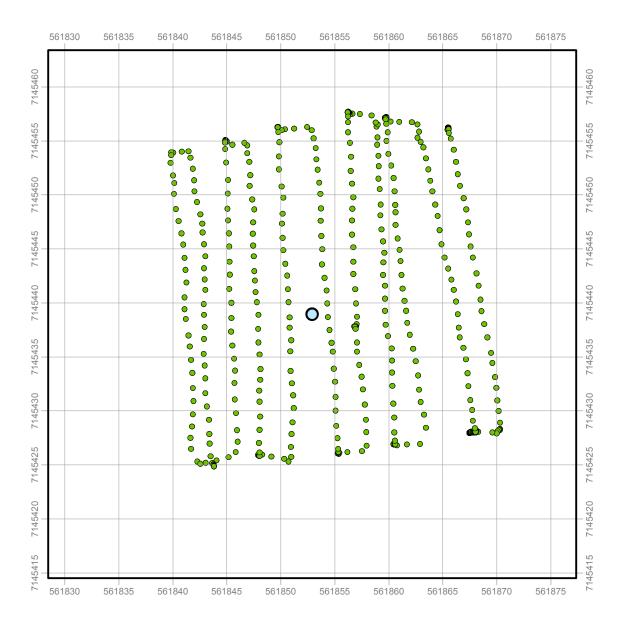
Point Count: 600 Min-Max: 0.055 - 0.085 μSν

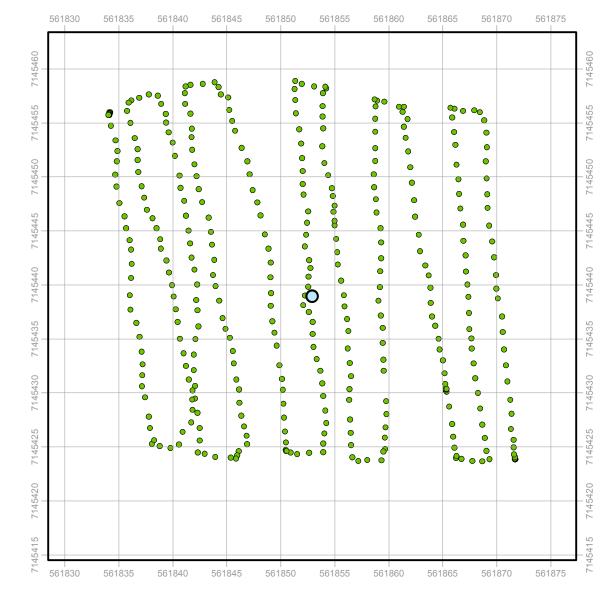
BN-02 **Post Gamma Survey**

Point Count: 686 Min-Max: 0.036 - 0.131 μSv



- O Drill Hole
- 0.0 0.3 μSv
- O.3 0.6 μSν
- O.6 1.0 μSv • 1.0 - 2.5 μSv
- > 2.5 μSv





BN-03 **Pre Gamma Survey**

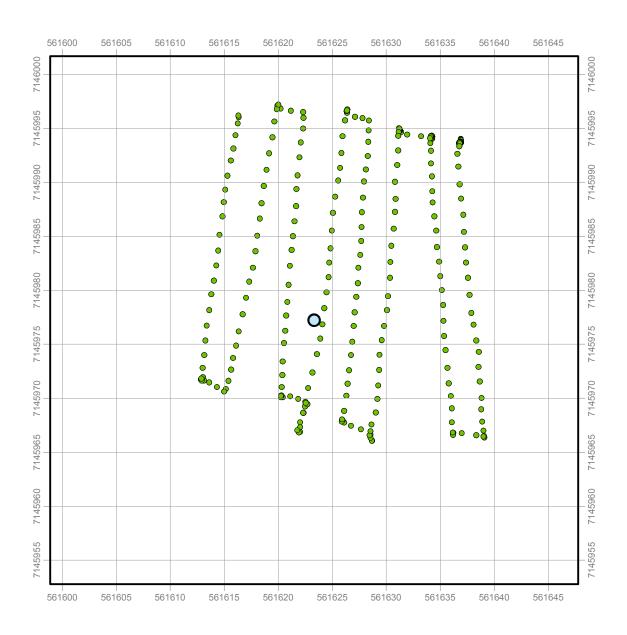
Point Count: 1208 Min-Max: 0.029 - 0.058 μSv

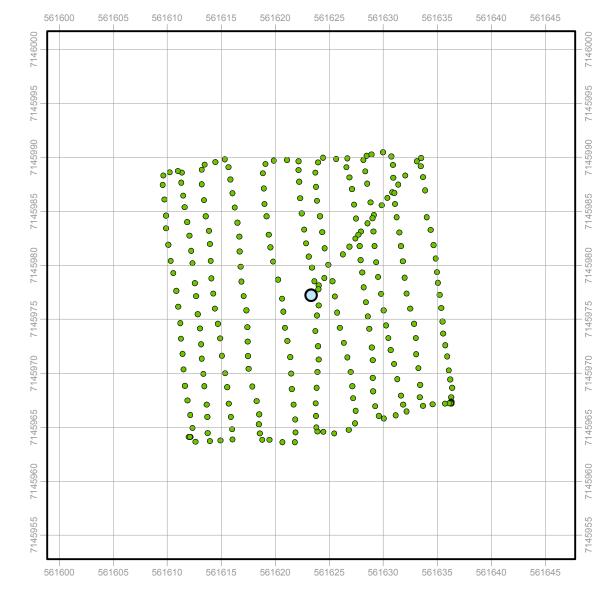
BN-03 **Post Gamma Survey**

Point Count: 774 Min-Max: 0.001 - 0.002 μSv



- O Drill Hole
- 0.0 0.3 μSv
- O.3 0.6 μSν
- O.6 1.0 μSv
- 1.0 2.5 μSv
- > 2.5 μSv





BN-04 **Pre Gamma Survey**

Point Count: 580 Min-Max: 0.042 - 0.087 μSv

BN-04 **Post Gamma Survey**

Point Count: 548 Min-Max: 0.023 - 0.056 μSv

Creator: C. Carter
Date: 01/01/2013 Scale: 5m x 5m Grid

File: KI08F102

FIGURE 3.7-14

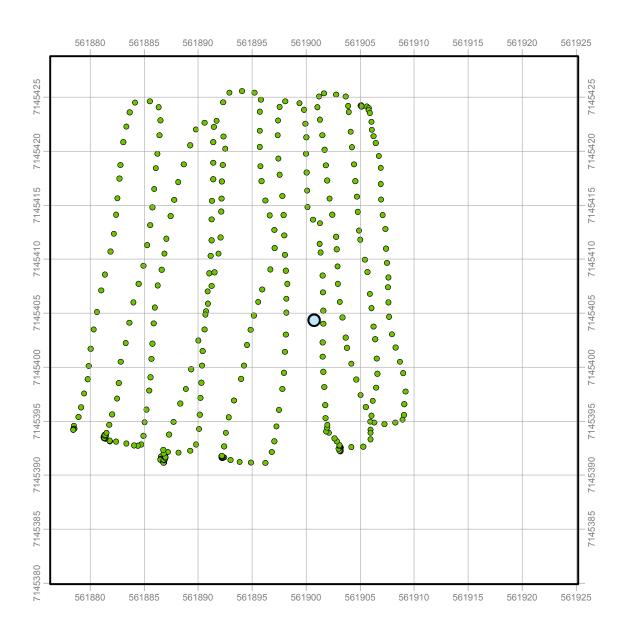
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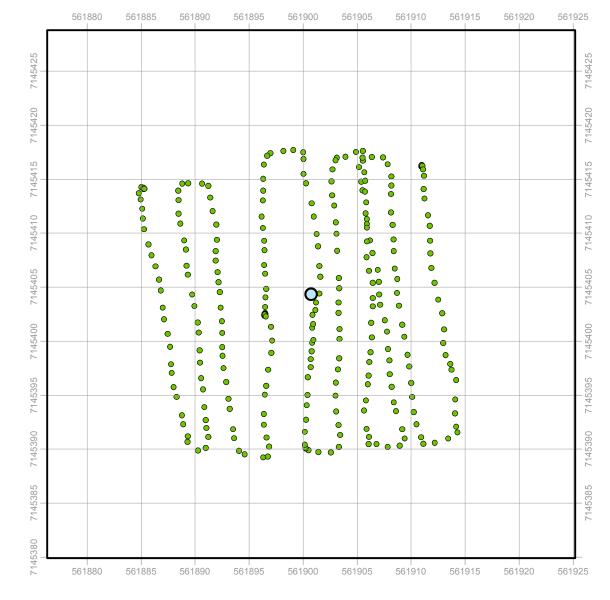




- O Drill Hole
- 0.0 0.3 μSv
- O.3 0.6 μSν
- O.6 1.0 μSv • 1.0 - 2.5 μSv







BN-05 Pre Gamma Survey

Point Count: 950 Min-Max: 0.037 - 0.119 μSv

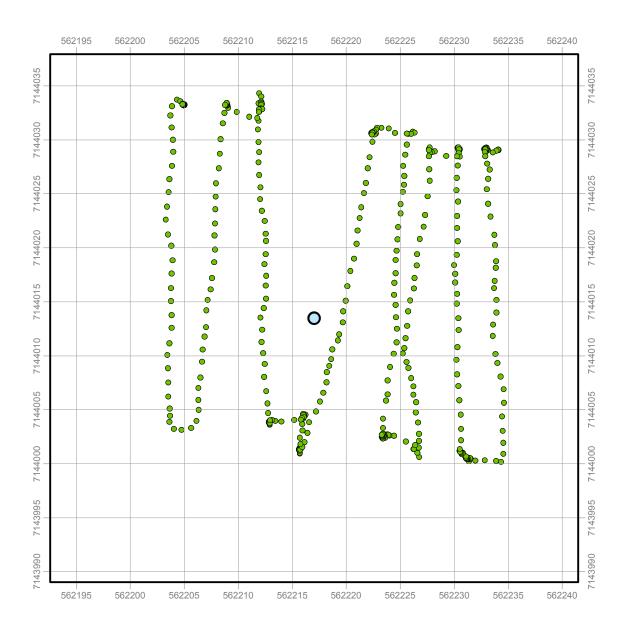
BN-05 **Post Gamma Survey**

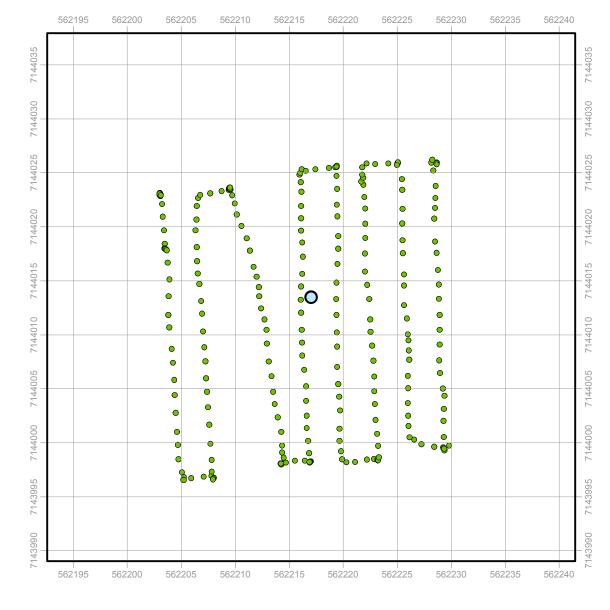
Point Count: 572 Min-Max: 0.016 - 0.026 μSv



- O Drill Hole
- 0.0 0.3 μSv
- O.3 0.6 μSv
- O.6 1.0 μSv • 1.0 - 2.5 μSv







BONG-061 Pre Gamma Survey

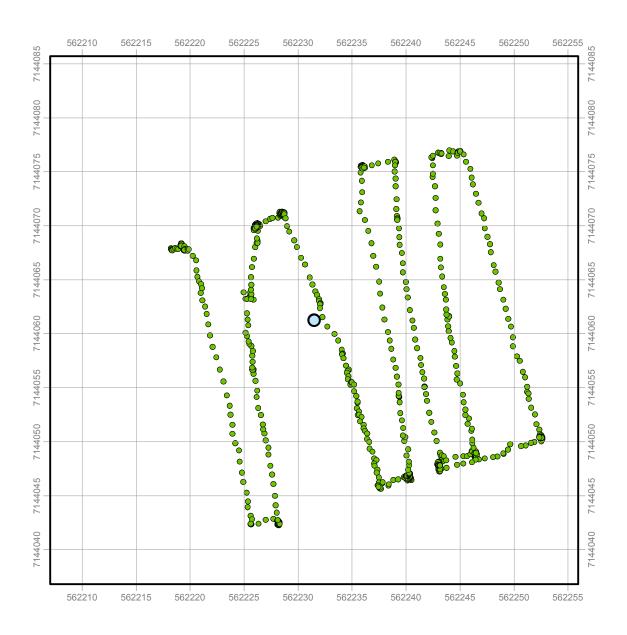
Point Count: 948 Min-Max: 0.041 - 0.085 μSv

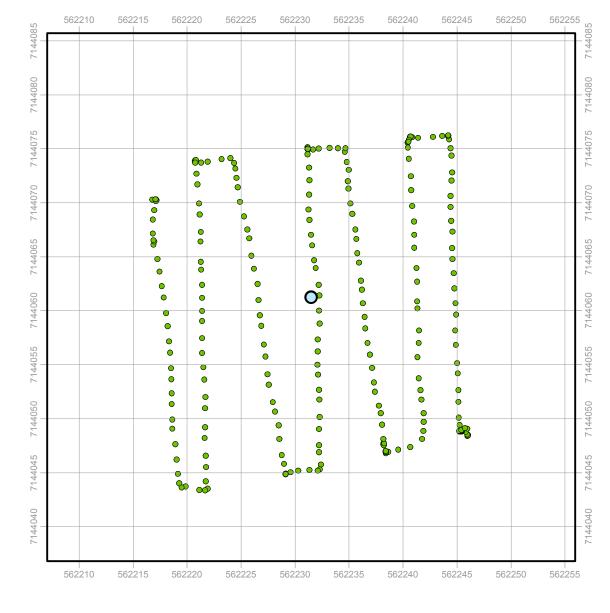
BONG-061 Post Gamma Survey

Point Count: 616 Min-Max: 0.053 - 0.092 μSv



- O Drill Hole
- 0.0 0.3 μSv
- O.3 0.6 μSν
- O.6 1.0 μSv
- 1.0 2.5 μSv
- > 2.5 μSv





BONG-062 Pre Gamma Survey

Point Count: 2186 Min-Max: 0.024 - 0.051 μSv BONG-062 Post Gamma Survey

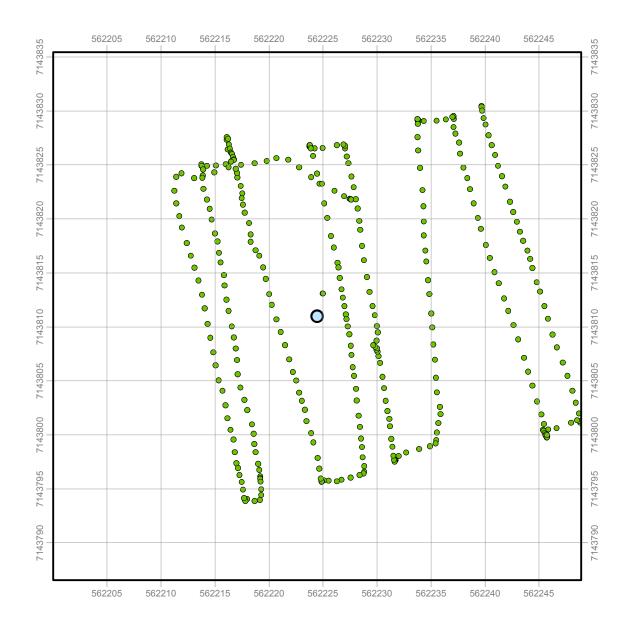
Point Count: 542 Min-Max: 0.001 - 0.091 μSv

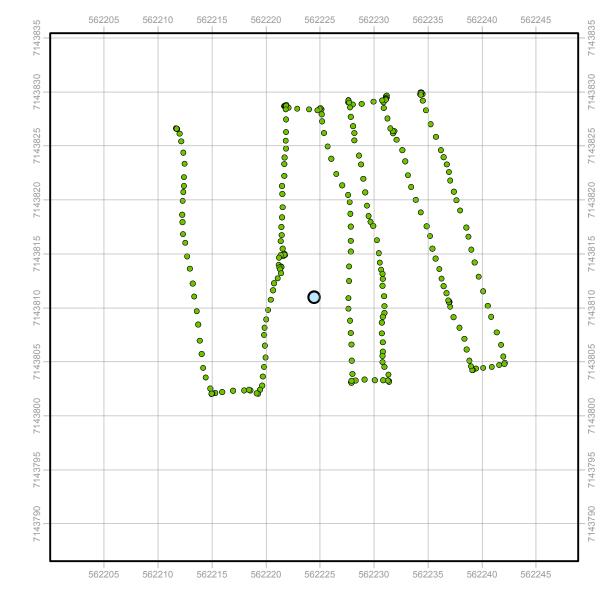
FIGURE 3.7-17
PRE AND POST GAMMA SURVEY
DRILL HOLE BONG-062





- O Drill Hole
- 0.0 0.3 μSv
- O.3 0.6 μSν
- 0.6 1.0 μSv
- 1.0 2.5 μSv
- > 2.5 μSv





BONG-063 Pre Gamma Survey

Point Count: 750 Min-Max: 0.042 - 0.079 μSv

BONG-063 Post Gamma Survey

Point Count: 566 Min-Max: 0.052 - 0.094 μSv

Creator: C. Carter
Date: 01/01/2013 Scale: 5m x 5m Grid

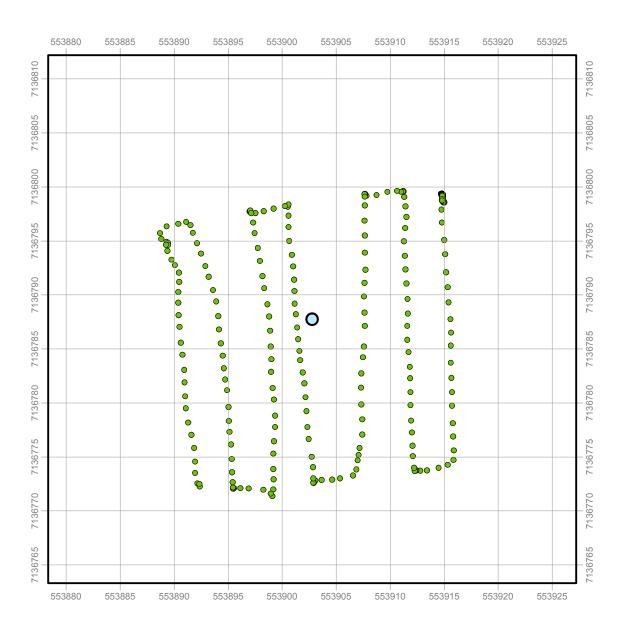
File: KI08F106

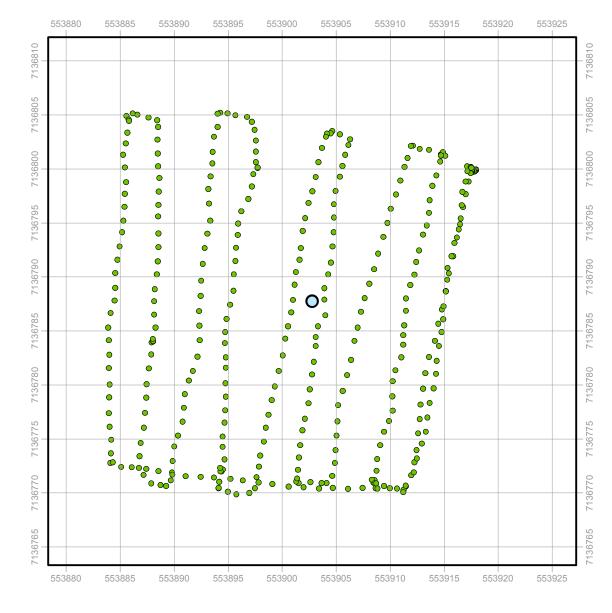
FIGURE 3.7-18 DRILL HOLE BONG-063





- O Drill Hole
- 0.0 0.3 μSv
- O.3 0.6 μSν
- 0.6 1.0 μSv1.0 2.5 μSv
- > 2.5 μSv





EN-01 Pre Gamma Survey

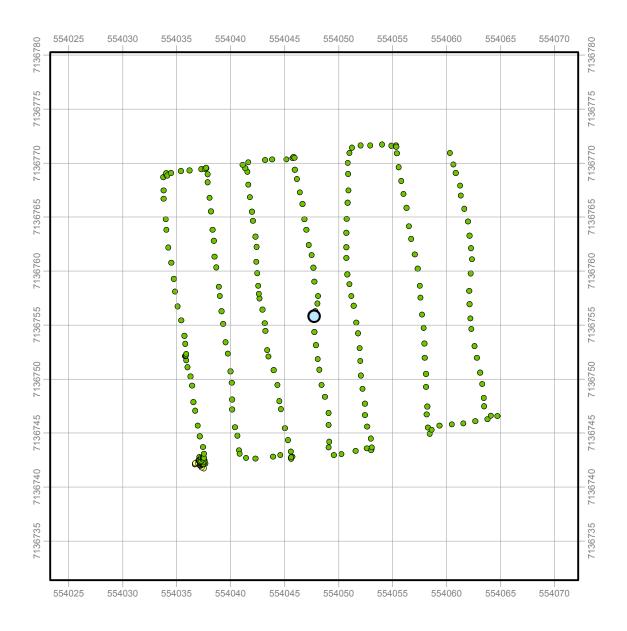
Point Count: 594 Min-Max: 0.041 - 0.076 μSv EN-01 Post Gamma Survey

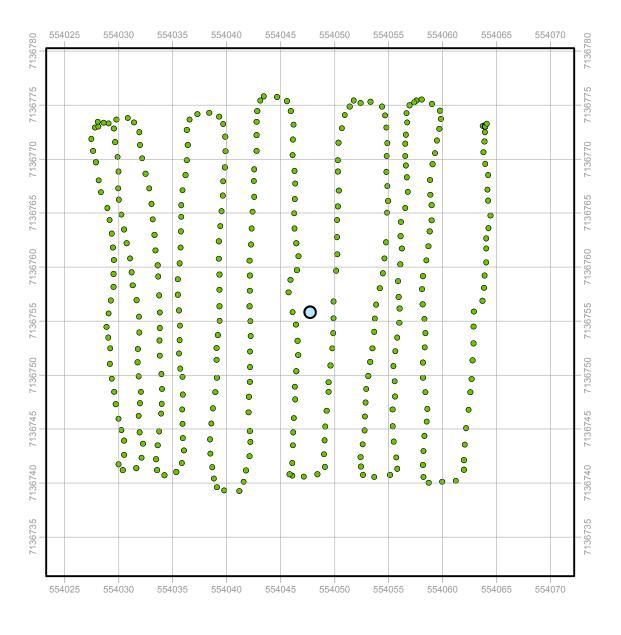
Point Count: 780 Min-Max: 0.044 - 0.080 μSv



- O Drill Hole
- 0.0 0.3 μSv
- O.3 0.6 μSν
- O.6 1.0 μSv • 1.0 - 2.5 μSv







EN-02 **Pre Gamma Survey**

Point Count: 666 Min-Max: 0.043 - 0.760 μSv

EN-02 **Post Gamma Survey**

Point Count: 728 Min-Max: 0.044 - 0.091 μSv

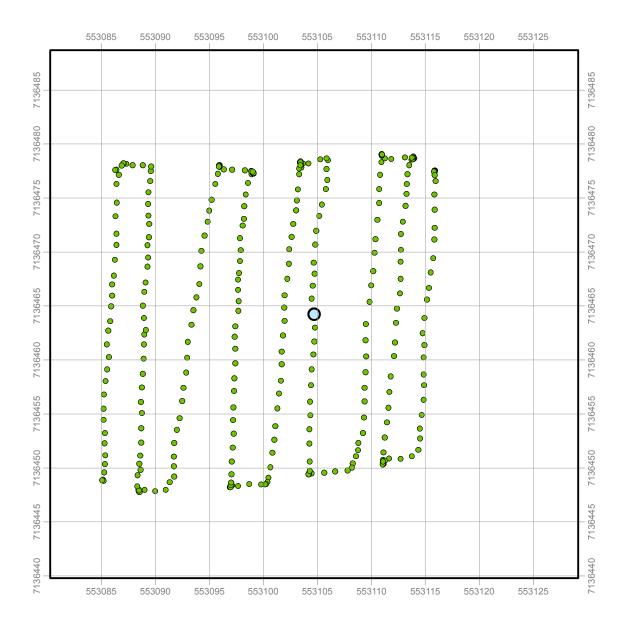
File: KI08F108

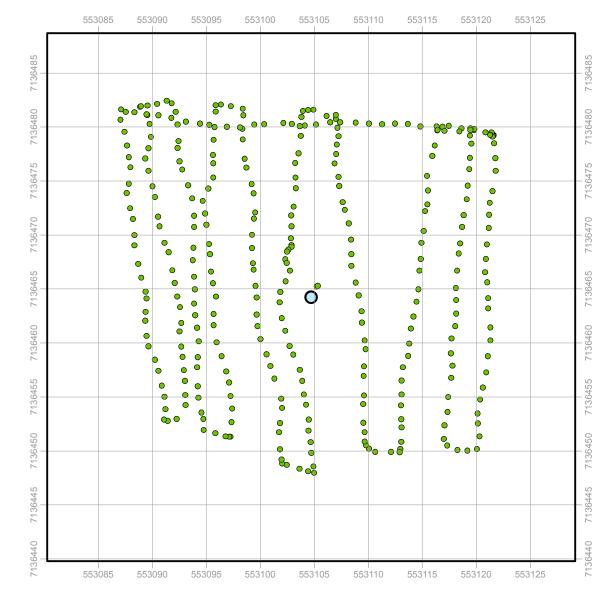
FIGURE 3.7-20



- O Drill Hole
- 0.0 0.3 μSv
- O.3 0.6 μSν
- O.6 1.0 μSv • 1.0 - 2.5 μSv







EN-03 **Pre Gamma Survey**

Point Count: 702 Min-Max: 0.044 - 0.078 μSv

EN-03 Post Gamma Survey

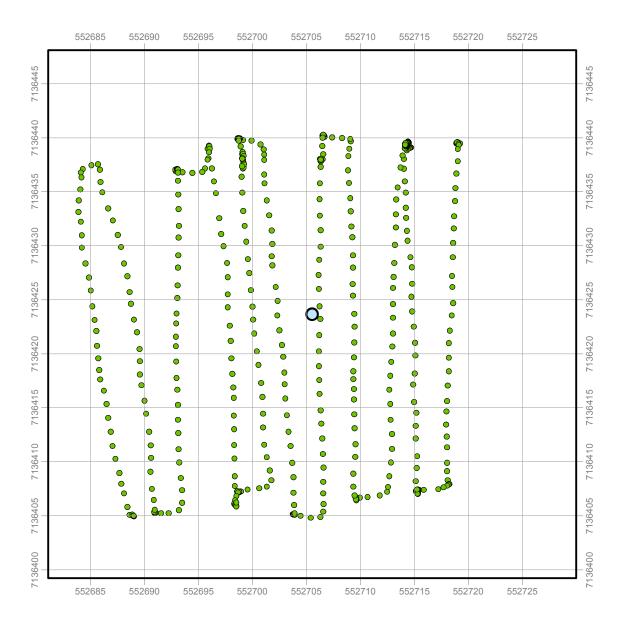
Point Count: 694 Min-Max: 0.001 - 0.105 μSv

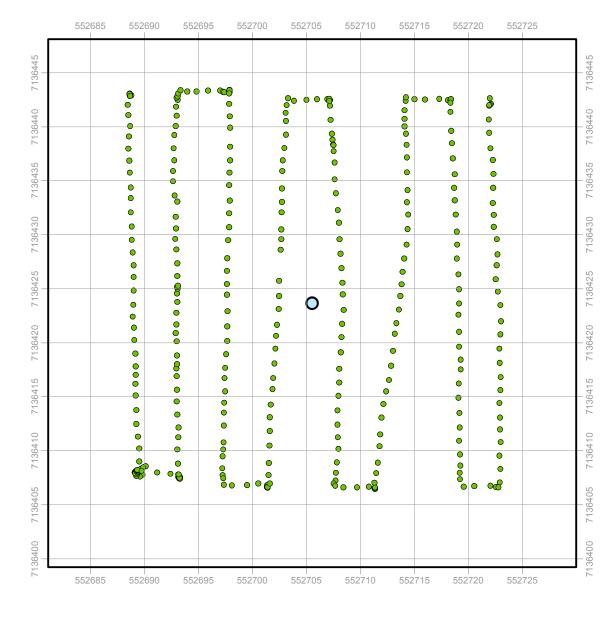




- O Drill Hole
- 0.0 0.3 μSv
- O.3 0.6 μSν
- O.6 1.0 μSv
- 1.0 2.5 μSv







EN-04 **Pre Gamma Survey**

Point Count: 1272 Min-Max: 0.058 - 0.094 μSv

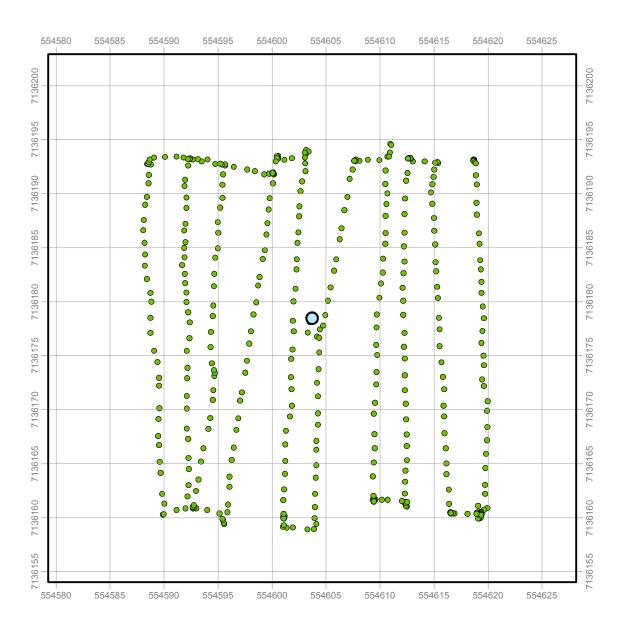
EN-04 **Post Gamma Survey**

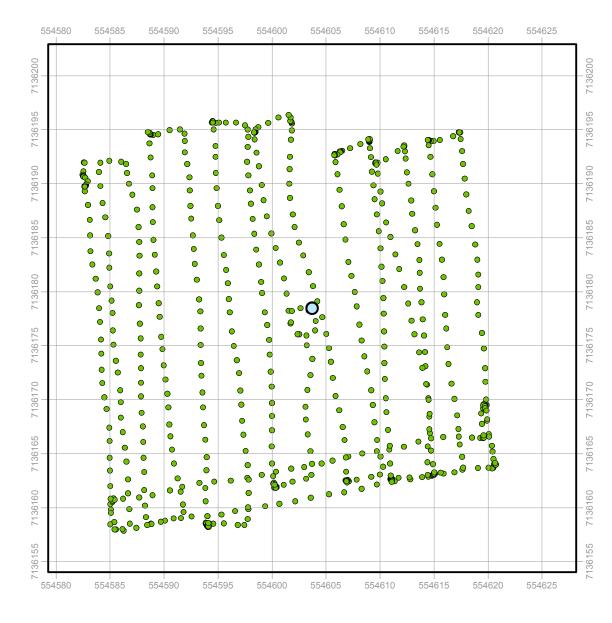
Point Count: 694 Min-Max: 0.063 - 0.101 μSv





- O Drill Hole
- 0.0 0.3 μSv
- O.3 0.6 μSν
- O.6 1.0 μSv
- 1.0 2.5 μSv
- > 2.5 μSv





END-13-01A **Pre Gamma Survey**

Point Count: 938 Min-Max: 0.034 - 0.077 μSv

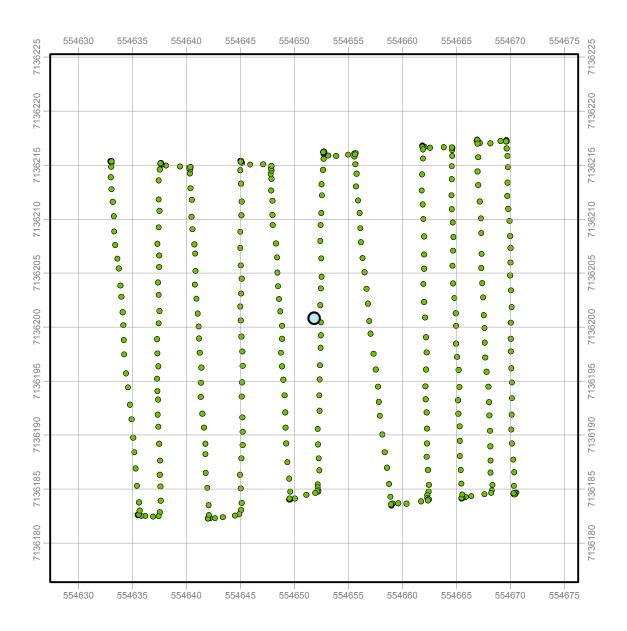
END-13-01A **Post Gamma Survey**

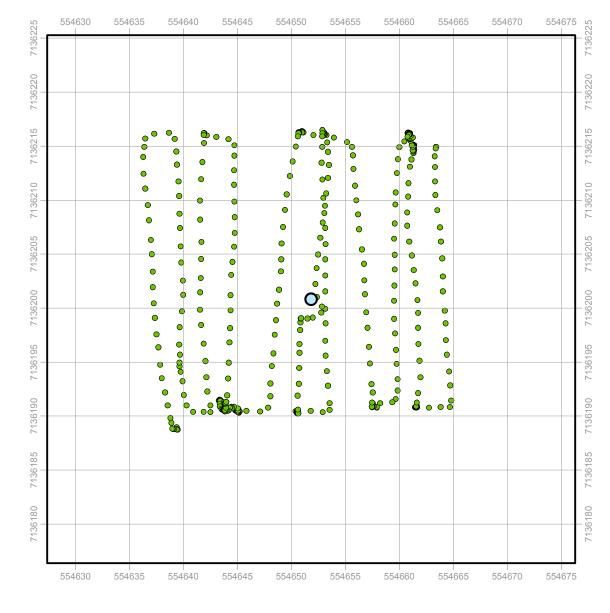
Point Count: 1648 Min-Max: 0.037 - 0.067 μSv



- O Drill Hole
- 0.0 0.3 μSv
- O.3 0.6 μSν
- O.6 1.0 μSv • 1.0 - 2.5 μSv







END-13-02 **Pre Gamma Survey**

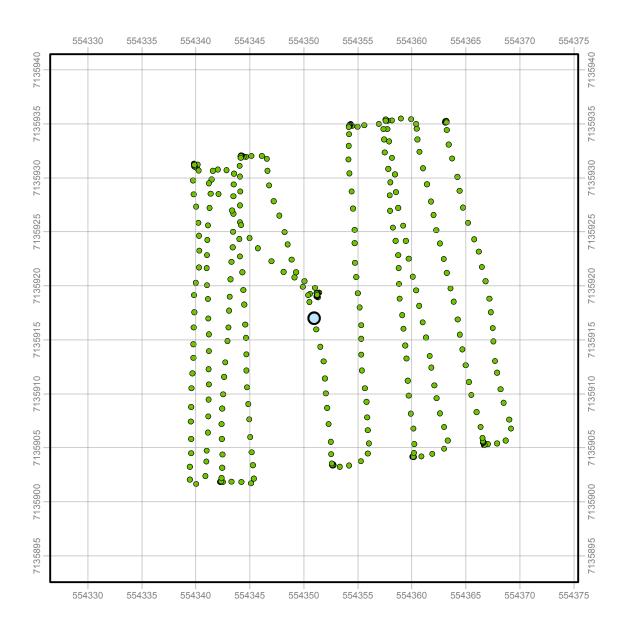
Point Count: 1036 Min-Max: 0.036 - 0.128 μSv

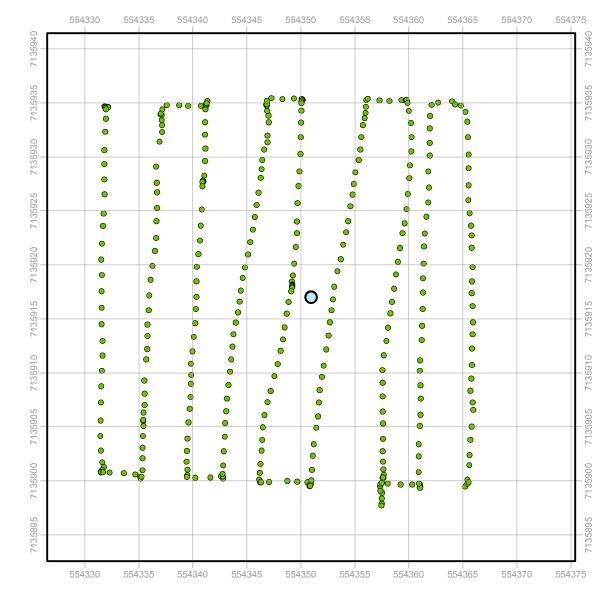
END-13-02 **Post Gamma Survey**

Point Count: 1158 Min-Max: 0.040 - 0.105 μSv



- O Drill Hole
- 0.0 0.3 μSv
- O.3 0.6 μSν
- O.6 1.0 μSv
- 1.0 2.5 μSv
- > 2.5 μSv





END-13-03 Pre Gamma Survey

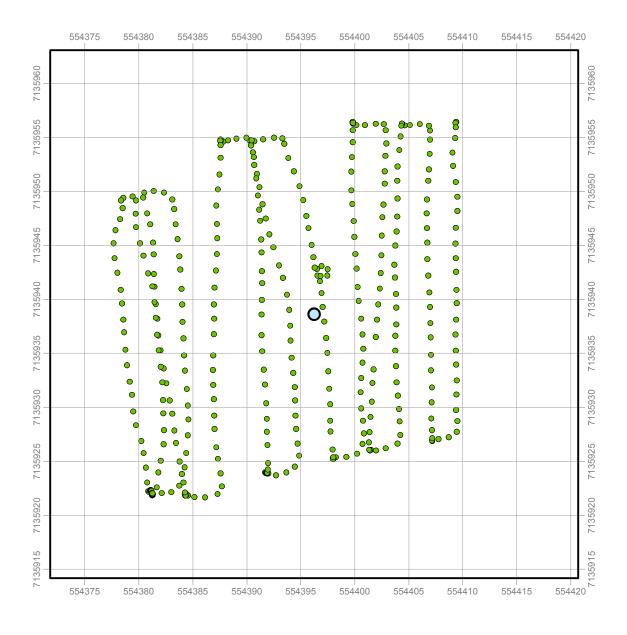
Point Count: 764 Min-Max: 0.008 - 0.013 μSv END-13-03 Post Gamma Survey

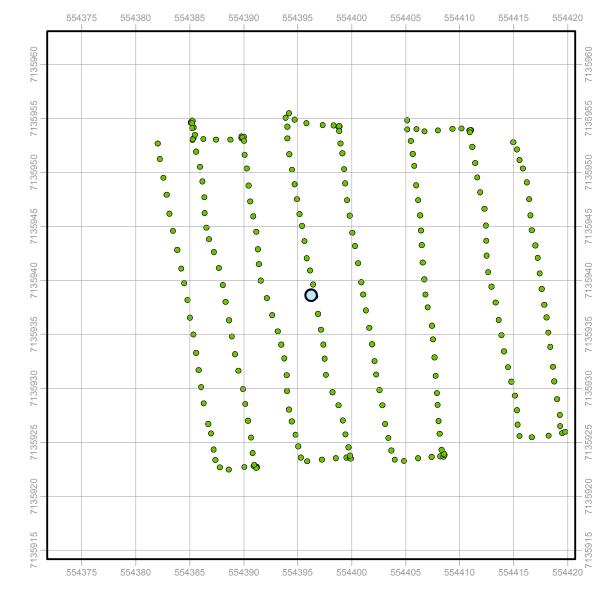
Point Count: 794 Min-Max: 0.061 - 0.106 μSv



AREVA

- O Drill Hole
- 0.0 0.3 μSv
- O.3 0.6 μSν
- O.6 1.0 μSv
- 1.0 2.5 μSv
- > 2.5 μSv





END-13-04 **Pre Gamma Survey**

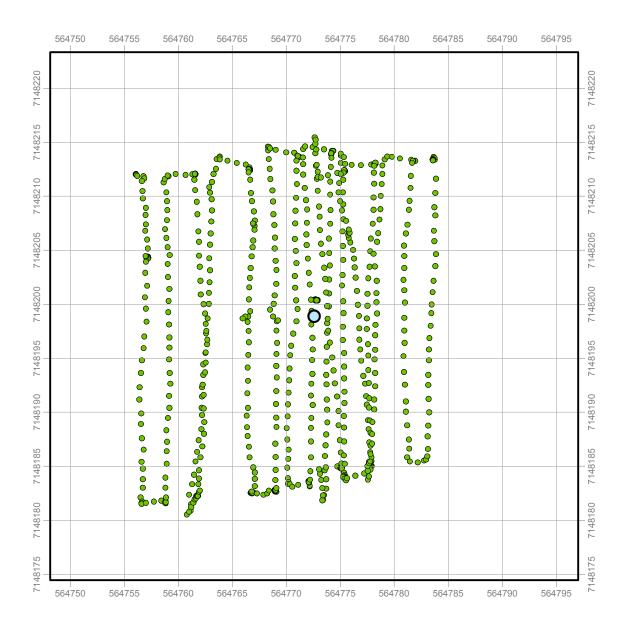
Point Count: 890 Min-Max: 0.006 - 0.013 μSv

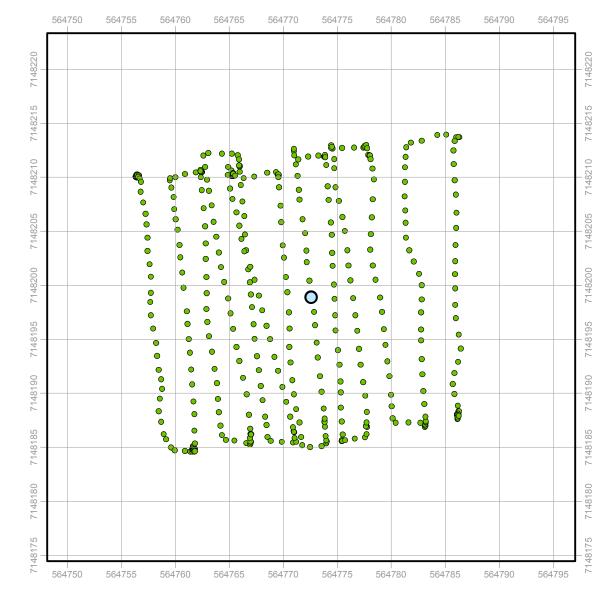
END-13-04 **Post Gamma Survey**

Point Count: 500 Min-Max: 0.049 - 0.108 μSv



- O Drill Hole
- 0.0 0.3 μSv
- O.3 0.6 μSν
- O.6 1.0 μSv
- 1.0 2.5 μSv
- > 2.5 μSv





KN-01 Pre Gamma Survey

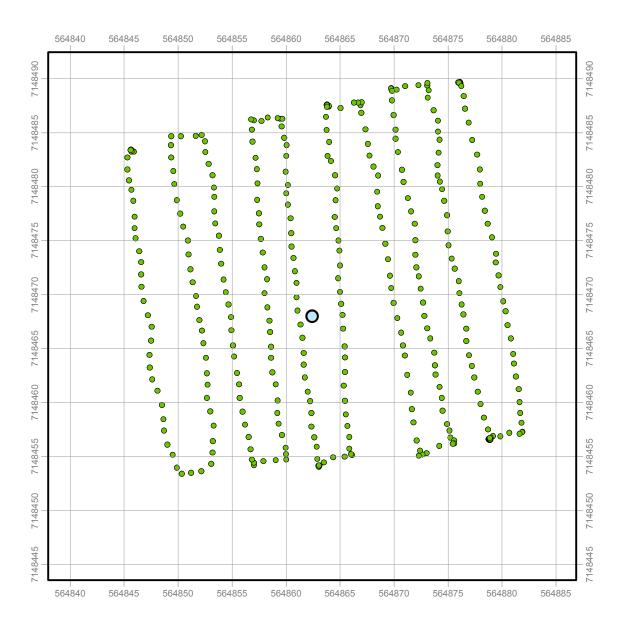
Point Count: 1498 Min-Max: 0.038 - 0.100 μSv KN-01 Post Gamma Survey

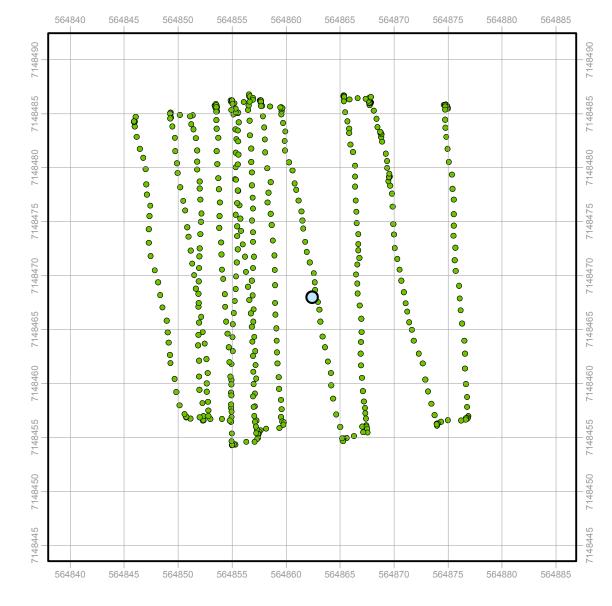
Point Count: 1008 Min-Max: 0.043 - 0.088 μSv



AREVA

- O Drill Hole
- 0.0 0.3 μSv
- O.3 0.6 μSν
- 0.6 1.0 μSv
- 1.0 2.5 μSv
- > 2.5 μSv





KN-02 Pre Gamma Survey

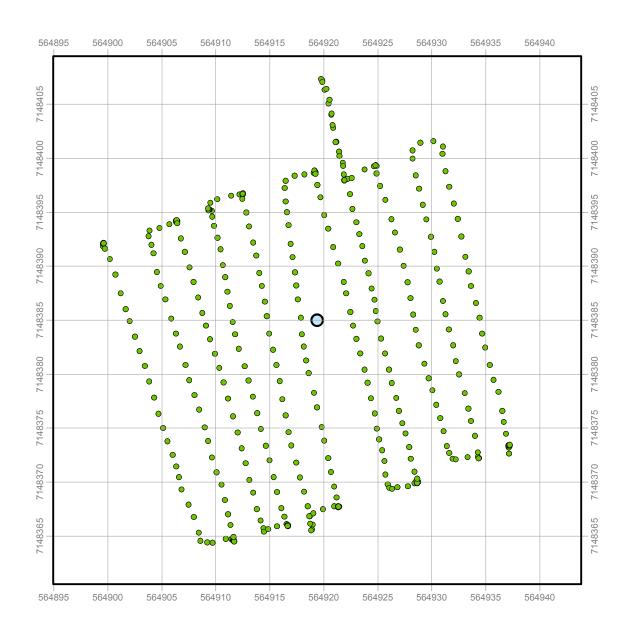
Point Count: 824 Min-Max: 0.057 - 0.106 μSv KN-02 Post Gamma Survey

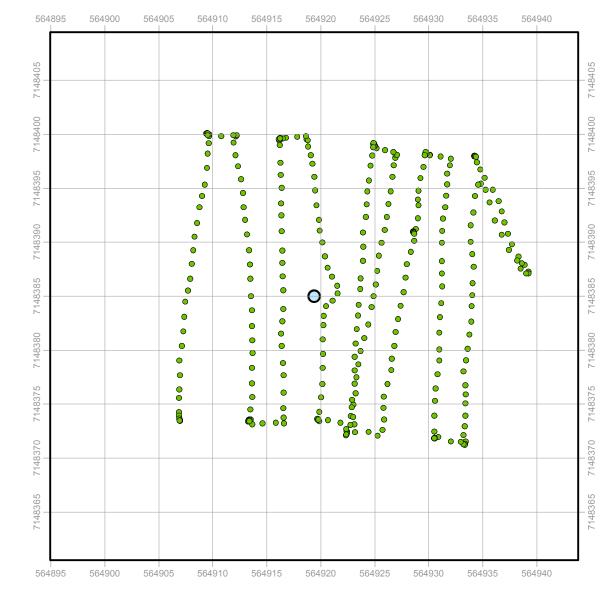
Point Count: 1028 Min-Max: 0.064 - 0.115 μSv



AREVA

- O Drill Hole
- 0.0 0.3 μSv
- O.3 0.6 μSν
- O.6 1.0 μSv
- 1.0 2.5 μSv
- > 2.5 μSv





KN-03 **Pre Gamma Survey**

Point Count: 748 Min-Max: 0.042 - 0.107 μSv

KN-03 **Post Gamma Survey**

Point Count: 726 Min-Max: 0.043 - 0.101 μSv

Creator: C. Carter
Date: 01/01/2013 Scale: 5m x 5m Grid File: KI08F117

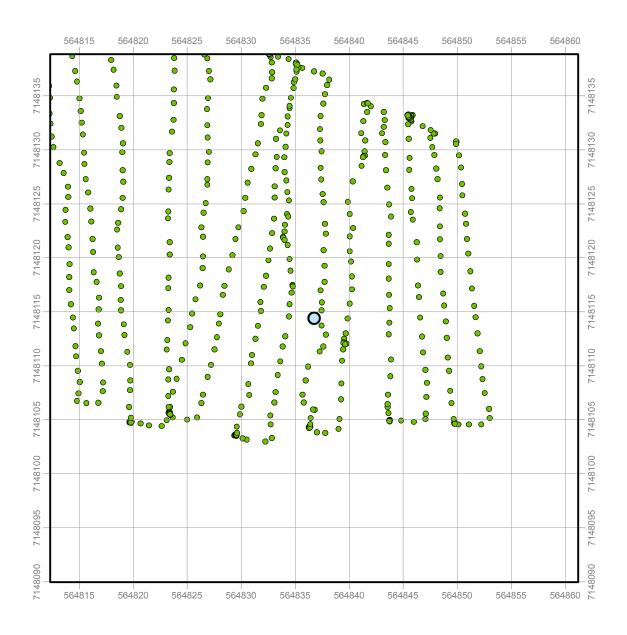
FIGURE 3.7-29

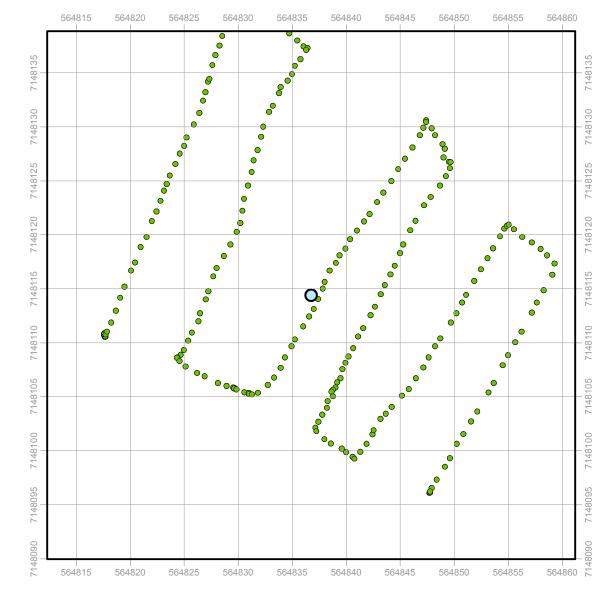




- O Drill Hole
- 0.0 0.3 μSv
- O.3 0.6 μSν
- 0.6 1.0 μSv
- 1.0 2.5 μSv







KN-04 Pre Gamma Survey

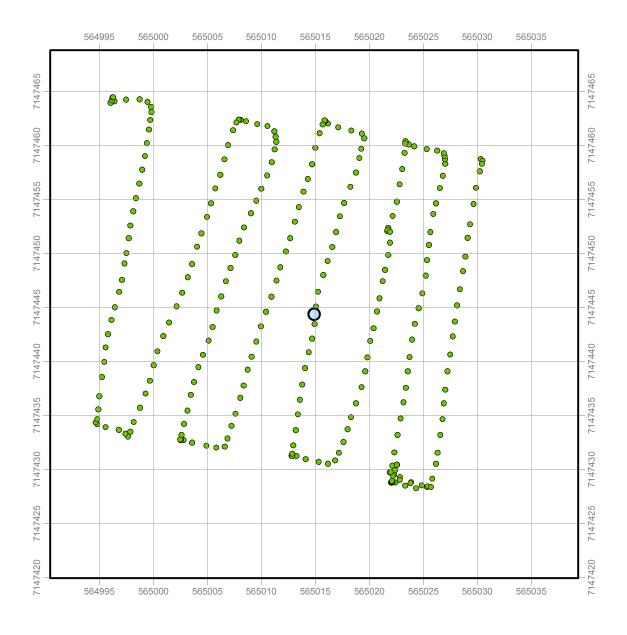
Point Count: 1148 Min-Max: 0.050 - 0.133 μSv KN-04 Post Gamma Survey

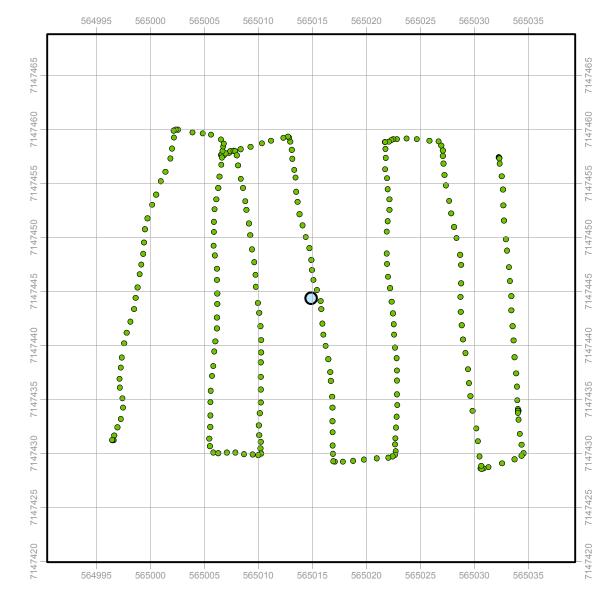
Point Count: 562 Min-Max: 0.055 - 0.122 μSv

Projection: NAD 1983 UTM Zone 14N Creator: C. Carter Date: 01/01/2013 Scale: 5m x 5m Gri File: KI08F118 FIGURE 3.7-30 PRE AND POST GAMMA SURVEY DRILL HOLE KN-04



- O Drill Hole
- 0.0 0.3 μSv
- O.3 0.6 μSv
- O.6 1.0 μSv
- 1.0 2.5 μSv
- > 2.5 μSv





KN-05 **Pre Gamma Survey**

Point Count: 538 Min-Max: 0.074 - 0.106 μSv

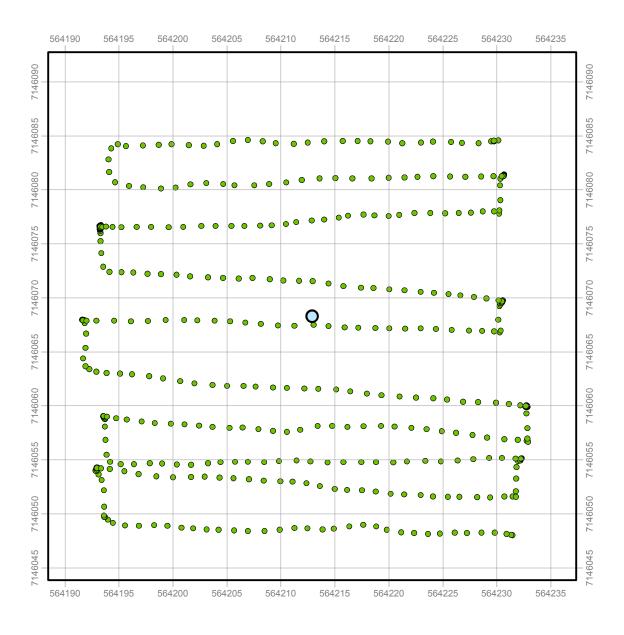
KN-05 **Post Gamma Survey**

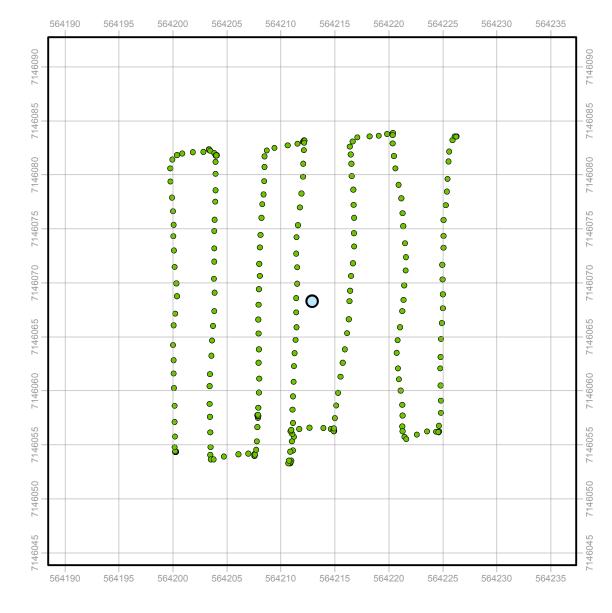
Point Count: 526 Min-Max: 0.068 - 0.104 μSv





- O Drill Hole
- 0.0 0.3 μSv
- O.3 0.6 μSν
- O.6 1.0 μSv
- 1.0 2.5 μSv
- > 2.5 μSv





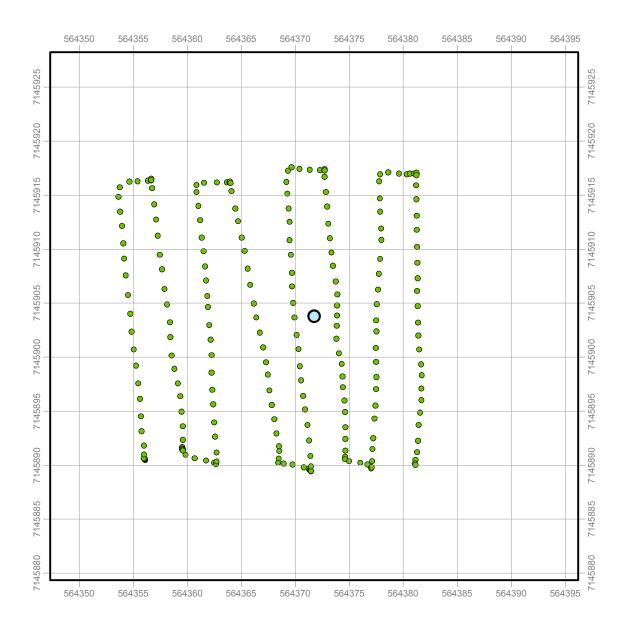
KSW-01 Pre Gamma Survey

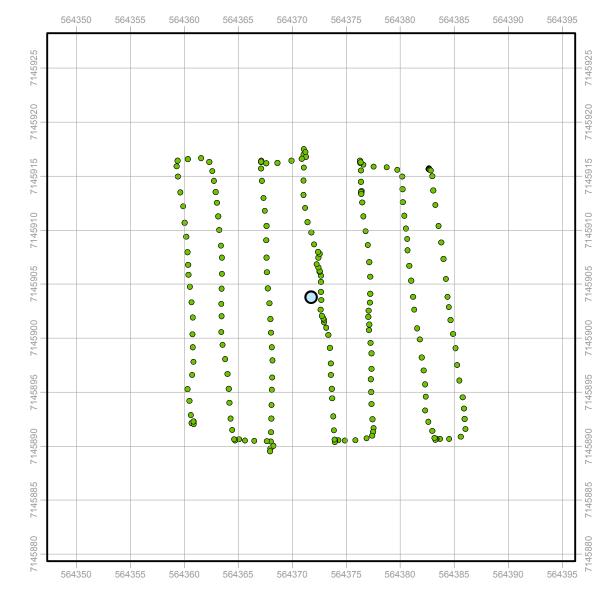
Point Count: 1020 Min-Max: 0.044 - 0.084 μSv KSW-01 Post Gamma Survey

Point Count: 498 Min-Max: 0.060 - 0.117 μSv

- O Drill Hole
- 0.0 0.3 μSv
- O.3 0.6 μSv
- O.6 1.0 μSv • 1.0 - 2.5 μSv







KSW-02 **Pre Gamma Survey**

Point Count: 468 Min-Max: 0.058 - 0.092 μSv

KSW-02 **Post Gamma Survey**

Point Count: 458 Min-Max: 0.061 - 0.109 μSv

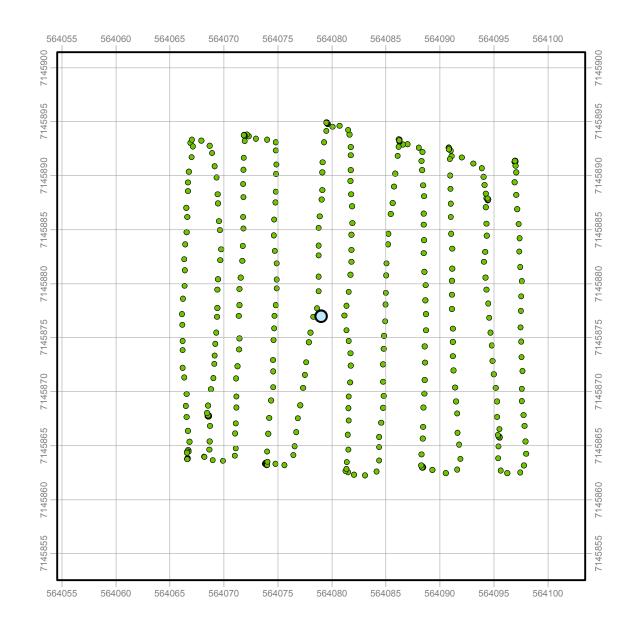
File: KI08F121

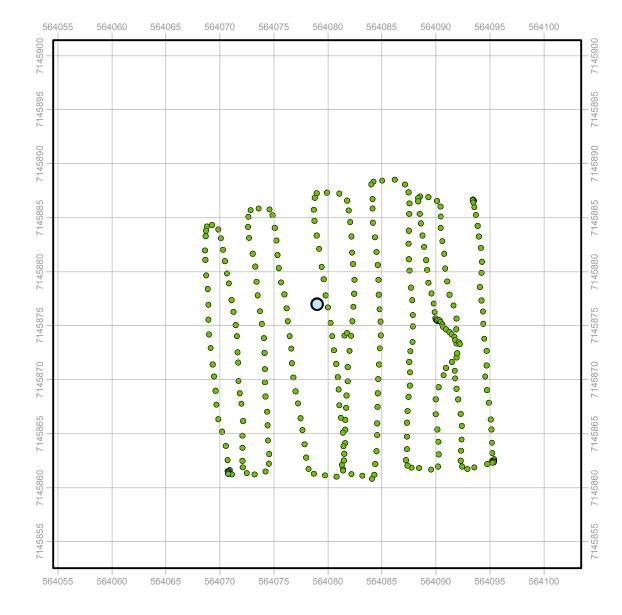
FIGURE 3.7-33





- O Drill Hole
- 0.0 0.3 μSv
- O.3 0.6 μSν
- O.6 1.0 μSv
- 1.0 2.5 μSv
- > 2.5 μSv





KSW-03 **Pre Gamma Survey**

Point Count: 876 Min-Max: 0.018 - 0.038 μSv

KSW-03 **Post Gamma Survey**

Point Count: 632 Min-Max: 0.040 - 0.068 μSv

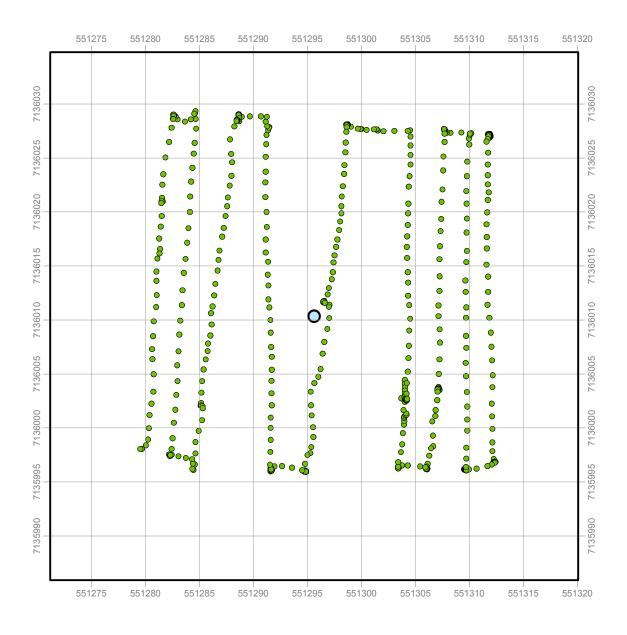
Creator: C. Carter
Date: 01/01/2013 Scale: 5m x 5m Grid File: KI08F122

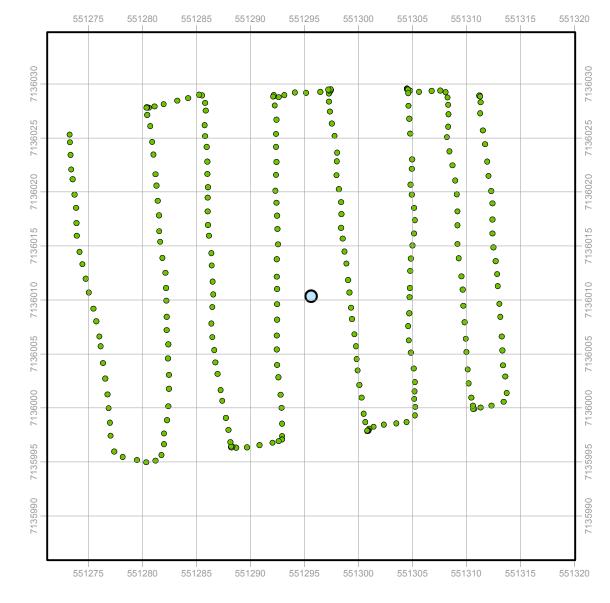
FIGURE 3.7-34





- O Drill Hole
- 0.0 0.3 μSv
- O.3 0.6 μSν
- O.6 1.0 μSv
- 1.0 2.5 μSv
- > 2.5 μSv





PG-01 Pre Gamma Survey

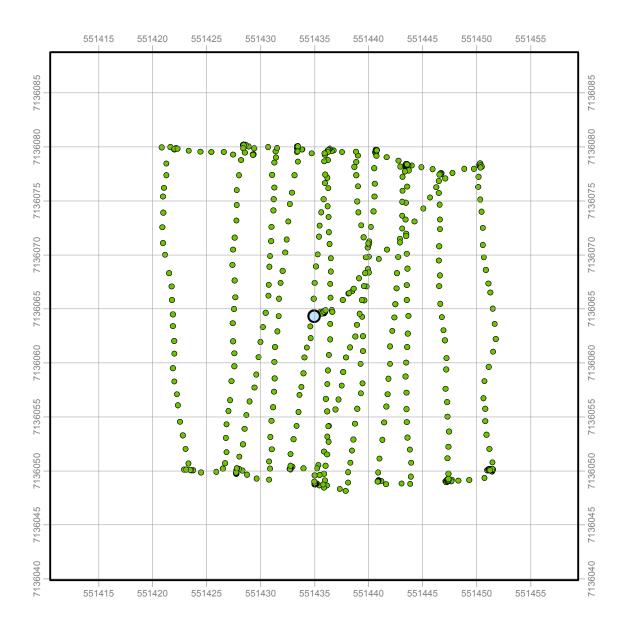
Point Count: 1396 Min-Max: 0.066 - 0.104 μSv PG-01 Post Gamma Survey

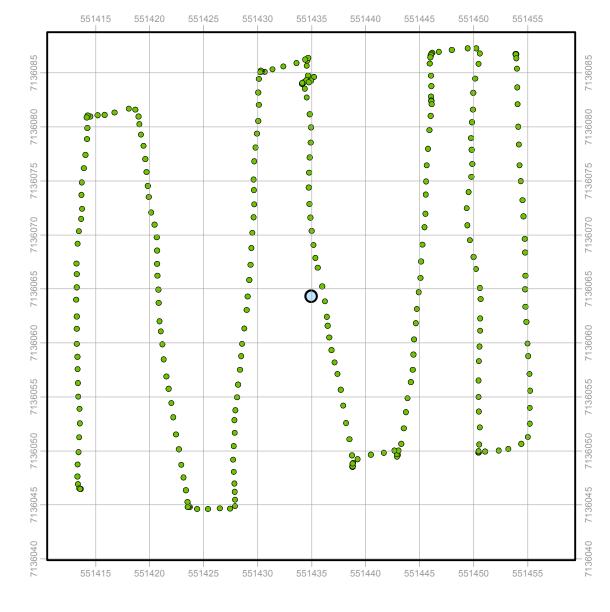
Point Count: 546 Min-Max: 0.067 - 0.113 μSv



AREVA

- O Drill Hole
- 0.0 0.3 μSv
- O.3 0.6 μSν
- O.6 1.0 μSv
- 1.0 2.5 μSv
- > 2.5 μSv





PG-02 Pre Gamma Survey

Point Count: 1278 Min-Max: 0.059 - 0.097 μSv PG-02 Post Gamma Survey

Point Count: 568 Min-Max: 0.063 - 0.101 μSv





4 EFFECTS OF THE PROJECT ON HUMAN HEALTH

AREVA is committed to taking every reasonable precaution toward ensuring the safety and health of all employees and contractors from any potential harmful effects of uranium exploration activities. This commitment is reflected in AREVA's Health and Safety Policy and is supported through a comprehensive Health and Safety Program for the Kiggavik Project.

4.1 OCCUPATIONAL HEALTH AND SAFETY PROGRAM

The Health and Safety Program was implemented to ensure work activities were performed in a safe and responsible manner, and was conducted in accordance with the Nunavut *Mine Health and Safety Regulations*, exploration best practices and AREVA safety requirements. AREVA completed the field season in accordance with its OHSAS 18001:2007 certification for the Exploration Department's Health and Safety Management System. The OHSAS 18001 standard provides the minimum requirements for a comprehensive Health and Safety Management System which allows an organization to proactively minimize occupational health and safety risks and to continually improve its health and safety performance. An external third party, SGS, conducted the OHSAS 18001:2007 recertification audit for the Health and Safety Management System from March 5 to March 8, 2013. The OHSAS 18001:2007 recertification audit concluded that the health and safety program continues to meet requirements.

Throughout the 2013 field program, the Health and Safety Program and Management System were implemented by AREVA staff. The Project Geologist was responsible for overseeing the program with the assistance of the SHEQ Supervisor or designate for managing routine safety activities. To ensure worker safety and protection of the environment, all employees and contractors of the Kiggavik site received orientation and appropriate safety training prior to commencing work. Employees and contractors were also required to participate in weekly safety meetings (Safety Huddles) to discuss and reinforce safety issues and act as the Occupational Health Committee (OHC). The meeting minutes and list of members were forwarded to the Mines Inspector, NU.

There were no lost time accidents in 2013 involving AREVA or contractor personnel. There were eight first aids and three medical aids, two of which required restricted work. A medical aid is classified as a work-related injury which requires management and care of the injury except those described under first aid. It does not involve any lost time.



4.2 RADIATION PROTECTION

The Radiation Protection program was implemented to ensure work activities were performed in a safe and responsible manner and that workers were not adversely exposed to radiation from drilling activities. The results of the 2013 monitoring program indicate that the field activities, conducted as part of the Kiggavik Project, did not pose a significant health risk to people working with the Project or living in nearby communities.

The Radiation Protection program was conducted using:

- Gamma dosimetry which included optically stimulated luminescent dosimeters (OLDs) and direct reading dosimeters (DRDs) for personal dosimetry
- Automess survey instrument for gamma radiation monitoring
- Ludlum model 2221 with Trimble Pro-Xrt for pre and post gamma surveys
- Ludlum model 12 survey instrument and swipes for contamination monitoring
- Alpha monitors for radon progeny and long lived radioactive dust (LLRD) monitoring

4.2.1 Radiation Protection Plan

The Radiation Protection Plan for the Kiggavik Project is designed to meet the requirements of the applicable Nunavut Occupational Health and Safety Regulations, exploration best management practices, and AREVA's Corporate Integrated Management System (IMS). Although current activities are not regulated by the CNSC, the Radiation Protection Plan is designed in accordance with the CNSC Regulations.

The Plan is implemented by the development and implementation of a routine monitoring schedule carried out by AREVA personnel. This includes dosimetry monitoring to determine worker exposure, management of radioisotopes, shipping and receiving of radioactive material, the storage and collection of radioactive materials and the development of a corporate and site specific emergency response plan.

Administrative Elements

The administrative elements are as follows:

- Program documentation
- Training
- Designation of Occupational Workers
- Dose limits and dose levels

AREVA

Obligations of Occupational Workers

Pregnant workers

Program Documentation

The Radiation Protection Program for the Kiggavik Project is supported through a comprehensive series of work instructions for worker dosimetry, radiological monitoring,

contamination control and the safe handling of radioactive materials.

Training

All AREVA employees and contractors receive appropriate radiation protection training prior to

beginning work at the Project site to ensure worker safety and protection of the environment.

Personnel involved with the shipment of radioactive materials received the required training in

Transportation of Dangerous Goods (TDG) Class 7 Radioactive Material for both ground and air

transport.

Program Elements

The program elements are as follows:

Exposure As Low as Reasonably Achievable (ALARA)

Radiological monitoring

Dosimetry monitoring

Action and Administrative Levels

Management of radioactive materials

Shipping of radioactive materials

Site abandonment and restoration

Emergency response

Radiological Monitoring Program

As part of the Radiation Protection Program, workplace radiological monitoring is performed for

gamma radiation, radon progeny (RnP) and long-lived radioactive dusts (LLRD) to detect

potentially abnormal radiological conditions, estimate worker doses, and document radiological

conditions.



Routine radiological monitoring was conducted continuously for LLRD and RnP in the core shacks. The LLRD concentrations ranged from 0.0001 - 0.001 Bq/m³ with an average concentration of 0.0005 Bq/m³. Radon progeny measurements are expressed in units of Working Level (WL), a measure of the airborne potential alpha energy concentration. Indoor radon progeny levels ranged from 0.0003 - 0.0004 WL with an average radon progeny measurement of 0.0003 WL. The appropriate personal protective equipment and ventilation methods were used throughout the season. A summary of the radiological monitoring results is provided in Table 4.2-1.

Table 4.2-1 Routine Radiological Monitoring Results

Radiation Type	Average	Maximum
Radon Progeny (WL*)	0.0003	0.0004
Long-Lived Radioactive Dust (Bq/m ³ *)	0.0005	0.001

^{*}Working Levels

Contamination control measures are implemented to minimize the spread of radioactive materials. Contamination monitoring using a pancake probe and swipes must be performed at the core shacks when gamma dose rates, measured with the automess survey instrument on contact with the core, exceeded 10 μ Sv/h. If removable contamination levels exceed 5.0 Bq/cm² for beta/gamma over 300 cm² the affected surface or equipment must be cleaned. During the 2013 field season the gamma dose rates did not exceed 10 μ Sv/h, thus further contamination monitoring was not required.

Dosimetry Monitoring Program

Dosimetry monitoring is conducted to document and determine worker exposures to radiological components which include gamma radiation, RnP, and LLRD. No dosimetry action levels were exceeded during the 2013 program. The worker radiation doses observed were well below regulatory dose limits for members of the public of one millisievert per annum (1 mSv/a) and occupational workers (20 mSv/a).

Gamma Exposures

The largest component of radiation exposure during uranium exploration activities is expected to come from gamma radiation emitted from mineralized core, rock and drill cuttings.

^{**}Becquerels per cubic meter

A AREVA

Worker exposures to external gamma radiation were measured using optically stimulated luminescent dosimeters (OLDs) provided by the licensed dosimetry provider, Landauer Inc. For exposure control, workers handling and logging radioactive drill core and rock samples were also issued direct reading dosimeters (DRDs). Action and Administrative Levels are set for gamma radiation dose rates which are measured using the automess survey instrument. Action levels were never exceeded during the 2013 field season. Worker gamma radiation exposures ranged from 0 mSv to 0.06 mSv with an average exposure of 0.017 mSv.

Radon Progeny and Long-Lived Radioactive Dust Exposures

Worker exposures to radon progeny (RnP) and long-lived radioactive dust (LLRD) are estimated from industry-accepted area monitoring techniques and occupancy time information. During the 2013 program, worker exposures from RnP and LLRD ranged from 0.0004 mSv to 0.0023 mSv with an average exposure of 0.0016 mSv.

Total Effective Exposure

The maximum annual dose permitted for an occupational worker is 50 mSv in a given year or an average of 20 mSv/a over 5 years. The maximum annual dose for a member of the public is 1 mSv/a. Total effective exposure for Kiggavik personnel was calculated for each individual based on OLD results, RnP and LLRD radiological monitoring results and time occupancy information. The maximum dose received by an individual working at Kiggavik in 2013 was 0.062 mSv, and the average dose was 0.018 mSv. Therefore, the Kiggavik personnel exposures were below the regulatory limit for members of the public (see Figure 4.2-1).



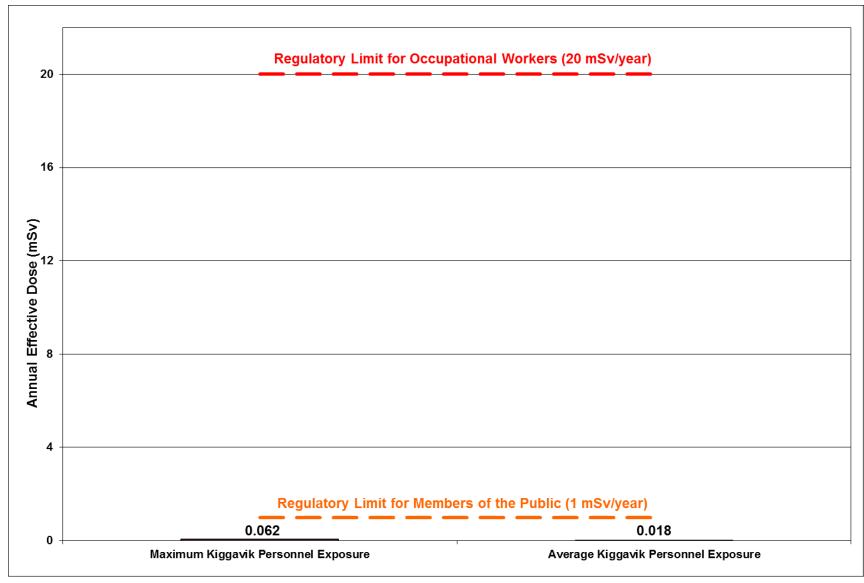


Figure 4.2-1 2013 Kiggavik Personnel Annual Effective Dose



5 SUMMARY OF LOCAL HIRES AND INITIATIVES

An important aspect of the Kiggavik Project is that it brings employment and business opportunities to local residents. In 2013, local people were hired for work carried out at the Kiggavik camp and in Baker Lake. Local companies were successful in winning contracts. In addition to providing direct employment and business contracts, AREVA sponsored several events in the Kivalliq region in 2013.

5.1 LOCAL EMPLOYMENT

The Kiggavik Project provided employment to local people through direct hiring as well as by hiring local companies to supply labor services to the Project. During 2013, the project hired two local people directly – a Community Liaison Officer who worked afternoons throughout the year and a Community Relations Assistant who worked during the summer. A third Beneficiary person was hired by AREVA to work at the Cluff Lake site in northern Saskatchewan throughout the summer to work on environmental monitoring of the decommissioned site.

The Project contracted Inuit workers through PEL, a company based in Baker Lake, for camp operations and maintenance, wildlife monitoring, a temporary Environment Technician, and geological assistants. The Project's drilling contractor, Boart Longyear, also had four graduates (two of which are shown in Photograph 5.1-1) from the Arviat drill program working at the Kiggavik site throughout the 2013 field season. Table 5.1-1 summarizes the employment provided to local Inuit workers for the past 5 years.

2009 2010 2012 2013 2011 Inuit Inuit Inuit Inuit Inuit Hours Hours Hours Hours Hours **Workers** Workers Workers Workers Workers Local **AREVA** 3 2993 3 3076 2* 2044 3* 1830 3** 2059 **Employees** Contracted 31 10,205 27 6495 17 4980 10 4332 19 6752 Workers Total 34 13,198 30 9571 7024 6162

Table 5.1-1 Local Employment

^{*} Includes a non-Inuit local Community Relations Assistant from Baker Lake who worked in Baker Lake during the summer

^{**}Includes Inuit worker hired by AREVA to work at the Cluff Lake site





Photograph 5.1-1 Drill Helper Graduates from the Arviat Drill Program

5.2 LOCALLY CONTRACTED WORK

Many goods and services obtained for the Kiggavik Project in 2013 were contracted to local suppliers. The total value of the contracts to local vendors in 2013 was \$3.4M, approximately 50% of the total exploration and mine development contract expenditures of \$6.8M. Much of this work went to companies with offices in Baker Lake and Rankin Inlet. There was also accommodation and meals in other Kivallig communities.

Table 5.2-1 summarizes the value of contracts awarded to northern businesses since 2007. The work contracted to local companies in 2013 consists of:

- Diesel and jet fuel
- Expediting and transportation
- Environmental Assessment studies
- Helicopter services
- Groceries
- Meals and accommodations
- Translation services
- Cleaning services
- Labour
- Office utilities
- Construction of core boxes and core racks



Table 5.2-1 Kiggavik Project Northern Contracts

	2007	2008	2009	2010	2011	2012	2013	Total
Inuit Owned companies*	\$1.0M	\$1.75M	\$1.4M	\$2.2M	\$2.4M	\$2.2M	\$2.30	\$13.25M
Nunavut companies**	\$0.90M	\$1.2M	\$0.76M	\$1.00M	\$0.36M	\$0.5M	\$0.55	\$5.26M
Other Northern Companies***	\$0.75	\$1.2M	\$0.60M	\$0.33M	\$0.26M	\$0.06M	\$0.58M	\$3.79M
Total Northern Expenditures	\$2.65M	\$4.15M	\$2.75M	\$3.5M	\$3.03M	\$2.76M	\$3.43	\$22.30M
Total Contract Expenditures	\$8.5M	\$13.7M	\$14.5M	\$12.5M	\$9.2M	\$7.1M	\$6.8M	\$72.60M
% spent total northern	30%	30%	19%	28%	33%	39%	50%	33%
% spent Inuit owned Firms	11%	13%	10%	18%	26%	31%	34%	20%

^{*}Companies qualifying as Inuit owned Firms

5.3 SPONSORSHIPS AND DONATIONS

The Kiggavik Project has sponsored community events in Baker Lake and other communities in the Kivalliq since 2006. Sponsorships were given to educational, community, cultural and sports events and celebrations. The list of events sponsored and donations given in 2013 is shown in Table 5.3-1.

Table 5.3-1 Sponsorships and Donations for 2013

Category	Organization	Activity	
	Baker Lake	Hamlet Days feast	
Community	Dance Club	Dance Event	
	Baker Lake Hospice Society	Dinner at Christmas	
	Baker Lake Ladies Volleyball	Tournament	
Sports and Boarcation	Baker Lake Dog Races	Tournament	
Sports and Recreation	Baker Lake Snowmobile Club	Race	
	Chesterfield Inlet Fishing Derby	Fishing Derby	
	Kivalliq Science Camp	Kivalliq Communities	
Education	Actua	Program Support	
	Northern Youth Abroad	Program Support	
	Baker Lake	Science Camp	

^{**}Companies not Inuit owned Firms but with offices in Nunavut and a significant number of Inuit employees

^{***}Northern based companies from outside of Nunavut



Category	Organization	Activity
	Baker Lake grade school awards	Graduation
	Baker Lake	Scavenger Hunt
	Coral Harbour School	Exchange Trip
	High School awards	7 communities graduation
	Back River Visit	Visit to Homeland
Culture	Fashion Show	Baker Lake Nunavut Day
	Bowhead Whale Hunt	Repulse Bay
Environment	Spring cleanup	Baker Lake
Haralda O Osfata	Baker Lake Search and Rescue	Helicopter support for searched
Health & Safety	Baker Lake BLAST	Suicide Prevention Walk in Baker Lake



6 COMMUNITY ENGAGEMENT

AREVA recognizes that for success of the Kiggavik Project, AREVA will need the support of the people in the region. Information sharing and community engagement are not only requirements of the environmental assessment process, but also one of AREVA's corporate commitments. This section presents the engagement activities that were carried out by AREVA in Nunavut in 2013 primarily for the environmental assessment process. The exploration program carried out at Kiggavik was discussed at some of these events.

6.1 INFORMATION SHARING

6.1.1 Information Office

AREVA has operated an information office in Baker Lake since August of 2006. The office continued to be open to the public throughout 2013 on a daily basis. A bilingual Community Liaison Officer was present each afternoon to speak with visitors. Between June and August, a full time Community Relations Assistant was also working in the Information office.

6.1.2 Kiggavik Project Community Liaison Committee

The Kiggavik Project established a Community Liaison Committee (CLC) in December 2006 as a means of maintaining community involvement in Baker Lake. Committee members are appointed by their respective organizations and a community member is elected as Chair of the Committee.

The organizations represented on the CLC are:

- Hamlet Council
- Elders Society (male and female representatives)
- Youth Group (male and female representatives)
- District Education Authority
- Hunter and Trappers Organization
- Health Committee
- Justice Committee
- Business Community
- Aberdeen Lake People



During 2013, the Baker Lake CLC met on 4 occasions and 4 members of the group attended a tour of the McClean Lake Uranium Mill in Saskatchewan. The dates are shown in Table 6.1-2. Meetings were held at the AREVA Information Office in Baker Lake and were open to the public. Meeting announcements were made on the local radio with the date, time and location. Following the meetings, radio announcements were made to provide Baker Lake residents with a meeting summary. Translation was provided and minutes were kept of each meeting. Meeting minutes are available at the information office in Baker Lake and are posted on the Kiggavik blog www.kiggavik.ca.

The Baker Lake CLC provided community advice to the Kiggavik Project throughout the year. Following is a summary of topics discussed with the CLC:

- Updates of Project activities including the field program, the overland haul, environmental baseline work and permits
- Updates on the environmental assessment process
- The Tour of Kivalliq Communities
- Information and updates on local employment opportunities and sponsorships

6.1.3 Kiggavik Blog

On June 29, 2010 a new communication initiative, the Kiggavik Blog www.kiggavik.ca went live. In May 2013 the look of the website changed. This website contains project information, a schedule of events and allows for the public to ask questions. Statistics for the blog are shown in Table 6.1-1. Blog activity was fairly consistent throughout the year with the highest activity between February and July. There were 4,670 site visits in 2013, compared with 4211 in 2012 and 5,649 in 2011.

Table 6.1-1 Statistics for Kiggavik Blog

Month	Site Visits	Page views	Unique visitors	Ave Pages viewed per visit
December 2013	355	1106	284	3.12
November 2013	299	1030	241	3.44
October 2013	270	993	223	3.68
September 2012	272	808	193	2.97



Mor	nth	Site Visits	Page views	Unique visitors	Ave Pages viewed per visit
August	2013	300	1042	231	3.47
July 2	2013	451	1345	300	2.98
June 2	2013	347	989	254	2.85
May 2	2013	548	2218	412	4.05
April 2	2013	417	998	333	2.39
March	2013	455	1187	330	2.61
Februar	y 2013	592	1292	422	2.18
January	/ 2013	364	946	293	2.6
	2013	4670	13954	3516	
Totals	2012	4211	10589	3075	
IOIAIS	2011	5649	12986	4657	

6.1.4 Summary of Meetings and Events

AREVA has engaged in a series of initiatives to inform, consult with and involve the community in the Kiggavik Project since 2005. The initiatives and events carried out in 2013 are detailed in this section and are listed in Table 6.1-2. Included are events that were organized by AREVA as engagement for the environmental assessment and as part of community involvement. The majority of events occurred in Kivalliq communities or with organizations from Kivalliq communities. Some events took place with communities outside the Kivalliq Region. The various activities are discussed in the remainder of the section.



Table 6.1-2 Community Information, Involvement and Engagement Activities - 2013

Community	Group	Date	Purpose/ Topic
		Feb 20	Overland Haul, wildlife monitoring, local hires, status of Kiggavik Environment Assessment, 2012 Open House Tour discussed
		Jun 1	Kiggavik Technical Meetings, Community Roundtable, and Pre-Hearing Conference discussed
	Community Liaison Committee	Jul 22	The Kiggavik Environmental Assessment, health and safety operations at Kiggavik and the planned tour of Saskatchewan Mines were discussed.
		Oct 23	The 2013 field season at Kiggavik, the status of the Kiggavik Environmental Assessment, the planned 2013 Open House tour and the planned tour of the Saskatchewan Uranium Mine were discussed
		Dec 3-4	Representatives attended the tour of the McClean Lake Uranium mill
	НТО	Feb 21	Meeting to discuss Information Requests
	HIO	Dec 3-4	Representative attended tour of McClean Lake
	ake Hamlet	Feb 21	Update meeting with Mayor in Baker Lake
Baker Lake		May 9	Update meeting with Mayor in Baker Lake
Hamlet		Nov 13	Update meeting with Mayor in Baker Lake
		Dec 3-4	Representative attended tour of McClean Lake
	CLARC	Apr 26	Meeting with Community Lands & Resources Committee (CLARC) in Baker Lake
		Jul 22	CLARC visit to Kiggavik
	Elders	May 8	Meeting with Baker Lake Elders to discuss the Kiggavik Project
		Aug 22	Baker Lake Elders visit to Kiggavik
		Sep 5	Workshop on IQ with Elders in Baker Lake
	IA High Cohool	Nov 13	EA and Radiation Protection discussion
	JA High School	Dec 3&4	Teacher and 3 students attended tour of McClean Lake
	Community	July 9	Fashion Show
	Community	Nov 13-14	AREVA Open House re DEIS
Arviat	Hunters and Trappers Organization	Dec 3-4	Representative attended Representative attended tour of McClean Lake
	High School		Discussion about Kiggavik and EA



Community	Group	Date	Purpose/ Topic	
	Community	Nov 21	AREVA Open House re DEIS	
	Hunters and Trappers	Nov 18	Meeting to discuss DEIS & monitoring jointly with council	
	Organization	Dec 3-4	Representative attended tour of McClean Lake	
Chesterfield	Homlet	Nov 18	Meeting to discuss DEIS & monitoring jointly with HTO	
Inlet	Hamlet	Dec 3-4	Representative attended tour of McClean Lake	
	High School	Nov 18	Discussion about Kiggavik and EA	
	Community	Nov 18	AREVA Open House re DEIS	
	Hunters and Trappers Organization	Dec 20	Meeting to discuss DEIS and & monitoring	
Rankin Inlet	High School	Nov 20	Discussion about Kiggavik and EA	
	Community	Nov 20	AREVA Open House re DEIS	
	Hamlet	Nov 19	Project update to Council & senior staff	
	Hamlet	Dec 3-4	Representative attended tour of McClean Lake	
Whale Cove	Hunters and Trappers Organization	Dec 3-4	Representative attended tour of McClean Lake	
	High School	Nov 19	Discussion about Kiggavik & EA	
	Community	Nov 19	AREVA Open House re DEIS	
Coral Harbour	Hamlet & HTO	Dec 3-4	Representatives attended tour of Mcclean Lake	
	Homlet	Nov 15	Meeting with Mayor & Council	
	Hamlet	Dec 3-4	Representative attended tour of McClean Lake	
Populae Pov	High School	Nov 15	Discussion about Kiggavik and EA	
Repulse Bay	Hunters and Trappers Organization	Nov 15	Meeting re Kiggavik EA	
		Dec 3-4	Representative attended tour of McClean Lake	
	Community	Nov 15	AREVA Open House re DEIS	
	KIA	Jan 16	Meeting in Winnipeg with staff and consultants to discuss Information Requests	
Regional Organizations, Inuit, Government and IPG		Feb 21	Meeting with staff in Baker Lake	
		Sep 26	Presentation update at KIA Annual General Meeting in Rankin Inlet	
meetings		Dec 3-4	KIA representatives attended tour of McClean Lake	
	NIRB	May 28-31	Technical Meeting in Rankin Inlet	



Community	Group	Date	Purpose/ Topic
		Jun 4-6	Community Roundtable and Pre-Hearing Conference in Baker Lake
	Nunavut Mine Training Roundtable	Apr 10	Annual meeting in Iqaluit
	Kivalliq Wildlife Board	Oct 31	Project EA wildlife update at annual general meeting in Arviat
	Kivalliq Mayors	Sept 10	Presentation at Annual meeting in Rankin Inlet
	Kivalliq Science Camp	Sep 5	Presentations and interactive meeting with the science camp in Baker Lake
	BQCMB	Nov 21	Discussion of Technical Comments at annual meeting in Winnipeg
	Athabasca Working Group	Sep 12	Presentation and discussion re Kiggavik EA at McClean Lake
	Kivalliq Socioeconomic Monitoring Committee	Nov 26-27	Annual Meeting in Arviat
	Northern Project Management Office	Jan 29	Update meeting in Vancouver
		April 9	Update meeting in Iqaluit
	CNSC and NRCan	Jan 9	Meeting in Ottawa to discuss Information Requests
	Department of Fisheries & Oceans	Jan 10	Meeting in Iqaluit to discuss Information Requests
	Federal Senator for	Jan 31	Project Update meeting in Vancouver
	Nunavut	Oct 1	Project Update meeting in Rankin Inlet
	Federal and Territorial Departments	Jan	Meeting in Iqaluit to discuss Information Requests
	GN ED&T	May 10	Meeting with staff member in Rankin Inlet re Technical Comments
	Chamber of Commerce	March 26	Project Update Presentation
	Hudson Bay Roundtable	Apr 25-25	Meeting and presentation at Annual meeting



Hamlet Representatives

Kiggavik team members met with the Mayors or Hamlet Representatives of Baker Lake, Chesterfield Inlet, Whale Cove, and Repulse Bay. Meetings were for an annual update of the status of the project with a focus on the Draft Environmental Impact Statement submitted in 2012.

Representatives of the Hamlets of Baker Lake, Chesterfield Inlet, Repulse Bay, Coral Harbour and Whale Cove attended the tour of the McClean Lake Uranium Mill in Saskatchewan in December. AREVA gave a presentation to the Kivalliq Mayors at their annual meeting on September 10 in Rankin Inlet.

Hunters and Trappers Organizations

The seven Hunters and Trappers Organizations were engaged in 2013. A meeting to discuss information requests was held with the Baker Lake HTO. Meetings about the EA and monitoring were held with the HTO's in Rankin Inlet, Chesterfield Inlet and Repulse Bay during the tour of Kivalliq communities in November. Representatives from the HTOs in Baker Lake, Coral Harbour, Repulse Bay, Rankin Inlet, Whale Cove and Arviat attended the tour of the McClean Lake uranium mill in December.

AREVA met with the Kivalliq Wildlife Management Board on October 31 for a project update meeting during their Annual General Meeting in Arviat.



6.2 KIVALLIQ COMMUNITY INVOLVEMENT

Community involvement for the Kiggavik project began in 2006. Community involvement activities are described in the following sections

6.2.1 High School Visits and Awards

The Kiggavik Project has been speaking with high school students in the Kivalliq region since 2006. The Award of Excellence is presented to the graduating high school student showing proficiency in math, science and Inuktitut. It has been awarded to a Baker Lake high school student each year since 2006. Since 2009, it has been awarded to a high school student in each of the seven Kivalliq communities. In 2013, a student at each high school was presented with of an Award of Excellence.

During the tour of Kivalliq communities in November, discussions on the Kiggavik Project, mining in general and the Nunavut environmental assessment process were held with classes in Baker Lake, Repulse Bay, Chesterfield Inlet, Rankin Inlet, Whale Cove and Arviat. In December, a teacher and three students from the minerals and energy class from the Jonah Amitna'aq High School in Baker Lake attended the tour of the McClean Lake Uranium Mill in Saskatchewan.

In September, AREVA participated in the Kivalliq Science Camp held in Baker Lake by having discussions about geology, environment and radiation protection and the Nunavut Environmental Assessment process. Photograph 6.2-1 shows AREVA staff speaking with a group of students at the Kivalliq Science Camp.





Photograph 6.2-1 Kivalliq Science Camp, September 5, 2013

6.2.2 Baker Lake Summer Community Involvement

The 2013 summer events are summarized below.

AREVA sponsored a traditional fashion show in Baker Lake on July 9. Inuit of all ages dressed in traditional Inuit clothing and were judged in various categories with prizes awarded. There were four categories from age 2 to adults. This is the fourth year AREVA sponsored a fashion show in Baker Lake. Photograph 6.2-2 shows fashion show participants. On July 20, AREVA held a scavenger hunt for Baker Lake youth. AREVA was a sponsor of a suicide prevention walk held on August 9.





Photograph 6.2-2 Fashion Show Participants, July 9, 2013

6.2.3 Homeland Visits

An initiative for people with close ties to the area where the Kiggavik Project is located began in 2006 and continues. Each visit consists of one or more Inuk, who was born on the land, along with family members traveling by helicopter and visiting a location where they lived on the land. The AREVA Community Liaison Officer normally accompanies the group on the visit. Since the start, 116 people have participated in 27 homeland visits. Three visits occurred in 2013.

A summary of the homeland visits to date is provided in Table 6.2-1. As shown in Photograph 6.2-3 and Photograph 6.2-4 Baker Lake elders visited their homelands.

Date Location **Community Participants** Aberdeen Lake and Beverly Jul-27 12 Lake 2006 Aberdeen Lake and Beverly 3 Jul-28 Lake Aberdeen Lake 3 Aug-24 Schultz Lake and Aberdeen 2007 Aug-17 4 Lake

Table 6.2-1 Homeland Visits

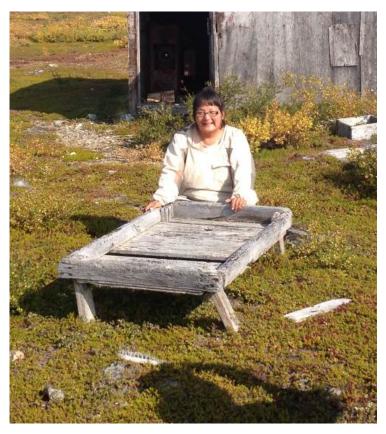


7	otal	27 Homeland visits	116 Participants
	September 3	Gary Lake, Priest House, Aigauganayuk Lake	4
2013	August 13	Ferguson Lake	4
	July 24	30 Mile Lake, Long Lake and Princess Mary lake	5
	Sept 1	Mallory Lake	4
	Aug 31	Garry Lake	4
	Aug 20	Qikiqtaqyualik	4
2012	Aug 17	Kazan River	4
	Aug 14	308 Lake	3
	Aug 6	Aleksektok Rapids	4
	July 30	30 Mile Lake, Kazan River	5
2011	Jun-21	Kazan River	4
2010	Aug-29	Aberdeen Lake	4
	Aug-28	Ferguson Lake	4
	Sep-10	Sand Lake	4
	Sep-09	Shultz Lake and Aberdeen Lake	4
2009	Aug-13	Aberdeen Lake	4
	Aug-12	Aberdeen Lake and Beverly Lake	4
	Aug-11	Garry Lake	4
	Sep-07	Herman River	4
	Sep-06	Schultz Lake	4
2008	Sep-05	Mallory Lake	4
	Aug-21	Judge Sissons Lake	5
	Aug-21	Schultz Lake	4





Photograph 6.2-3 Homeland Visit on September 3, 2013



Photograph 6.2-4 First Family Home; Wooden Bed August 13, 2013



6.3 SITE TOURS

Since 2005, community and other stakeholder groups have taken tours of uranium mines in Saskatchewan and the Kiggavik site.

6.3.1 Saskatchewan Minesite Tours

Since 2005, AREVA has hosted eleven tours of Saskatchewan mine sites with 163 participants. Two Saskatchewan Mine tours were carried out in 2013. A list of tours carried out since 2005 is provided in Table 6.3-1.

Table 6.3-1 Tours of Saskatchewan Mines

Date		Group		Tour and meetings
Sep 13-15			Governments and co- management boards	Toured McArthur River and McClean Lake and held meetings in Saskatoon with
	Sep 13-15	14	32 from NTI, the three RIA's and the mayor of Baker Lake.	Saskatchewan Environment, CNSC and Environmental Quality Committee members
2005	Sep 19-21	32	NTI, the three RIA's and the mayor of Baker Lake.	Toured McArthur River and McClean Lake and met with Saskatchewan northerners who have worked with uranium mines.
	Oct	11	Councillors, elders, students, hunter/trappers and business people from Baker Lake	Toured McArthur River and McClean Lake
2007	Sep 11-13	12	NPC Commissioners and Staff	Toured McArthur River, McClean Lake and Cluff Lake and met with EQC reps in LaRonge
	May 24, 22	8	Regional Committee members	Toured McClean Lake and Cluff Lake and
	May 21-22	1	Arctic College representative	met with the McClean Lake Elder
2008	Jun 21-22	7	Staff members from Government of Nunavut Departments	Toured McClean Lake and Cluff Lake
	Jul 15-17	12	KIA Board Members and Staff	Toured McClean Lake and Cluff Lake and met with AREVA and CAMECO representatives in Saskatoon
	Oct 6-7	11	Kivalliq Wildlife Management Board	Toured McClean Lake and Cluff Lake and met with McClean Lake elder and AREVA
		9	CLC	staff from the northern affairs office in



Date		Group		Tour and meetings
		5	Minerals Class from JA High School	LaRonge.
		2	Regional Committee	
2009	Jul-14	2	INAC representatives	Toured McClean Lake
2013	June 26	15	NIRB & CNSC representatives	Toured McClean Lake
2013	December 3&4	22	CLC, Hamlet, HTO, School, KIA	Toured McClean Lake
Total	11 tours	163	Visitors	

6.3.2 Kiggavik Site Tours and Visits

Community people have been visiting the Kiggavik site since 2005. There were two community visits to Kiggavik in 2013. On July 22, three members of the Baker Lake community Lands and Resources Committee visited Kiggavik. On August 22, 9 Baker lake Elders visited. A list of the stakeholder and community visits to Kiggavik since 2005 is provided in Table 6.3-2.

Table 6.3-2 Site Visits to Kiggavik

Date		Group		Visit
2005	Aug-23	4	Baker Lake elders	Visit after 2003 and 2004 cleanup
	Jul-27	12	Homeland visitors	Visit Kiggavik site during homeland visit
2006	Jul-28	3	Homeland visitors	Visit Kiggavik site during homeland visit
	Aug-24	3	Homeland visitors	Visit Kiggavik site during homeland visit
2007	Aug-12	10	CLC & community members	Tour of camp, core area and drilling
	Aug-17	4	Homeland visitors	Visit Kiggavik site during homeland visit
	Jun-12	7	Premier, Mayor and group	Tour of camp, core area and drilling
	Aug-21	8	CLC	Tour of camp, core area and drilling
2008	Aug-27	5	Regional Liaison Committee	Tour of camp, core area and drilling
	Sep-05	4	Homeland visitors	Visit Kiggavik site during homeland visit
	Sep-06	4	Homeland visitors	Visit Kiggavik site during homeland visit
2009	Aug-11	4	Homeland visitors	Visit Kiggavik site during homeland visit



Date		Group		Visit
	Aug-12	4	Homeland visitors	Visit Kiggavik site during homeland visit
	Aug-13	4	Homeland visitors	Visit Kiggavik site during homeland visit
	Aug-19	12	CLC and DEA reps	Tour of camp and core area
	Sep-09	4	Homeland visitors	Visit Kiggavik site during homeland visit
	Sep-10	4	Homeland visitors	Visit Kiggavik site during homeland visit
	Jul-20	3	Blog Question Contest Group	Tour of camp and core area
	Jul-25	3	Shultz lake group	Visited Kiggavik following a visit to Schultz Lake
	Aug-07	3	Community members	Tour camp and core area
	Aug-22	8	CLC	Tour of camp and core area
2010	Aug-24	3	НТО	Tour of camp and core area
	Aug-25	7	Elders	Tour of camp and core area
	Aug-25	3	Blog question Contest Group	Tour of camp and core area
	Aug-25	2	Mayor and one other	Tour of camp and core area
	Aug-29	4	Homeland Visitors	Visit Kiggavik site during homeland visit
2011	Jun-21	3	Mineral and Energy Class from JA High School	Tour of camp and core area
	Aug-11	4	Bloq Question and Youth Forum Group	Tour of camp and core area
2012	Aug-14	8	CLC Visit	Tour of camp and core area
2013	Jul-22	3	CLARC Visit	Tour of camp and core area
2013	Aug-22	9	Tour of Elders	Tour of camp and core area
Totals		147	Visitors	



APPENDIX A – COMPLIANCE WITH CONDITIONS

The following sections list the conditions of the Nunavut Impact Review Board (NIRB) Screening Decision, the Aboriginal Affairs and Northern Development Canada (AANDC) Land Use Permit, the Kivalliq Inuit Association (KIA) Land Use Licence and the Nunavut Water Board (NWB) Water Licence for the Kiggavik Project and also describe the means by which the Project has achieved compliance with these conditions.

6.4 NUNAVUT IMPACT REVIEW BOARD FILE NO. 06AN085

On March 26, 2008 NIRB re-issued the original terms and conditions (<u>April 3, 2007 Screening Decision</u>) along with the additional terms and conditions outlined in the August 30, 2007 and January 9, 2011 letters.

6.4.1 Original NIRB Screening Decision – April 3, 2007

RECOMMENDATION/CONDITION	COMPLIANCE ACTION
AANDC imposed mitigation measures,	Refer to Section 6.7 AANDC.
conditions and monitoring requirements	
pursuant to the Federal Land Use Permit,	
which require AREVA (the Proponent) to	
respect the sensitivities and importance of the	
area. These mitigation measures, conditions	
and monitoring requirements should be in	
regard to:	
a. Location and Area	
b. Time	
c. Equipment	
d. Methods and Techniques	
e. Control or Prevention of Flooding,	
Erosion and Subsidence of Land	
f. Use, Storage, Handling and Disposal	
of Chemical or Toxic Material	
g. Wildlife and Fisheries Habitat	



RECOMMENDATION/CONDITION	COMPLIANCE ACTION
h. Objects and Places of Recreational, Scenic and Ecological Value i. Petroleum Fuel Storage j. Matters Not Consistent with Regulations	
AANDC must consider the importance of conducting regular Land Use Inspections, pursuant to the authority of the Federal Land Use Permit, while the project is in operation. The Land Use Inspections should be focused on ensuring the Proponent is in compliance with the DIAND Caribou Protection Measures.	AANDC conducted a field inspection pursuant to the Federal Land Use Permit on July 19, 2013. Refer to section 1.5.1 for details on this inspection.
KIA imposed mitigation measures and/or Environment Terms and Conditions pursuant to the IOL Licence in regard to: a. General Standards b. Fuel and Chemical Storage c. Campsites d. Fisheries e. Ground Disturbance f. Wildlife g. Any other conditions recommended by the appropriate Community Lands and Resource Committee (CLARC)	Refer to Section 6.8 KIA Land Use Licence.
Additional work (related to AANDC or KIA land applications) outside the original scope of the project proposal requires screening by NIRB; NIRB recommends any renewal request to be forwarded to them for re-screening	Continual communication efforts are made with all regulatory agencies and boards.
GN - DOE CO's should conduct random	The SHEQ Supervisor and Wildlife Monitor



RECOMMENDATION/CONDITION	COMPLIANCE ACTION
inspections of the location from May to August to monitor compliance with DIAND Caribou Protection Measures	met with the Conservation Officer on August 6 and wildlife reports were provided monthly. Priority will be given to arrangement of a site visit early in the 2014 season.
GN-DOE should conduct on-going review of wildlife monitoring results as required by WMMP	Monthly wildlife reports were submitted to GN-DOE during the duration of the 2013 field season.
After receiving the annual report, GN-DOE should report to NIRB and AANDC its findings regarding the possible impact of the Project on the Beverly and Ahiak caribou herds	No AREVA action required.
AANDC permit and KIA licence subject to any findings, direction or advice received from GN-DOE as result of 2007 GN/GNWT population surveys of the Beverly and Ahiak Caribou Herds.	No AREVA action required.
AREVA to maintain a copy of Screening Decision at the site	Located in the camp office and kitchen.
AREVA is to forward copies to NIRB of all permits obtained and required for the Project.	Ongoing.
AREVA to operate in accordance with proponent commitments stated in Appendix A (see 6.4.2 below)	Refer to Section 6.4.2 Summary of Proponent Commitments.
AREVA shall operate in accordance with commitments made in all the Operation Plans (namely Spill Contingency, Abandonment and Restoration, Noise Abatement, Waste Management, Wildlife Mitigation and	AREVA is committed to maintaining compliance as part of AREVA's commitment to continuous improvement. Operational Plans are reviewed at least once per year and revised more frequently if required. All



RECOMMENDATION/CONDITION	COMPLIANCE ACTION
Monitoring, Radiation Safety and the Environmental Code of Practice)	Operational Plans are submitted with this annual report as the Environmental Management Plans.
AREVA to submit annual report to NIRB, AANDC, KIA and GN-DOE by January 31 each year that the project is in operation commencing January 31, 2008.	Annual Reports have been submitted for 2007, 2008, 2009, 2010, 2011 and 2012. This submission represents the Annual Report for the 2013 exploration field program.
Shall abide by DIAND Caribou Protection Measures (see 6.4.4) and those mitigation measures outlined in the WMMP.	This is ongoing throughout the field season with employee/contractor training and awareness. This is monitored by AREVA staff and Wildlife Monitors. Refer to Section 6.4.4.
Prohibited to allow aircraft to take-off or land if groups of caribou are within 1 km of the airstrip or helipad.	Addressed in the Wildlife Mitigation and Monitoring Plan; pilots receive training and awareness; verified by a Wildlife Monitor. Refer to Section 3.6 for more information.
Update WMMP to include "Section 2.1 During June and July – To avoid injuries to caribou and humans, if one or more caribou approach within 1 km of drilling operations, then activities will be suspended until caribou leave the area." Any direction from GN-DOE or KIA regarding caribou management plan must be forwarded to NIRB.	Revised conditions established in previous Wildlife Mitigation and Monitoring Plan. GNDOE believes that 50 caribou is an appropriate threshold for the suspension of activities (December 16, 2008 letter to NIRB regarding INAC and KIA land use permit extension request). Monitoring program (including Inuit wildlife monitors) help to guide this protection measure.
Ensure no hunting or fishing without proper Nunavut authorizations	Employees and contractors made aware of required authorization during orientation and through on-going awareness. Employees request fishing licences from the SHEQ Supervisor who obtains them from the



RECOMMENDATION/CONDITION	COMPLIANCE ACTION
	Conservation Officer.
Compliance with the CWS for Dioxins and Furans, and the CWS for Mercury. Efforts to achieve compliance reported in annual report.	Refer to Section 3.2.1.
Adherence to conditions in Appendix B Archaeological and Paleontological Resources – Terms and Conditions for Land Use Permit Holders (see 6.4.3 below)	Refer to Section 6.4.3; hiring of an independent consultant to conduct heritage surveys and investigations
Shall avoid known archaeological and/or paleontological sites	Record of known sites is kept updated and sites are avoided or handled appropriately by consultants and responsible authorities.

6.4.2 Appendix A: Summary of Proponent Commitments

RECOMMENDATION/CONDITION	COMPLIANCE ACTION
Disturbance to permafrost mitigated through insulating floors of buildings, keeping sump and incinerator area small and raising incinerator above ground	In compliance through proper site planning.
Use walkways to minimize soil and vegetation disturbance	Walkways are present between all buildings at the cabin and geology areas of camp; additional boardwalk was constructed between the new core racks north of the core tents. The importance regarding the use of walkways is stressed during the site orientation.
The impact of helicopter and airplane noise and presence on wildlife and people will be mitigated by avoiding wildlife during flights and avoiding low flying. This will require ongoing	Ongoing through the implementation of the Wildlife Mitigation and Monitoring Plan; proper training and awareness to all site employees/contractors. Refer to Section 3.6



RECOMMENDATION/CONDITION	COMPLIANCE ACTION				
communication and diligence.	for more information.				
The presence of wildlife will be carefully monitored to ensure minimal disturbance. Daily wildlife siting records will be maintained and these will be used to plan work so that wildlife disturbance will be minimized. The information will also be provided to management boards and regulatory authorities.					
Use protective procedures and containments to protect water quality	Spill Contingency Plan.				
Grey water treated through sumps and carefully monitored to ensure containment	Prior to the completion of the 2012 season, a punctured barrel with sand and gravel was used to construct a sump for the grey water discharge. During the 2013 inspection, it was deemed adequate by the AANDC inspector. The sump was continuously monitored to ensure containment and filtration.				
No garbage to remain on site	Ongoing through the implementation of the Waste Management Plan.				
Camp to be decommissioned when no longer in use	Addressed in the Abandonment and Restoration Plan.				
No fuel, drill cuttings, chemicals, wastes or sediment will be deposited into any water body as per the <i>Fisheries Act</i> , S 36(3).	Ongoing through the implementation of the Waste Management Plan and the Spill Contingency Plan; proper training and awareness is provided to all site employees/contractors.				
Sumps, including those created for the	No sumps are located within the high water				



RECOMMENDATION/CONDITION	COMPLIANCE ACTION			
disposal of drill cuttings located above the high water mark of any water body to prevent contents from entering any water body frequented by fish	mark of any water body.			
Drilling additives or mud not to be used in connection with holes drilled through lake ice unless re-circulated or contained such that they do not enter the water or are demonstrated to be non-toxic	If such activities take place in the future, t proper methods will be applied to ensu			
Land-based drilling not to occur within 30 m of the high water mark of any water body	Ongoing through the implementation of the Environmental Code of Practice; proper training and awareness provided; regular inspections of drill sites performed by environment group. Any drilling within 30 m of the high water mark will be under an approved licence with applicable protection and mitigation measures in place to the satisfaction of the NWB and DFO.			
Material will not be stored on the surface ice of lakes or streams. Materials on ice surface must be for immediate use.	Any materials on ice surface are for immediate use and completely removed before the melting of the ice.			
If artesian flow is encountered, the drill hole will be immediately plugged and permanently sealed.	As approved by the NWB on March 14, 2012, AREVA is allowed to drill while under low flow artesian conditions within all areas encompassed by the Kiggavik Lease provided the appropriate measures are implemented (as outlined in Amendment approval). The amendment was further incorporated into the licence renewal for 2BE-KIG1318. Refer to			



RECOMMENDATION/CONDITION	COMPLIANCE ACTION				
	Section 3.3.2 for information regarding				
	artesians encountered during the 2013 field				
	season.				
Winter road travel will not begin until the	In compliance and ongoing. This is done by				
ground is sufficiently frozen to provide support	t following the Environmental Code of Practice;				
and to avoid surface damage and rutting	proper training and awareness is provided.				
Locate winter road stream crossings that will	Committed to conduct when required and				
minimize grades. Avoid bank disturbance and	achievable.				
mechanized clearing immediately adjacent to					
any watercourse.					
Winter road lake and stream crossings to be	Committed to conduct when required and				
constructed entirely of ice and snow materials	achievable.				
and stream crossings are to be removed or					
notched prior to spring break-up.					

6.4.3 Appendix B: Archaeological and Palaeontological Resources

Terms and Conditions for Land Use Permit Holders (Also attached to AANDC permit).

RECOMMENDATION/CONDITION	COMPLIANCE ACTION			
AREVA shall not operate any vehicle over a known or suspected archaeological or paleontological site	In compliance; use of ATV's only permitted around camp and for limited activities; addressed through proper training and awareness; included in site orientation.			
AREVA shall not remove, disturb, or displace any archaeological artifact or site, or any fossil or paleontological site	Site rule that is reinforced during orientation.			
AREVA will immediately contact the Dept. of	AREVA will promptly contact CLEY should any			



RECOMMENDATION/CONDITION	COMPLIANCE ACTION
Culture, Language, Elders and Youth (CLEY) should an archaeological site or specimen, or a paleontological site or fossil be encountered or disturbed by a land use activity.	site or specimen be encountered or disturbed.
AREVA will cease any activity that disturbs an archaeological or paleontological site until permitted to proceed by CLEY	In compliance through proper training and awareness; included in site orientation.
AREVA will follow CLEY and DIAND direction in restoring disturbed sites if required	AREVA strives to promptly follow-up on all recommendations/concerns.
AREVA will provide CLEY with requested information on sites encountered in the course of land use	Any information requested on sites encountered will be provided to CLEY.
AREVA will make best efforts to ensure all those working under a permit are aware of conditions concerning archaeological or paleontological sites	Training and awareness of archaeological and paleontological protocol is included in site orientation. Copies of all permits and licences are provided on site for reference.
AREVA shall avoid known archaeological or paleontological sites	Record of known sites is kept updated and avoided or handled by consultants on the advice/recommendations of responsible authorities.
AREVA shall have an archaeologist or paleontologist perform those functions required and permitted by CLEY.	In compliance; hiring of an independent consultant to conduct heritage surveys and investigations.



6.4.4 Additional NIRB Terms and Conditions

Terms and conditions contained in <u>August 30, 2007 letter</u>:

RECOMMENDATION/CONDITION

COMPLIANCE ACTION

Spill Contingency Plan

AREVA to consult and implement recommendations found in the 2003 CCME guidance document PΝ 1326 entitled of "Environmental Code **Practice** for Aboveground Storage Tank Systems Containing Petroleum Product and Allied Petroleum Products"

AREVA to revise Spill Contingency Plan regarding this amendment and conduct personnel re-training as per revised Spill Contingency Plan. AREVA to submit revised plan to NIRB and other regulators within 30 days of this decision

Revisions to include: quantity of the proposed double-walled tanks and the site layout plan; design considerations for safe operation and maintenance; operation, maintenance and inspection procedures and an emergency response plan.

The site layout and tanks have been designed by a consulting professional engineer and have been installed by а registered company/petroleum contractor to ensure compliance with the Canadian Council of Ministers of the Environment (CCME) Environmental Code of Practice Aboveground and Underground Storage Tank Systems Containing Petroleum and Allied Petroleum Products, 2003. In 2007 Golder Associates (Golder) conducted an engineering assessment to identify potential issues with the installation of storage tanks. Recommendations were provided for the foundation support for the storage tanks. To mitigate the potential issues described in the report, Golder recommended that the tanks be placed on timbers located under each saddle to provide an increased bearing area.

The use of timbers is a deviation from the CCME COP, however it should be noted that this is common practice in the area and AREVA received permission from the area Fire Marshal, Tim Hinds with the Government of Nunavut-Community and Government Services via email (Trevor Carlson, AREVA) on November 20th, 2007.



RECOMMENDATION/CONDITION	COMPLIANCE ACTION				
	All necessary changes and appropriate training requirements have been made in both the Project's Spill Contingency Plan and the Emergency Response Manual.				
Secondary containment or surface liner with adequate size and volume utilized during all fuel or hazardous substance transfers	In compliance and ongoing through the implementation of the Spill Contingency Plan and the Environmental Code of Practice.				
Sufficient absorbent materials and spill kits during fuel transportation, storage and transfers are provided					
Drilling and Disposal of Radioactive Substances					
Use of biodegradable and non-toxic additives (Canadian Environmental Protection Act lists CaCl ₂ as a toxic substance)					
Drill holes that encounter uranium mineralization with a content >1.0% over a length of >1 m with a meter-percent concentration greater than 5% should be sealed by cementing over the entire mineralization zone; this should be at least 10 m above and below each mineralization zone.	Committed to conduct when required and achievable as per Uranium Exploration Plan.				
All land-based artesian holes shall be documented, plugged and sealed with grout.	e Refer to section 3.3.2 for information regardinal artesians encountered during the 2013 fiel season.				
Core storage areas should be located at least 100 m from the high waterline of all water	Ongoing through the implementation of the Radiation Protection Program and appropriate				



RECOMMENDATION/CONDITION	COMPLIANCE ACTION				
bodies.	site planning.				
Physical E	invironment				
No movement of equipment or vehicles unless the ground is in a state capable of fully supporting the equipment or vehicles without rutting or gouging. Overland travel suspended if rutting occurs	communicated to employees and contractors during orientation and on-going awareness.				
Additional camp facilities to be located on gravel, sand or other durable land New sleeping units properly designed to prevent any degradation to permafrost	Is in compliance and is ongoing through site planning. All buildings/sleeping units built in 2007 and later are located on timbers placed on gravel to allow airflow underneath the building which prevents degradation to permafrost.				
Final inspections of entire site to be conducted by proponent and lead agency to ensure all areas have been reclaimed in accordance with authorizations	Addressed in the Abandonment and Restoration Plan				

Terms and conditions contained in <u>January 9, 2009 letter</u>:

RECOMMENDATION/CONDITION	COMPLIANCE ACTION				
The Proponent shall make all efforts to	In replacement of aerial surveys, ground				
minimize the use of aerial surveys to obtain	observations are utilized around camp and at				
information about caribou. It is recommended	the drill sites by the Wildlife Monitor. Satellite				
that the Proponent employ daily stationary	caribou collar data from the government is				
ground observations and satellite caribou	provided to AREVA. See Section 3.6 for				
collar data in obtaining the necessary	further details on wildlife monitoring and				
monitoring data.	mitigation.				



RECOMMENDATION/CONDITION	COMPLIANCE ACTION
The Proponent shall not conduct aerial surveys with flight altitudes less than 120 m above ground level between June 1 and August 15.	Aerial surveys are conducted for the purpose of gathering geophysical data. As included in the Wildlife Mitigation and Monitoring Plan, it is required that such surveys are conducted at an altitude \geq 120 m.
The Proponent shall not construct camps, cache fuel, conduct blasting or drilling activities, or operate ground, air, or marine based mobile equipment within 10 km of a 'designated and/or recognized caribou crossing' during periods of caribou migration.	There is no infrastructure or activities occurring within 10 km of a designated and/or recognized caribou crossing. Refer to the Wildlife Mitigation and Monitoring Plan appended to this report for further details on AREVA's requirements.
Where wildlife are present, AREVA shall maintain a minimum flight altitude of 610 m above ground level where it is safe to do so	This requirement is specified in the Wildlife Mitigation and Monitoring Plan and communicated to the helicopter pilots. Flight altitudes checks are conducted by AREVA personnel to confirm compliance.
The Proponent shall maintain a daily logbook of caribou observations and submit these records to the Government of Nunavut, Department of Environment on a monthly basis.	A wildlife log is maintained in the Kiggavik kitchen, camp office and in each helicopter for personnel to track wildlife sightings. Wildlife sightings made by the wildlife monitor are also recorded. All wildlife sightings are reported to the GN-DoE monthly during the field season. See Section 3.6 for further details on monitoring and mitigation.



6.5 DIAND CARIBOU PROTECTION MEASURES

Note that these conditions are also required by the KIA Land Use Licence, AANDC Land Use Permit and the NIRB Screening Decision.

RECOMMENDATION/CONDITION **COMPLIANCE ACTION** Caribou Protection Areas No activity, without approval of Land Use AREVA does not conduct any activity within Inspector, between May 15 and July 15 within the designated Caribou Protection Areas. the Caribou Protection Areas When caribou cows approach area of operation within the Caribou Protection Areas all personal not required for maintenance and protection of camp and equipment must leave the area. Activities within the Caribou Protection Areas occurring between May and July may be permitted by the Land Use Inspector if caribou cows are not expected to use the area for calving or post-calving. Caribou Protection - General Operations will be suspended within any area These requirements are included in the occupied by cows and calves between May 15 Wildlife Monitoring and Mitigation Plan. and July 15 in the event caribou cows calve Employees are made aware of these outside the designated Caribou Protection commitments and they are monitored by Areas. AREVA staff and Wildlife Monitors. See Section 3.6 for further information. The following operations will be suspended in the presence of caribou cows and calves: blasting



RECOMMENDATION/CONDITION	COMPLIANCE ACTION			
overflights at <300m above ground				
snowmobile and ATV use outside vicinity of				
camp				
Caribou Protection - Migration				
No operation will block or cause diversion to	Ongoing through the implementation of the			
migration	Wildlife Mitigation and Monitoring Plan; proper			
All activities that may interfere with migration	training and awareness provided to all site employees/contractors			
will cease during migration	employees/contractors			
Caribou Crossing				
No camp construction, caching of fuel or	Ongoing through the implementation of the			
blasting will occur within 10 km of a	Wildlife Mitigation and Monitoring Plan; proper			
Designated Caribou Crossing between May 15	training and awareness provided to all site			
and September 1	employees/contractors.			
No diamond drilling operations within 5 km of a				
Designated Caribou Crossing between May 15				
and September 1				
Additional				
Concentrations of caribou should be avoided	Ongoing through the implementation of the			
by low level aircraft at all times	Wildlife Mitigation and Monitoring Plan; proper			
	training and awareness provided to all pilots.			
	Refer to Section 3.6 for more information			



6.6 NUNAVUT PLANNING COMMISSION KEEWATIN REGIONAL LAND USE PLAN CONFORMITY DETERMINATION

The Kiggavik Project received a positive conformity determination for advanced exploration on December 15, 2006, which is further outlined in the table below.

RECOMMENDATION/CONDITION COMPLIANCE ACTION Archaeological Sites and Artifacts Artifacts must be left where they are found. All During orientation, personnel are informed land users are responsible for reporting the responsibility to of their report the location of, or any removal or disturbance of, discovery of archaeological sites artifacts to CLEY. artifacts. They are also informed that they shall not disturb known or suspected sites or artifacts. The NPC and CMC shall continue to hold a AANDC Land Use Permit N2009C0017 central registry of archaeological sites and and the site orientation inform all continue to monitor land use activities to protect employees of these requirements. these sites. Information about the location and identity of archaeological sites in specific areas, and the measures necessary to protect them, shall be included in land use permits. Land users shall report the discovery of all suspended archaeological sites to CLEY.

Caribou Protection

Development activities shall be prohibited on all public lands and waters within all caribou calving areas during calving season and within caribou water crossings in the Keewatin, in accordance with the terms of DIAND caribou protection measures contained in Appendix H. Development activities shall be prohibited on IOL within all

KIA Land Use Licence KVL306C02 and AANDC Land Use Permit N2009C0017

These requirements are included in the Wildlife Monitoring and Mitigation Plan. Employees are made aware of these commitments and they are monitored by AREVA staff and Wildlife Monitors. See



RECOMMENDATION/CONDITION **COMPLIANCE ACTION** caribou calving areas during calving season and Section 3.6 for further information. within caribou water crossings in the Keewatin, in accordance with the KIA caribou protection measures (an example of which is contained in Appendix H). These measures shall be enforced throughout the region by DIAND, KIA and DSD, to the full extent of their respective jurisdictions. During the caribou calving, post-calving and Ongoing through the implementation of the migrating seasons, land use activities should be Wildlife Mitigation and Monitoring Plan; restricted to avoid disturbing caribou, in general, proper training and awareness provided to and activities will be governed more specifically all site employees/contractors. by caribou protection measures such as those contained in Appendix H. Cleanup and Pollution Community residents in particular, and all land The Spill Contingency Plan, Abandonment users in general, shall be actively involved in Restoration and Waste and Plan, planning and conducting cleanup operations, Management Plan outline the cleanup whenever possible and practicable. requirements and describe the methods for handling waste. This includes proper Refuse, such as fuel drums and scrap metal, sorting and disposal of wastes. Personnel shall be recycled where possible. trained and made aware Sites containing toxic materials shall be given requirements during orientation. priority for cleanup, and the location of these sites shall be widely publicized to warn residents. Sites within or near caribou calving grounds, near water and near communities shall also be given priority for cleanup. New occurrences of pollution, garbage During site orientation, employees are contamination caused by anyone shall be made aware of the requirements as prevented. Land users shall ensure that all drums



RECOMMENDATION/CONDITION	COMPLIANCE ACTION				
are safely recovered.	described in the Spill Contingency Plan.				
The principle of "the polluter pays" shall apply to a strategy for cleaning up the environment. Where it is possible to identify the person, or company or agency responsible for creating an abandoned or inactive waste site, they shall be made responsible for the cleanup and restoration of the site.	expiry of the existing permits and licences in accordance with the Spill Contingency Plan, Waste Management Plan, and Abandonment and Restoration Plan.				
The landscape of each camp and other land use sites will be restored to its original condition to the greatest degree possible. When possible and feasible, old sites will be restored to the natural state. (Code of Good Conduct – Appendix G)	Abandonment and Restoration Plan, and will be completed prior to the expiry of				
Hydrocarbon Ex	xploration				
Hydrocarbon exploration shall continue to be restricted in the area encompassing southern Southampton Island and Coats Island, as at present.	The project proposal is not for hydrocarbon exploration in the area encompassing southern Southampton Island and Coats Island (Conformity Requirement 3.8 is not applicable).				
Hydroelectric De	velopment				
The possible cumulative impacts of additional hydroelectric power development in Manitoba, Ontario and Quebec on the ecosystem of Hudson Bay, James Bay and Hudson Strait must be examined before more hydroelectric development proceeds.	The project proposal is not for hydroelectric development (conformity requirement 2.13 is not applicable).				



RECOMMENDATION/CONDITION

COMPLIANCE ACTION

Local Purchase of Supplies and Services

Whenever practicable, and consistent with sound procurement management, land users will follow the practice of local purchase of supplies and services. (Code of Good Conduct, Appendix G)

AREVA employs people from the local community, and contractors employ from surrounding communities of the region. Various services and supplies are provided by local companies.

Low Level Flights

Generally, low-level flights by aircraft at less than 300 metres should not occur where they will disturb wildlife or people. If such flights are necessary, they should only take place after consultation with the appropriate communities. All land users are responsible for reporting to the land managers any illegal or questionable low-level flight.

Low level flights shall not take place unless absolutely necessary. Should they be necessary, pilots shall avoid disturbance to people and wildlife wherever possible.

project proposal does involve The absolutely necessary low level flights, the proponent has or will consult with the communities. and pilots will avoid wildlife and disturbance to people. Reasonable comments on the necessity of low-level flight (NPC, 2006).

These requirements are included in the Wildlife Monitoring and Mitigation Plan. Employees are made aware of these commitments and they are monitored by AREVA staff.

Mine Closure and Restoration

All proposals for mining developments shall include adequate plans for mine closure and restoration of the site.

The project proposal is not for mining development (conformity requirement 3.4 is not applicable).

Academic and / or Scientific Research

Local and traditional knowledge shall be sought and, when available and relevant, shall be The project proposal does not involve academic and/or scientific research



RECOMMENDATION/CONDITION	COMPLIANCE ACTION			
integrated with the scientific knowledge.	(conformity applicable).	requirements	are	not
Research programs conducted in the Keewatin	арріїсавіс).			
shall, where possible, rely on local services and				
local employment.				
All scientific researchers shall communicate with				
the communities in clear, non-technical language				
in Inuktitut and English. Scientific researchers				
shall communicate the results of their research to				
the communities.				
Academic and scientific researchers shall make				
all reasonable efforts to consults the NRI				
concerning research topics or fields that would be				
of benefit and interest to local residents.				

Transportation and/or Communications Corridors

All parties wishing to develop a transportation and/or communications corridor shall submit to the NPC a detailed application for an amendment. This application must include an assessment of alternative routes, plus the cumulative effects of the preferred route. It shall provide reasonable options for other identifiable transportation and utility facilities. In particular, this application must meet the information requirements set out in Appendix J.

The NPC and either NIRB or a panel acting under s. 12.4.7 of the NLCA shall publicly review the proposed corridor to determine whether the proposal adequately meets the requirements of

The project proposal is not for the development of a transportation and/or communications corridor (conformity requirements 5.6 and 5.7 are not applicable).



RECOMMENDATION/CONDITION	COMPLIANCE ACTION
Appendix J and the guidelines of Appendix J.	
Once it is determined that a proposal meets the	
guidelines, the NPS may request the Minister of	
DIAND to amend the plan to include the new	
transportation corridor.	
Uranium Development	
Uranium development shall not take place until	The project proposal is not for uranium
the NPC, NIRB, the NWB, and the NWMB have	development (conformity requirements 3.5
reviewed all of the issues relevant to uranium	and 3.6 are not applicable).
exploration and mining. Any review of uranium	
exploration and mining shall pay particular	
attention to questions concerning health and	
environmental protection.	
Any future proposal to mine uranium must be	
approved by the people of the region.	



6.7 ABORIGINAL AFFAIRS AND NORTHERN DEVELOPMENT CANADA

The following table lists terms and conditions appended to AANDC Land Use Permit N2009C0017 (Received January 21, 2010; permit extended to April 9, 2014).

Shall remove all scrap metal, machinery parts, barrels and kegs, building and building materials	Development of a Waste Management Plan and an Abandonment and Restoration Plan to address these issues; efforts are being made to identify local approved handling facilities.
	1
Shall notify a Land Use Inspector at least 10 days prior to backfilling any sump.	Noted. Has not been required to date.
Shall use a forced-air fuel-fired incinerator to incinerate all combustible garbage and debris.	All combustible garbage is burned in a single chamber, forced-air fuel-fired incinerator.
a) place all excavated material over the sump area b) overlap the replaced material a minimum of two (2) metres beyond the edges of the existing sump wall	Noted.
a) where flowing water from bore holes is encountered, plug the borehole in such a manner as to permanently prevent any further outflow of water.b) The artesian occurrence shall be reported	Refer to Section 3.3.2 for information regarding artesians encountered during the 2013 field season
to the Engineer within forty-eight (48) hours. Shall prepare the site in such a manner as to	Walkways around camp prevent rutting and



RECOMMENDATION/CONDITION	COMPLIANCE ACTION
prevent rutting of the ground surface	ground disturbance. As well an ATV is used around camp, however its use is not permitted when ground is soft. The area is inspected regularly by AREVA site personnel.
Shall dispose of all fluids used to wash machinery and equipment in a sump unless otherwise authorized in writing by a Land Use Inspector	Noted.
Prior to the discharge of any sump, shall carry out an analysis of the fluids in a manner prescribed by the Engineer and obtain his written approval to discharge.	Noted.
Shall not conduct land use operation on any lands not designated in accepted application	Plans are made for activity only on approved lands.
Locate all camps on durable land	Camp location has been inspected and approved by regulatory agencies
Advise a Land Use Inspector at least 10 days prior to completion of land use operation (1. removal or storage of equipment and materials or 2. final clean-up and restoration of the lands use will be completed)	Addressed in the Abandonment and Restoration Plan.
Shall complete all clean-up and restoration of lands prior to expiry date of permit	Development of a Seasonal and Final Abandonment and Restoration Plan.
Only allow the use of equipment that is listed in the accepted application	AREVA abides by this and has made amendment requests seeking approval for additional equipment prior to its purchase/arrival on site.



RECOMMENDATION/CONDITION	COMPLIANCE ACTION
Burn all combustible garbage in an acceptable container	All combustible garbage is burned in a single chamber, forced-air fuel-fired incinerator.
Keep all garbage and debris in a covered metal container until disposal.	All garbage is contained either in secure containers or inside buildings until incinerated.
Not locate any sump within 31 m of normal high water mark	No sump is located within 31 m of the normal high water mark.
Backfill and restore all sumps prior to expiry date of permit	Addressed in the Abandonment and Restoration Plan.
Housekeeping	Addressed through formal daily site inspections conducted by AREVA site personnel.
Not use unapproved chemicals	Comply with list provided in application.
Deposit all sewage in sump	Received verbal approval from inspector to incinerate solid sewage waste and discharge liquid waste with grey water.
Not to allow the spreading of drilling waste on surrounding lands	All non-radioactive drill waste is contained to a low-lying depression. All radioactive drill waste is disposed of down hole when achievable or collected and stored in long-term on-site storage facility.
Burn all garbage at least daily	Ongoing throughout field season.
Remove all non-combustible garbage and debris from land use area to a disposal site approved in writing by a Land Use Inspector	Currently being separated and stored for future removal off-site; some items are being backhauled off-site.



RECOMMENDATION/CONDITION	COMPLIANCE ACTION
Report all spills immediately	Development and implementation of a Spill Contingency Plan; training and awareness.
Shall not unnecessarily damage wildlife habitat	Development and implementation of the Environmental Code of practice and the Wildlife Mitigation and Monitoring Plan; training and awareness
Shall not feed the wildlife	Implementation of the Wildlife Monitoring and Mitigation Plan; Communicated as site rule during orientation, training and awareness.
Provide in writing the location of all fuel caches within 10 days of establishment	Completed and AREVA will continue to communicate any fuel cache locations.
Fuel storage must be a minimum of 30 m from normal high water mark	The main and camp fuel caches are located >30 m from the normal high water mark.
Shall not allow petroleum products to spread to surrounding lands or into water bodies	Ongoing through the implementation of the Spill Contingency Plan and site orientation, training and awareness.
Mark all fuel containers with Permittee's name	Ongoing
Display land use permit number on all vehicles and equipment	These are displayed on both the ATV and the stand-up forklift
Dispose and seal drill mud solids or cuttings with uranium concentration >0.05% down hole	Radiologically contaminated material is collected in bags and stored in long term storage facility on site. All drill holes are permanently sealed.
Seal by grouting entire mineralization zone and greater than 10 m both above and below each	All drill holes are cemented and grouted as required.



RECOMMENDATION/CONDITION	COMPLIANCE ACTION
mineralization zone, any drill hole that encounters mineralization with a uranium content greater than 1.0% over a length of >1 meter, and with a meter-percent concentration >5.0	
Seal by cementing, all drill holes by grouting to an appropriate depth from the surface such that surface waters are prevented from interacting with ground waters	All drill holes are cemented and grouted as required.
Conduct radiometric surveys following backfilling of site. If material exceeds background radiation levels the Land Use Inspector must review and approve handling procedures.	Conducted upon completion of hole. Refer to Section 3.7.2.2 Chemical and Radiological Restoration for further details.
Ensure gamma radiation levels of core storage meet the decommissioning requirements of less than 1.0 μ Sv one meter from surface, not to exceed 2.5 μ Sv. If core exceeds identified levels the Land Use Inspector must review and approve handling procedures.	Conducted as part of routine monitoring schedule.
Convert instruments to measure radiation counts per second to μSv/h	Automess has a read out in $\mu Sv/h$. Conversion is known for other instruments used to measure gamma radiation.



6.8 KIVALLIQ INUIT ASSOCIATION LAND USE LICENCE

The following table lists terms and conditions appended to KIA Land Use Licence KVL306C02 (received April 3, 2007; expiry January 3, 2015).

RECOMMENDATION/CONDITION	COMPLIANCE ACTION
Licence Terms	and Conditions
Compliance with all applicable regulations, laws, orders and with terms of licence. Provide KIA with written notices of non-compliance.	AREVA complies with all regulations, laws, orders and with terms of licence. Written notices are and will continue to be provided to KIA should a non-compliance occur.
Obtain and maintain such licences, permits or approvals from the federal, territorial or other governing bodies as may be necessary to enable the Licencee to undertake the permitted activities on the lands	AREVA will obtain all required authorizations.
Permit KIA reasonable access to site for purpose of inspecting	Ongoing. KIA conducted an inspection of the Kiggavik Project on August 27, 2013.
All fees required under licence due on the first of each month. AREVA responsible for reasonable costs of inspections KIA deems necessary to monitor compliance.	AREVA has provided all formally requested fees.
Obtain and maintain appropriate insurance at all times during occupation. Proof of all insurance shall be provided	Ongoing.
AREVA is required to pay the applicable licence fees if operations cease and environmental remediation reclamation occurs	Condition is recognized by AREVA.
Any damage or injury to lands or property	Addressed in the Abandonment and



RECOMMENDATION/CONDITION	COMPLIANCE ACTION
caused by licencee will be repaired, rebuilt, replaced and restored to the satisfaction of KIA.	Restoration Plan.
Submit a Work Plan (proposed operation for upcoming year) and an Environmental Action Plan (reclamation and remediation plans) to KIA no later than September 30 th each year	Obtained agreement from KIA allowing all revised Plans to be submitted with the Annual Report in January of each year.
Schedule A: Ge	neral Standards
No operations on lands not covered by approved licence	In compliance and ongoing.
Contact KIA at least 48 hours prior to commencement of licensed activities	KIA has been and will continue to be notified prior to the start of each field season.
Keep all computable garbage and debris in a covered metal container; combustible garbage burned in a suitable container; non-combustible removed to approved locations	Ongoing by implementing the Waste Management Plan; includes the proper sorting and storage of garbage; non-combustible garbage back-hauled off-site.
Sewage deposited into a sump or removed from lands	Received verbal approval from inspector to incinerate solid sewage waste and discharge liquid waste with grey water.
No metal wastes buried without consent of the KIA	In compliance through the implementation of the Waste Management Plan; proper training and awareness; proper sorting and storage.
Locate all camps on gravel, sand or other durable land. No permanent structures erected without KIA consent.	Addressed in site plans; all permanent structures have approval of KIA.
Housekeeping – keep lands free of garbage	Addressed through formal daily site



RECOMMENDATION/CONDITION	COMPLIANCE ACTION
and debris	inspections conducted by AREVA site personnel. Expectations are reviewed during site orientation.
All man-bear interactions reported to nearest Renewable Resources Office	AREVA will continue to comply if such interactions were to occur.
Licence available for viewing in a conspicuous place on site	All site staff is made aware of its location in the camp office and kitchen.
Within 60 days of licence expiry AREVA to provide KIA with final plan showing all areas used in operations	Condition noted and will be complied with upon expiry of approvals.
All buildings, equipment and materials removed (unless otherwise authorized) at completion of operations or licence termination.	This is addressed in the Abandonment and Restoration Plan.
All burial grounds avoided and left undisturbed. All discovered sites to be reported to KIA.	Condition noted and will be complied with upon occurrence.
Operations carried out as to minimize surface disturbance	Ongoing by implementation of the Environmental Code of Practice
All disturbed areas restored	AREVA continues to implement the Abandonment and Restoration Plan.
Surface vehicles not to be used to move drill rigs or other equipment/supplies without prior authorization. Vehicle use off approved routes prohibited.	In compliance; ATV approved to be used around camp only. Most material is transported by helicopter.
No petroleum storage containers within 12 m	In compliance through the implementation of



RECOMMENDATION/CONDITION	COMPLIANCE ACTION
of the normal high water mark.	the Spill Contingency Plan; generally adhere to the more stringent condition of 30 m.
No petroleum or chemical products to spread to surrounding lands or waters	Ongoing through the implementation of the Environmental Code of Practice and the Spill Contingency Plan. This involves extensive preventative measures and careful monitoring. All fuel and equipment is kept at a minimum of 31 m from the high water mark
All petroleum shall be kept in approved containers marked or within a bermed area. All containers labeled with licencee name	Ongoing through the implementation of the Spill Contingency Plan.
All spills reported	Noted
All combustible waste will be incinerated or removed	Ongoing through the implementation of the Waste Management Plan; proper sorting of wastes; proper training and awareness.
All drill fluids disposed of in sump or naturally occurring contained depression. Drill fluids recycled whenever possible.	Non-mineralized drill fluids are deposited in a naturally low lying depression >30 m from any water body. Mineralized cuttings are collected and stored in the Radioactive storage compound.
No drill sumps to be located within 30 m of any water body	Instructed through Environmental Management Plans and adhered to through site planning.
All drill sumps to be restored to natural surrounding contours of the land prior to licence expiry	To be completed through the implementation of the Abandonment and Restoration Plan.
Restrict vegetation disturbance from deposit of	Ongoing throughout field season and



RECOMMENDATION/CONDITION	COMPLIANCE ACTION
drill fluids/cuttings to the area of the sump and ground prepared for re-vegetation upon abandonment	implemented through the Abandonment and Restoration Plan.
No deposit of deleterious substances into any water body	Ongoing through the implementation of the Spill Contingency Plan.
Not cause obstruction of any stream	In Compliance through implementation of the Environmental Code of Practice; proper training and awareness.
Winter stream crossings must be removed prior to annual break-up	Condition noted.
Shall abide by Caribou Protection Measures	Measures have been integrated into the Wildlife Mitigation and Monitoring Plan.
Ensure there is not damage to wildlife habitat	Condition integrated into Wildlife Mitigation and Monitoring Plan and continued employee awareness through orientation and on-going training.
Shall cease activities that may interfere with migration or calving	Integrated into Wildlife Mitigation and Monitoring Plan and considered when planning site activities.
Shall not move any equipment or vehicles without prior testing the thickness of ice	No on ice drilling conducted to date; recommendation is implemented by contractors conducting winter haulage.
Shall suspend overland travel of equipment or vehicles if rutting occurs	Condition is noted. AREVA site personnel monitor land conditions during regular inspections of field operations and winter hauls.



RECOMMENDATION/CONDITION	COMPLIANCE ACTION
Shall construct and maintain winter roads with a minimum of ten centimeters of packed snow at all times	Condition communicated to contractor carrying out winter haul.
Shall not use any equipment except of the type, size and number listed in the application	AREVA is in compliance with this list and any other amendments issued.



6.9 NUNAVUT WATER BOARD LICENCE

The following table lists terms and conditions appended to NWB licence 2BE-KIG1318 (previous licence No.'s 2BE-KIG0812, 2BE-KIG0708 and 2BE-SIS0607).

	RECOMMENDATION/CONDITION	COMPLIANCE ACTION
	General	
Annua	I fees paid in advance of water use	Ongoing.
File an	n annual report by March 31 st containing the ng:	Fulfilled with submission of this report. Annual Reports had previously been
a.	A summary report of water use and waste disposal activities;	submitted for 2007, 2008, 2009, 2010, 2011 and 2012.
b.	A list of unauthorized discharges and a summary of follow-up actions taken;	
C.	Any revisions to the Spill Contingency Plan, Abandonment and Restoration Plan, Uranium Exploration Plan, as required by Part B, Item 7, submitted in the form of an Addendum;	
d.	A description of all progressive and or final reclamation work undertaken, including photographic records of site conditions before, during and after completion of operations;	
e.	Report all artesian flow occurrences as required under Part F, Item 6;	
f.	A summary of all information requested and results of the Monitoring Program; and	
g.	Any other details on water use or waste disposal requested by the Board by November 1 of the year being reported.	
Notify	NWB of any changes in operating plans or	Continual communication efforts are made
	ions associated with the project at least 30 prior to the change	with all regulatory agencies and boards and amendments applied for as necessary.
Install	flow meters or other such devices, or	Complete on camp water supply. Pumping



RECOMMENDATION/CONDITION	COMPLIANCE ACTION
implement suitable methods required for measuring of water volumes	capacities for all pumps at drills are known and can be used to calculate the maximum amount of water that can be used at the drills each day. This number is below the allowable limit for water used at the drills each day. Refer to Section 3.1 for further information.
Include proposed implementation timetable with submitted plans for Board approval and direction and implement plans as approved	All plans have been implemented.
Review plans as required by changes in operation and/or technology, and modify the plans accordingly. Revisions to the plans shall be submitted in the form of Addendum to the Annual Report.	Plans are included as an addendum to this Annual Report.
Every plan to be carried out pursuant to the terms and conditions of this Licence shall become a part of this Licence, and any additional terms and conditions imposed upon approval of a Plan by the Board become part of this Licence. All terms and conditions of the Licence should be contemplated in the development of a plan where appropriate.	Term and conditions are considered and incorporated into the plans which are included as an addendum to this report.
Copy of Licence is maintained at site.	Available in site office and kitchen.
Shall submit one pater copy and one electronic copy of all reports, studies, and plans to the Board. Reports or studies submitted to the board shall include a detailed executive summary in Inuktitut.	Ongoing.



RECOMMENDATION/CONDITION	COMPLIANCE ACTION
Water U	<i>I</i> se
Obtain all camp water from a small unnamed lake located to the north of the camp or a small unnamed lake located to the east of the camp, to a maximum of ten (10) cubic metres per day. Drill water shall be obtained from water sources, proximal to the drilling targets, to a maximum of two-hundred and eighty nine (289) cubic metres per day. The total volume of water for the purposes of this Licence shall not exceed two hundred ninety nine (299) cubic metres per day.	Ongoing compliance through the field season is demonstrated in Section 3.1.
Streams cannot be used as a water source unless authorized and approved by the Board in writing.	Streams were not used as water sources.
Notify NWB of potential drawdown of a water source at least 30 days prior to commencement of use of water, submit to the Board for approval in writing, the following: volume required, hydrological overview of the water body, details of impacts, and proposed mitigation measures.	Condition is noted. NWB will be notified as required.
Water intake hoses have screens of appropriated mesh size to ensure fish are not entrained and shall withdraw water at a rate such that fish do not become impinged on the screen.	Ongoing. All water pumps are inspected by AREVA site personnel on an ongoing basis to ensure compliance with this condition. The appropriate mesh size is described in the Department of Fisheries and Oceans Freshwater Intake End-of-Pipe Fish Screen Guideline.
Shall not remove any material from below the	Training and awareness. Inspections are



RECOMMENDATION/CONDITION	COMPLIANCE ACTION
ordinary high water mark of any water body	conducted to ensure compliance.
Shall not cause erosion to banks of any body of water	Condition met throughout the field season.
Implement sediment and erosion controls prior to and maintained during operation	Condition noted. Preventative and mitigation measures are in place for sediment and erosion control during drilling activities.
Waste Dis	posal
Waste disposal is a minimum of 31 m from ordinary high water mark of any water body such that the quality, quantity or flow of water is not impaired, unless otherwise approved by the Board in writing.	Waste disposal sites are located more than 30 meters from the high water mark.
Shall not practice on-site land filling of domestic waste, unless otherwise approved by the Board in writing. AREVA is authorized to dispose of all acceptable food waste, paper waste and untreated wood products in an incinerator. AREVA shall not open burn plastics, wood	As per the Waste Management Plan, wastes are managed and sorted, the incinerator is then used to dispose of acceptable waste and the remaining materials are stored on site for future disposal at a licensed facility.
treated with preservatives, electric wire, Styrofoam, asbestos or painted wood to prevent the deposition of waste materials of incomplete combustion and/or leachate from contaminated ash residual, from impacting surrounding waters, unless otherwise approved by the Board in writing.	
Provide authorization from all communities in	Received written consent from the Hamlet



RECOMMENDATION/CONDITION	COMPLIANCE ACTION
Nunavut receiving wastes from the Kiggavik Project prior to backhauling and disposal of wastes	of Baker Lake in 2007, forwarded to NWB. No waste was disposed of in any community in 2013.
Backhaul and dispose of all hazardous wastes, waste oil and non-combustible waste at a licensed waste disposal site	Waste oil generated during the 2013 season will be backhauled during the 2014 winter haul and later disposed of at an approved facility.
Shall maintain records of all waste backhauled and records of confirmation of proper disposal of backhauled waste.	Waste manifests are completed for all waste backhauled, and records are available.
Contain all grey water in a sump 31 m from the ordinary high water mark of any water body, at a site where direct flow into a water body is not possible and no additional impacts are created, unless otherwise approved by the Board in writing.	Currently grey water is being placed in a sump which is comprised of a punctured barrel buried in the ground and filled with sand/gravel for filtration. The location is greater than 100 m from any water body.
Shall contain all toilet wastes in latrine pits or use incineration, chemical, portable or composting toilets. Latrine pits shall be located at a distance of at least thirty one (31) metres above the ordinary high water mark of any water body, treated with lime and covered with native material to achieve the pre-existing natural contours of the land prior to abandonment. Shall dispose of all toilet wastes through incineration, chemical or composting toilets. Any remaining residue generated through the course of the operation shall be backhauled and disposed of in an approved waste disposal site.	Sewage waste is collected and incinerated. The ashes are backhauled for disposal in an approved waste disposal site.



RECOMMENDATION/CONDITION	COMPLIANCE ACTION
Shall ensure that any hazardous materials, including waste oil, receive proper treatment and disposal at an approved treatment facility.	Hazardous materials are stored on site until they are backhauled for shipment to a licensed facility.
Camps, Access Infrastruc	tures and Operations
Shall not erect camps or store material on the surface of frozen streams or lakes including the immediate banks except what is for immediate use. Camps shall be located such as to minimize impacts on surface drainage.	Operation is seasonal from May to September. Informed through training and awareness. The camp does not impact surface drainage.
Conduct activities in a way to minimize impacts on surface drainage	Drainage and flow are considered prior to activities.
Winter lake and stream crossings shall be constructed entirely of water, ice or snow. Choose locations that minimize disturbance by locating ice bridges in an area that requires the minimum approach grading and the shortest crossing route. Stream crossings shall be removed or the ice notched prior to spring breakup.	This is ongoing through proper selection of routes for the Winter Haul of materials.
With respect to access road, pad construction or earthworks, the deposition debris or sediment into or onto any water body is prohibited. These materials shall be disposed a distance of at least thirty one (31) metres from the ordinary high water mark in such a fashion that they do not enter the water.	Currently the site is not accessed by road; however should there be construction or earthworks in the future, this item has been noted. Compliance is achieved through training, awareness and project planning.
Shall not mobilize heavy equipment or vehicles for trenching or other activities unless the ground	The winter haul is performed only when the ground is capable of supporting the



RECOMMENDATION/CONDITION	COMPLIANCE ACTION
is capable of fully supporting the equipment or vehicles without rutting or gouging. Overland travel of equipment or vehicles shall be suspend if rutting occurs	equipment or vehicles without rutting.
Drilling Ope	rations
AREVA to review and revise Uranium Exploration Plan as required by changes in operation and/or technology. Revisions to Plan submitted as addendum with Annual Report.	Board approved AREVA's original Uranium Exploration Plan submitted October 17, 2007. As part of AREVA's commitment to continual improvement. Operational Plans are reviewed at least once per year and revised as necessary. Current plans are included as an appendix to this report.
AREVA shall not conduct any land based drilling within thirty-one (31) metres of the ordinary high water mark of any water body with the exception of the End Grid Lake area as identified in the application received dated October 9, 2008.	Any drilling within 31 m of the high water mark will be under an approved licence amendment with applicable protection and mitigation measures in place to the satisfaction of the NWB and DFO.
Drill waste (water, chips, muds, salts) from land- based drilling are disposed of in properly constructed sump or natural depression	Use natural depressions, supplemented by temporary sandbag berms and visually monitoring flow. These areas are regularly inspected by AREVA staff.
Drill mud solids or cuttings with a uranium concentration greater than 0.05 percent are to be collected and then disposed of down the drill hole and sealed.	Due to difficulty disposal down the drill hole, this material is collected in bags and should the radiation levels exceed 1 µSv/h, the bags are stored in the radioactive storage compound at the Kiggavik Camp for future handling. All drill holes are sealed.



RECOMMENDATION/CONDITION

AREVA is permitted to drill under low flow artesian conditions within all areas encompassed by the Kiggavik Lease provided that appropriate measures are implemented to prevent induced contamination of groundwater or salinization of surface waters and that AREVA adheres to the following:

- a. Shall analyze water encountered from the artesian flow to confirm the quality of the water as per Part J, Item 12;
- b. Shall adhere to the operational and mitigation measures as outlined in the technical support document "Drilling in Low Flow Artesian Conditions" submitted as part of the application dated March 29, 2011.
- c. Shall provide as part of the Annual Report required by Part B, Item 2, information on all artesian flow encountered, with GPS coordinates, dates, and flow rates, depth, permafrost, aquifer and Packer testing data and associated water quality analytical results.

COMPLIANCE ACTION

When low flow artesians (≤ 95 L/min) are intercepted during drilling operations, the operational and mitigation measures are implemented as per the Technical Support Document submitted with the March 29, 2012 application. Refer to Section 3.3.2 for details regarding all artesian flows encountered during the season.

Record the depth of permafrost – include in annual report

The pneumatic packer testing and installation of thermistors did not occur through the 2013 season as these are activities specific to baseline studies for mine development. The permafrost depths are therefore estimated based upon previous thermistor locations (See Section



RECOMMENDATION/CONDITION	COMPLIANCE ACTION
	1.2).
No on-ice drilling	On ice drilling will only occur under applicable approved licence amendments with appropriate protection and mitigation measures in place to the satisfaction all regulatory bodies.
When conducting drilling within 31 m of the ordinary high water mark of End Grid Lake, activities are to be on stable ground such as frozen tundra or bedrock, to prevent disturbance to the natural ground and limit erosion and sedimentation.	Drill platforms are located on stable ground and set up on timbers to prevent ground disturbance and damage to permafrost.
AREVA shall establish water quality conditions of adjacent waters or waters immediately downstream prior to and upon completion of any drilling program within 31 m of the high water mark proximal to the End Grid Lake Area.	There were no drill holes completed within 31 m of the End Grid Lake high water mark.
If artesian flow is encountered in areas other than the Kiggavik Lease, drill holes shall be immediately sealed and permanently capped to prevent induced contamination of groundwater or salinization of surface waters. AREVA shall report all artesian flow occurrences within the Annual Report, including the location (GPS coordinates) and dates.	There were no artesian flows encountered outside the Kiggavik Lease.
Modificat	ions
AREVA may, without written consent from the Board, carry out Modifications to the Water	Management is aware of these conditions and will comply to them if modifications are



RECOMMENDATION/CONDITION	COMPLIANCE ACTION
Supply Facilities and Waste Disposal Facilities provided that such Modifications are consistent with the terms of this Licence and the following requirements are met: a. AREVA has notified the Board in writing at least 60 days prior to beginning Modifications; b. Modifications do not place AREVA in contravention of the Licence or the <i>Act</i>	required.
c. Modifications are consistent with the NIRB Screening Decision;	
d. The Board has not, during the 60 days following notification of the proposed Modifications, informed AREVA that review of the proposal will require more than 60 days; and	
e. The Board has not rejected the proposed Modifications.	
Modifications for which all of the conditions referred to in Part G, Item 1 have not been met can be carried out only with written approval from the Board.	Noted
AREVA shall provide as-built plans and drawings of the Modifications within 90 days of completion. These plans and drawings shall be stamped by an Engineer.	Noted



RECOMMENDATION/CONDITION

COMPLIANCE ACTION

Spill Contingency Planning

AREVA shall review the Spill Contingency Plan as required by changes in operation and/or technology and modify the Plan accordingly. Revisions to the Plan are to be submitted in the form of an Addendum to be included with the Annual Report.

The plan is reviewed at least annually and reviews are submitted with the annual report.

Prevent any chemicals, petroleum products or wastes associated with the project from entering water. All sumps and fuel caches shall be located at least 31 m from the ordinary high water mark of any adjacent water body and inspected on a regular basis. An exception to this condition is provided for activities within 31 m of End Grid Lake.

In compliance through the implementation of the Spill Contingency Plan; proper training and awareness. All drilling sites are inspected regularly by AREVA staff. Double walled tanks are used at the drills and secondary containment is used for chemical or petroleum products.

Equipment maintenance and servicing conducted only in designated areas and shall implement special procedures (such as the use of drip pans) to manage motor fluids and other waste and contain potential spills.

Addressed through training and regular inspections.

If an unauthorized discharge of waste occurs, or if such a discharge is foreseeable, AREVA shall:

- a. Employ the approved Spill Contingency
 Plan
- Report the spill immediately to the 24-Hour Spill Line at (867) 920-8130 and to the Inspector at (867) 975-4295; and

Addressed through training and inspections. As noted in Section 3.4.2, hydraulic oil was released to the ground on two occasions. Although the quantities released were less than those identified in Schedule B of the Nunavut *Spill Contingency Planning and Reporting Regulations*, they have been included as part of this Annual Report.



RECOMMENDATION/CONDITION	COMPLIANCE ACTION	
c. For each spill occurrence, submit to the Inspector, no later than 30 days after initially reporting the event, a detailed report that will include the amount and type of spilled product, the GPS locations of the spill, and the measures take to contain and clean up the spill site.		
Shall, in addition to Part H, Item 5, regardless of the quantity of releases of harmful substances, report to the NWT/NU Spill Line if the release is near or into a water body.		
While drilling is occurring within the 31 m high water mark at End Grid, AREVA may allow a limited supply of fuel within 31 m of the ordinary high water mark to support the drilling operations, provided that secondary containment is made available for the storage of fuel and all external pumps and motorized equipment used.	Noted. There was no drilling conducted within 31 m of End Grid Lake during the 2013 season.	
Abandonment and Restoration	on or Temporary Closing	
AREVA to review and revise Abandonment and Restoration Plan as required by changes in operation and/or technology. Revisions to Plan submitted as addendum with Annual Report.	Noted. Revisions are submitted with the annual report.	
Complete restoration work prior to the expiry of this Licence	Addressed in the Abandonment and Restoration Plan.	
Shall carry out progressive reclamation of any components of the project no longer required for AREVA's operations.	Reclamation to ensure chemical stability occurs in a progressive manner; best management practices for reclamation to	



RECOMMENDATION/CONDITION	COMPLIANCE ACTION
	ensure physical stability of surface disturbance are currently being investigated.
All sumps are backfilled to pre-existing natural contours of the land.	This will be done where required to the satisfaction of the inspector.
Remove all site infrastructure, site material, including all fuel caches, drums, barrels, buildings and contents, docks, water pumps and lines, material and equipment prior to the expiry of the Licence.	Addressed in the Abandonment and Restoration Plan.
All roads and airstrip, if any, shall be re-graded to match natural contour to reduce erosion.	Currently not required.
Remove any culverts and restore the drainage to match the natural channel. Measures shall be implemented to minimize erosion and sedimentation.	Currently not required.
To promote growth of vegetation and the needed microclimate for seed deposition, all disturbed surfaces shall be prepared by ripping, grading or scarifying the surface to conform to natural topography.	Addressed in the Abandonment and Restoration Plan.
Shall reclaim areas that have been contaminated by hydrocarbons from normal fuel transfer procedures to meet objectives as outlined in the Government of Nunavut's (GN) <i>Environmental Guideline for Site Remediation</i> (2009). The use of reclaimed soils for the purpose of back fill or general site grading may be carried out only upon	This is addressed in the Abandonment and Restoration Plan and the Spill Contingency Plan.



RECOMMENDATION/CONDITION	COMPLIANCE ACTION
consultation and approval by the GN, Department of Environment and an Inspector.	
Drill core must be stored greater than 31 m above the ordinary high water mark of any adjacent water body, where direct flow into a water body is not possible and no additional impacts are created.	Core is transported from the drill location to the Kiggavik camp on a daily basis and stored greater than 31 m above the high water mark of the nearest water body.
Long term storage of core will not exceed radiation measurements of greater than 1.0 μSv at 1 m from the surface and not to exceed 2.5 μSv	Implemented Radiation Protection Plan; regular inspections and monitoring are conducted by AREVA site personnel.
Drill holes and disturbed areas to be restored to natural conditions immediately upon completion of drilling. Any drill hole that encounters mineralization with uranium content greater than 1.0 percent over a length greater than 1 m, and with a meter-percent concentration greater than 5.0 will be sealed by grouting over the entire length of the mineralization zone and not less than 10 m above or below each mineralization zone.	Completed as required for all drill holes to date.
Seal by cementing the upper 30 m of bedrock or entire depth of hole, whichever is less	Completed as required for all drill holes to date.
If the radiation levels for the stored core exceed the levels identified in Part I, Item 12, AREVA shall submit to the AANDC Water Resources Inspector, a detailed report of test results and the	Condition is noted; AREVA is committed to its compliance if required



RECOMMENDATION/CONDITION	COMPLIANCE	ACTION
proposed long term core handling and mitigation measures for the long term storage or removal.		
Shall contour and stabilise all disturbed areas to a pre-disturbed state upon completion of work.	Addressed in the All Restoration Plan	pandonment and
Monitoring F	Program	
Measure and record, in cubic metres, daily water quantities for camp, drilling and other purposes.	Conducted and recorded Please refer to Section details.	
Provide GPS coordinates (in degrees, minutes and seconds of latitude and longitude) of all locations where water sources are utilized for all purposes.	Completed; refer to Sect coordinates.	ion 3.3.1 for GPS
Provide GPS coordinates (in degrees, minutes and seconds of latitude and longitude) of all waste locations	Incinerator	64° 26' 26.97" N 97° 39' 30.47" W
	Grey Water Discharge Point (south of Kitchen)	64° 26' 26.75" N 97° 39' 31.68" W
results of the potable water supply previously utilized under previous Licences, in order to assess the oil and grease contamination during the Licence term and investigate he source of contamination and possible mitigation measures required. Plans to address this matter shall be submitted to the NWB within the Annual Report.	water supply referenced under Licence 2BE-KIG0708 on June 27, 2009. Analysis conducted by the Saskatchewan Resear Council (SRC) Laboratory showed traces of grease and oil	
All sampling, preservation and analysis to be conducted in accordance with the Standard	Noted	



RECOMMENDATION/CONDITION	COMPLIANCE ACTION
Methods for the Examination of Water and Wastewater	
All analyses shall be performed in an accredited lab (ISO/IEC Standard 17025). The accreditation shall be current and in good standing.	SRC is accredited by the Canadian Association for Environmental Analytical Laboratories (CAEAL) for environmental testing procedures. Accreditation ensures that procedures, facilities, and methods conform to the internationally recognized ISO 17025 standard. AREVA commits to only using labs that are adequately accredited.
Additional monitoring requirements may be requested by the Inspector.	Noted
Where uranium mineralization has been encountered, under Part I, Items 13 and 14, AREVA shall monitor the drill sumps and core storage areas to provide the necessary data needed in order to assess and ensure that mitigation measures required for restoration under the Abandonment and Restoration Plan have been completed.	Ongoing, refer to Section 3.7.2.2
All data, monitoring results and information required by this "Monitoring" section to be included in the Annual Report.	In compliance through submission of this Annual Report
AREVA shall establish water quality conditions prior to and upon completion of drilling at the End Grid Lake areas as identified in the application dated October 9, 2008 in accordance with Part F,	There were no drill holes completed within 31 m of the ordinary high water mark at the End Grid areas.



RECOMMENDATION/CONDITION	COMPLIANCE ACTION
Item 10, and monitoring shall include the following: Total Suspended Solids	
рН	
Electrical Conductivity	
Total Trace Metals as determined by a standard ICP Scan (to include at a minimum, the following elements: Al, Sb, Ba, Be, Cd, Cr, Co, Cu, Fe, Pb, Li Mn, Mo, Ni, Se, Sn, Sr, Tl, Ti, U, V, Zn), and Trace Arsenic and Mercury	
AREVA shall determine GPS co-ordinates (in degrees, minutes and seconds of latitude and longitude) of all drill hole locations within the 31 m ordinary high water mark in the End Grid area and provide these locations on a map of suitable scale for review as part of the annual report.	There was no drilling within 31 m of the ordinary high water mark at the End Grid area in 2013.
AREVA shall determine water quality of low-flow artesian conditions identified in Part F, Item 6, by including the following analyses:	Completed for the four artesians encountered during the 2013 season (See Section 3.3.2)
Total Suspended Solids	
pH	
Electrical Conductivity	
Total Trace Metals as determined by a standard ICP Scan (to include at a minimum, the following elements: Al, Sb, Ba, Be, Cd, Cr, Co, Cu, Fe, Pb, Li Mn, Mo, Ni, Se, Sn, Sr, Tl, Ti, U, V, Zn), and	



RECOMMENDATION/CONDITION	COMPLIANCE ACTION
Trace Arsenic and Mercury	



APPENDIX B - ENVIRONMENTAL MANAGEMENT PLANS

Abandonment and Restoration Plan
Noise Abatement Plan
Radiation Protection Plan
Spill Contingency Plan
Uranium Exploration Plan
Waste Management Plan
Wildlife Mitigation and Monitoring Plan



AREVA Resources Canada Inc.

KIGGAVIK PROJECT, NUNAVUT

ABANDONMENT AND RESTORATION PLAN

May 2013 - Version 4 Revision 3

REQUIRED USERS

Required and other users are responsible for using the current version of the Abandonment and Restoration Plan as posted on Q:\Exploration\IMS. Users may print copies of this plan, but are ultimately responsible for ensuring they are using a current copy as posted. Users are requested to destroy all previously printed copies of the plan when they are informed of revisions.

HISTORY OF REVISIONS

Version	Revision	Date	Details of Revision
1	0	March 2007	Original submission
2	0	October 2007	Updated to reflect changes in field activities/capabilities and areas of continual improvement
2	1	May 2008	Updated to reflect comments and conditions received by the Nunavut Water Board associated with the issuance of water licence no. 2BE-KIG0812
3	0	January 2009	Updated to reflect changes in field activities/capabilities and areas of continual improvement
4	0	January 2010	Updated to reflect changes in infrastructure
4	1	May 2011	Updated personnel titles and grammatical changes
4	2	May 2012	Updated to reflect personnel changes.
4	3	May 2013	Updated to reflect personnel title changes, update land ownership details, and input coordinates

Original Copy of this Manual: Approved and Signed by title: **Naomi Stumborg** Safety Health Environment and Quality Supervisor, **Exploration** Approved by: lay 16, 2013 Signature and Date Approved and Signed by title: Patrick Ledru Vice President, Exploration Approved by: Signature and Date

The original hard copy of this approval page has been signed and is located at the AREVA Resources Canada Inc. corporate office.

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1 PREAMBLE

The AREVA Resources Canada Inc. (ARC) Abandonment and Restoration Plan (A&R Plan) is in effect from the time licences and permits are issued up to the expiry date. The A&R Plan applies to the Kiggavik Project located approximately 80 km west of Baker Lake, Nunavut.

1.1 Purpose and Scope

Abandonment and Restoration considerations are on-going during the life of the project. Progressive restoration provides an opportunity to reduce the extent of disturbed land over the life of the project.

The objectives of the A&R Plan are to:

- protect public health and safety by using safe and responsible reclamation practices;
- reduce or eliminate environmental effects, such as ground disturbance;
- following cessation of project activities, re-establish conditions which permit the land to return to a similar pre-exploration land use; and
- reduce the need for long term monitoring and maintenance by establishing physical and chemical stability of disturbed areas.

The A&R Plan complies with the conditions of permits, licences, regulations and industry standards. The following principles have been established to guide the development of the overall A&R Plan:

- plan and implement in accordance with regulations;
- apply cost effective and appropriate abandonment and reclamation practices to reduce environmental risks and allow for traditional use of the land;
- maintain program of progressive abandonment and reclamation as an integral part of the project;
 and.
- incorporate new abandonment/reclamation methods and procedures, when applicable.

1.2 Revision to the Plan

The Abandonment and Restoration Plan is reviewed on an annual basis and is updated as required to keep the information current and consistent with regulatory and procedural changes. A History of Revisions can be found at the front of this Plan.



1.3 Responsibilities

The District Geologist, Nunavut is responsible to ensure that this plan is implemented, and the implementation may be completed by:

- Project Geologist
- Safety Health Environment and Quality (SHEQ) Supervisor
- Or designate

The Vice President, Exploration is ultimately responsible for any activity being carried out by Kiggavik Project personnel.



2 INTRODUCTION

This A&R Plan has been prepared for a project that includes advanced exploration activities and environmental baseline program to be carried out by ARC.

AREVA Resources Canada Inc. head office location: P.O. Box 9204 817 – 45th Street West Saskatoon, Saskatchewan S7K 3X5

2.1 Location

The Kiggavik Project includes two properties:

- The Kiggavik site is located at approximately 64°26'N and 97° 37'W. The property consists of 15 mineral leases totalling 9,267 ac (3,753 ha). The leases are currently on Crown Land (i.e., surface and subsurface rights are administered by Aboriginal Affairs and Northern Development Canada (AANDC)).
- The Sissons site is situated roughly 17 km south-west of Kiggavik at approximately 64°20'N and 97°52'W. The Sissons site consists of 22 mineral leases totalling 36,372 ac (14,730 ha). Five of the mineral leases, including those containing the Andrew Lake and End Grid deposits, are located on Inuit Owned Land (IOL), as such surface rights are administered by the Kivalliq Inuit Association (KIA) and subsurface rights are "grandfathered" administered by AANDC.

Subject to the finalization of the Land Swap, the majority of the leases will be on IOL with the exception of 6 leases of the JANE prospect on the south-west portion of the Project. The KIA will administer the surface rights for the IOL, while the AANDC will continue to administer the sub-surface rights. AANDC will continue to administer both surface and subsurface rights for the remaining 6 leases on Crown land.

There is an existing temporary exploration camp at the Kiggavik site which can accommodate approximately 60 people. The Kiggavik camp is located at the following coordinates:

UTM 14W 564530 E 7146879 N

Latitude: 64° 26' 29" NLongitude: 97° 39' 34" W



2.2 Schedule

The Kiggavik Camp is seasonally occupied, and supplies are brought to site during the winter by a local contractor on a winter road. The project site is secured and prepared for each seasonal shutdown following completion of exploration field program activities. Final restoration will commence once the exploration/feasibility programs have ceased.

No buildings, equipment or waste will remain beyond the expiration date of permits or licences (i.e., KIA Land Use Licence; AANDC Land Use Permit; NWB Water Licence), unless approvals have been obtained permitting the camp to remain. If unforeseen delays in permitting renewals occur, ARC will consult with the agencies to arrange for an agreement regarding site infrastructure pending a permitting decision.

2.3 Infrastructure – Main Camp

In 2007, the temporary camp accommodated approximately 32 persons, was expanded to accommodate approximately 50 persons in 2008 and 60 in 2009. Further camp expansions and personnel requirements will be discussed in permit applications for the field season. The camp currently consists of the following:

- One storage shed/back-up generator/shop
- One generator building (housing the current generator)
- One helicopter storage/shop
- Two helicopter pads
- One kitchen with storage
- One washroom/dry building constructed with separate male/female facilities
- Two offices
- 17 sleeping units (one is a first aid shack)
- One fuel storage area (equipped with Arctic Berms)
- · Grey water collection area
- Industrial incinerator
- Core storage
- Five core logging tents
- · Radioactive materials storage compound

There is a fuel esker containing 1 shed and 8 bulk fuel tanks. Three bulk tanks are for Jet-B fuel and five are for diesel fuel, and additional fuel drums within secondary containment may also be stored at the esker.

Currently there is one shed and core storage located at the Andrew Lake drill site, as well as core storage at the Kiggavik site and Pointer Lake.



Additions may include the following:

- new sleeping units
- additional office space
- additional core storage racks, and small core logging sheds/tents located in the vicinity of where the drilling will take place (e.g., Kiggavik and Sissons).



3 SEASONAL SHUTDOWN

3.1 Buildings and Contents

Following the completion of each field program, equipment is either removed from site, or stored within buildings or sea containers to ensure they can withstand the winter season. Canvas tents are secured and braced internally so they can withstand snow and wind. All wooden buildings are secured with plywood over the windows and doors to prevent inadvertent opening.

3.2 Water System

Pumps and hoses are drained and dismantled. Pumps may be removed from site for servicing or put into storage along with the hoses.

3.3 Fuel Caches and Chemical Storage

An inventory is conducted prior to leaving at the end of the field season to track the items that are removed or remain at site. A thorough inspection of all fuel caches is completed and the remaining empty fuel drums are removed from site should they no longer be required. Chemicals, including cleaning products, are removed from site for storage and or disposal. If any chemical products (CaCl₂) remain on site they are stored in secure buildings or sea containers.

3.4 Waste

<u>Combustible waste:</u> Non-hazardous combustible waste is burnt in a Single Chamber Cyclonator Incinerator (Series CY1000) which remains on site for use each year. Incinerator ash is collected in drums and stored until shipped off-site to an approved handling facility.

The grey water from the kitchen and washroom facilities is diverted to the grey water collection sump area. The grey water sump consists of a barrel that was punctured with drainage holes and buried to allow drainage and filtration of the water. The grey water collection area is regularly inspected, marked and photographed.

The Waste Management Plan and Radiation Protection Plan details waste handling and are in effect from the time the exploration licence is issued to the time it expires.

3.5 Drill Sites

The drill is dismantled into its main components as per the drilling contractor procedure, packaged and secured along with its ancillary equipment and rods. The drill components may winter at site, be removed via the winter road or may be flown out by the drilling contractor.



Drill sites from the field program are inspected for fuel stained soil and undergo a radiation survey for radioactive contamination. Contaminated soil or drill cuttings are collected in appropriate containers and stored in the radioactive storage compound for future handling, which may include transfer to an operating mine site.

Drill sites must be cleaned to the extent that the gamma dose at a height of 1 m is less than 1 μ Sv/h above background. To the greatest extent possible, all residual radioactive materials accumulated during drilling are disposed of down the drill hole. Where this is not practicable, radioactive material is collected, appropriately packaged and stored in the existing core storage areas. Gamma radiation levels at 1 m from the surface of the core storage area should be reduced to 1 μ Sv/h above background and in no instances exceed 2.5 μ Sv/h. Should the levels be exceeded, the AANDC Land Use Inspector must be contacted for review and approval of handling procedures. If necessary, residual radioactive material may be transported to the McClean Lake Operation for storage and disposal.

Drill holes are sealed by cementing/grouting the upper 30 m of bedrock or the entire depth of the hole, which ever is less or otherwise approved of by the Nunavut Water Board (NWB) in writing.

Any remaining waste is taken to camp to be burned or if required, flown off-site to an approved disposal location.

3.6 Contamination Clean Up

Any soil around camp that has become contaminated and had gone previously unnoticed is treated as per the Spill Contingency Plan. Before and after photos are taken to document the contamination and the clean-up. Clean-up will be conducted in accordance with Government of Nunavut's Department of Environment - Environmental Guideline for Site Remediation.

3.7 Progressive Reclamation

It is ARC's intention to reclaim disturbed sites in an adequate and acceptable manner. Proper reclamation techniques are currently being investigated and will be implemented under the direction and approval of experienced consultants, community members and regulatory agencies. Restoration work will be completed prior to the expiry of the land use licence. This will include but is not limited to reclaiming surface disturbance to promote the growth of vegetation.

3.8 Inspection and Documentation

A full inventory and complete inspection of all areas are conducted prior to seasonal closure. Photos are taken to document the conditions prior to leaving the site for the winter. These photos are included in the annual report submitted to the NWB, AANDC and KIA and included in any required spill reporting.



4 FINAL ABANDONMENT AND RESTORATION

The following activities will occur upon cessation of the current exploration/feasibility program, unless further activities or development are anticipated.

4.1 Buildings and Contents

All buildings will be dismantled and removed or burned (if acceptable). All wooden structures including floors will either be burned or shipped off-site, depending on the nature of the wood. As per the Waste Management Plan, wood products are sorted with non-treated wood products to be incinerated and treated wood to be shipped off-site for proper disposal.

4.2 Equipment

All equipment, including pumps, generators, etc. will be dismantled and removed from the project area.

4.3 Fuel Caches and Chemical Storage

All fuel drums and EnviroTanks will be removed. All areas where there have been fuel caches will be thoroughly inspected. The liner of the secondary containment will be removed and taken to an approved disposal facility for reuse or proper disposal, if it cannot be reused by ARC. Any contamination at fuel cache sites will be cleaned up as well as any debris removed. Contaminated soil will be tested for petroleum hydrocarbons (fraction F1 through F4) as per Canada-Wide Standards for Petroleum Hydrocarbons (PHC) in Soil (2001) and benzene, ethylbenzene, toluene and xylene as per Canadian Soil quality Guidelines for the Protection of Environmental and Human Health (2004). Any contaminated soil will be handled as prescribed by the Spill Contingency Plan. Final photos will be taken of all fuel caches for inclusion in the final report.

All chemicals will be removed from site. Areas where chemicals have been stored will be inspected to ensure that there has been no contamination.

4.4 Sumps

If sumps are used, they will all be properly closed out at the end of the project and will be inspected to ensure that there is no leaching, run-off, or radiological and hydrocarbon contamination. Any contaminated material found will be treated as per the Spill Contingency Plan. Sumps will be backfilled and levelled as required. Final photos will be taken.



4.5 Camp Site

A final inspection of the camp site area will be conducted to ensure that there is no waste left behind. All wastes that are not burnable will be removed from site and taken to an approved disposal facility.

4.6 Drill Sites

The drill will be dismantled into its main components as per the drilling contractor procedure, packaged and secured along with its ancillary equipment and rods. The drill may be flown out by the drilling contractor or taken out overland during the winter.

All drill sites will be inspected for radioactive or hydrocarbon contamination. Any contaminated material will be treated as per the Spill Contingency Plan. Any remaining waste will be taken to camp to be burned if possible or to be flown out to an approved disposal location.

An inspection will be conducted by ARC personnel to ensure that all drill sites are/have been restored and sumps have been covered and levelled.

4.7 Drill Hole Abandonment

Drill holes that encounter uranium mineralization with a uranium content greater than 1.0% over a length of more than 1 m with a meter percent concentration greater than 5% will be sealed by cementing over the entire mineralization zone; this should be at least 10 m above and below each mineralization zone. This practice will be performed as the holes are completed.

4.8 Helicopter Pads

The helicopter pads consist of wooden platforms. The wood will be burnt or taken off site to an approved disposal facility. The soil around the helicopter pads will be inspected for contamination. As the ground has not been altered, scarification will not be necessary.

4.9 Landing Eskers

The esker which has been used as a landing strip will be inspected for surface disruption and if need be restored to pre-use conditions.

4.10 Contamination Clean Up

Any contamination will be treated as per the Spill Contingency Plan.



4.11 Inspection and Documentation

A complete inspection will be conducted of all areas prior to closure. Photos will be taken to document the conditions prior to leaving the site for use in the final report. Before and after photos will be taken to document any contamination and resulting clean up. These photos will make up part of the final report to be submitted to the Water Resource Inspector; the annual report submitted to the NWB, AANDC and KIA and will be included in any required spill reporting.

All agencies will be contacted and notified once the final clean up has been conducted.

Agency contact information can be found in the Contact List.