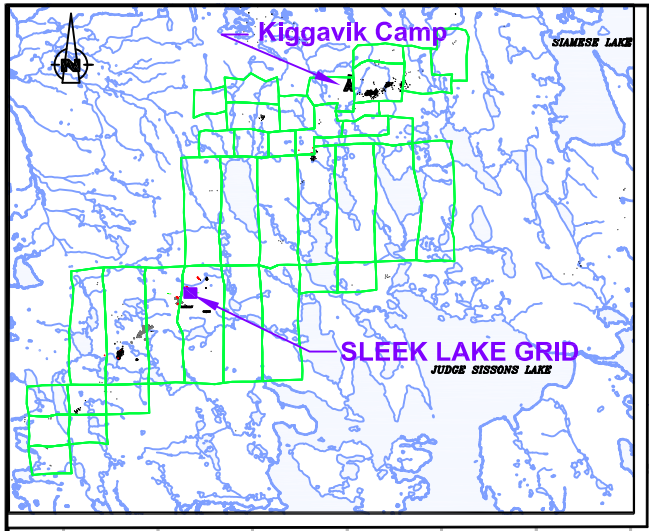

556500 E
557000 E
55750
7138000 N
555500 E
556000 E
ML3302
ML3303
SLEEK LAKE GRID
SLEK-13
SLEK-12
SLEK-14
SLEK-1
SLEK-1A
SLEK-1B
SLEK-2
SLEK-3
SLEK-11
SLEK-4
SLEK-15
SLEK-9
SLEK-5
SLEK-7
SLEK-6
SLEK-8
SLEK-16
SLEK-10
7137500 N
7137000 N
0 Baseline
Baseline 0
2800W
2600W
2400W
2200W
2000W
1200E
800E
400E
100E
100W
200N
400N
200S
400S
3400W
3200W
3000W
1800W
1600W
0
250
500m
Scale 1:8000

Mineral Lease
ML 3303 Mineral Lease Number
SLEK-7 Drill Hole
SLEK-15 2012 Drill Hole

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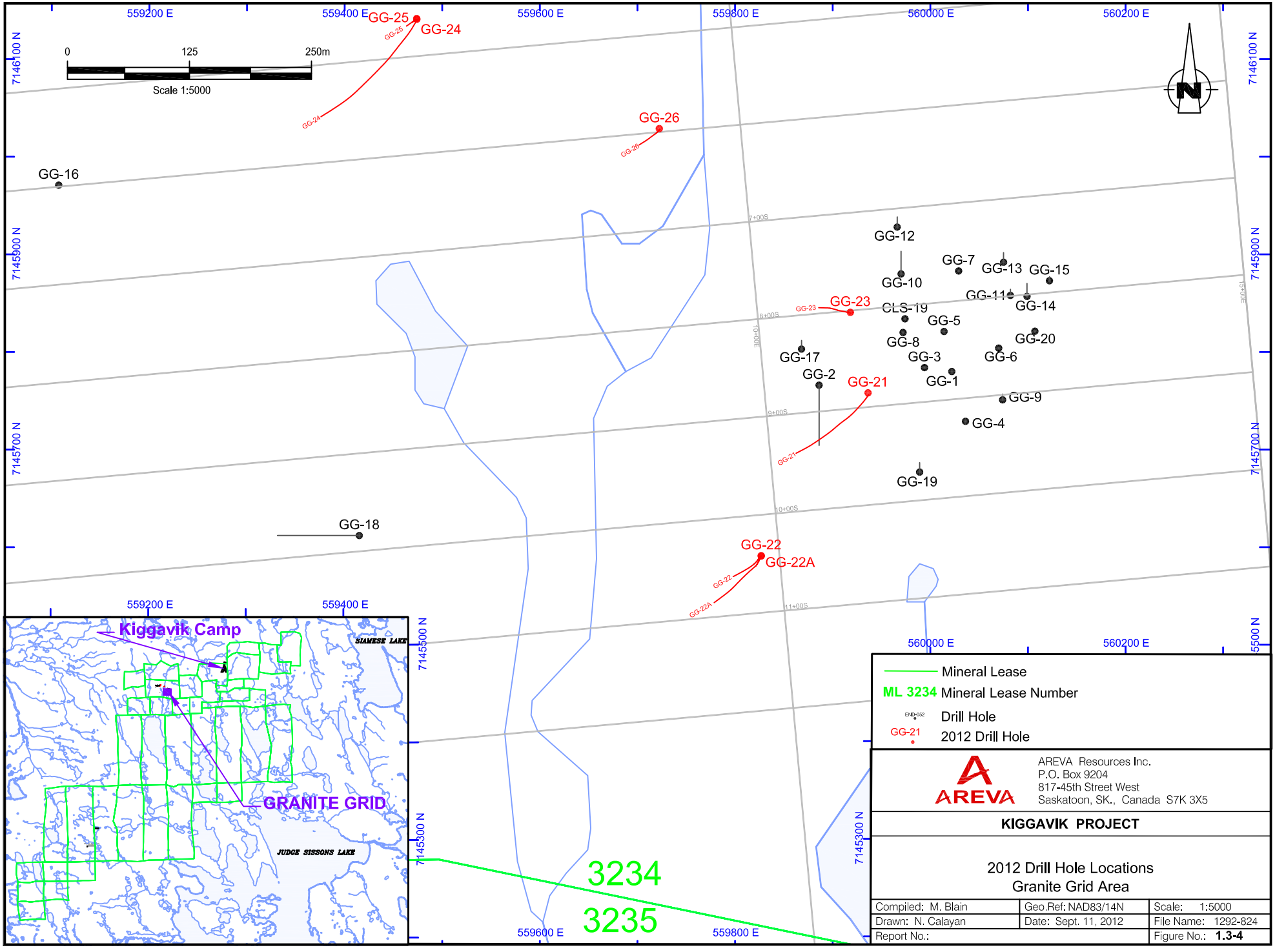
P.O. Box 9204
817-45th Street West
Saskatoon, SK., Canada S7K 3X5

KIGGAVIK PROJECT

2012 Drill Hole Locations
Sleek Lake Grid

Compiled: M. Blain	Geo.Ref: NAD83/14N	Scale: 1:8000
Drawn: N. Calayan	Date: Sept. 11, 2012	File Name: 1292-822
Report No.:		Figure No.: **1.3-3**


559200 E
559400 E
559600 E
559800 E
560000 E
560200 E
7146100 N
7145900 N
7145700 N
7145500 N
7145300 N
0
125
250m
Scale 1:5000
GG-25
GG-24
GG-26
GG-16
GG-12
GG-7
GG-13
GG-15
GG-10
GG-11
GG-14
GG-23
CLS-19
GG-5
GG-8
GG-20
GG-17
GG-3
GG-6
GG-2
GG-21
GG-1
GG-9
GG-4
GG-19
GG-18
GG-22
GG-22A
7+00S
8+00S
9+00S
10+00S
11+00S
10+00E
15+00E
Kiggavik Camp
SIAMESE LAKE
GRANITE GRID
JUDGE SISSONS LAKE
3234
3235
Mineral Lease
ML 3234 Mineral Lease Number
Drill Hole
2012 Drill Hole
AREVA Resources Inc.
P.O. Box 9204
817-45th Street West
Saskatoon, SK., Canada S7K 3X5
KIGGAVIK PROJECT
2012 Drill Hole Locations
Granite Grid Area
Compiled: M. Blain
Geo.Ref: NAD83/14N
Scale: 1:5000
Drawn: N. Calayan
Date: Sept. 11, 2012
File Name: 1292-824
Report No.:
Figure No.: 1.3-4

1.4 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 Kiggavik Project.

Prior to initiation of the 2012 field season, seven Environmental Management Plans, originally prepared in 2007, were updated and submitted to the regulatory agencies to aid in developing best management practices and procedures to mitigate any potential adverse environmental impacts. These Plans also ensure compliance with regulatory approval conditions and internal AREVA requirements. It is AREVA's intention 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. These Plans have been included with the submission of this Annual Report (refer to Appendix A - Operational Plans).

The following plans were maintained throughout the 2012 field season, and are further discussed below:

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

1.4.1 Uranium Exploration Plan

The Uranium Exploration Plan is designed to meet the requirements of the Water Licence issued by the Nunavut Water Board (2BE-KIG0812) 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

On September 1, 2012, core samples (low specific activity) were shipped 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. Shipper's Declaration for Dangerous Goods were completed and filed by appropriately trained AREVA staff.

1.4.2 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 prior to or upon arrival at the Kiggavik site. During orientation, the location of the Material Safety Data Sheets (MSDS), spill kit locations, and spill response supplies and tools are identified. All personnel are trained to identify the probable location of potential leaks and spills. Further training is provided on the identification of existing leaks and spills and the proper use of spill response supplies and tools. 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.

The Plan was implemented on August 1, 2012 in the End Grid area when a hose that was running from the drill to the discharge area burst near the End Grid streams. Details regarding this incident and the associated response are discussed in Section 9.

1.4.3 Waste Management Plan

In accordance with AREVA's Environmental Policy, a Waste Management Plan was developed and implemented to address any concerns regarding waste and to mitigate 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 a safe, efficient and compliant manner. The Waste Management Plan is frequently 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 review this Plan and 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).

Food, paper and non-treated wood waste are incinerated in an approved incinerator shown in Photograph 1-2.

Photograph 1-2 Kiggavik Camp Incinerator

Materials transported to the Baker Lake Dump during 2012 field season are shown in Table 1.4-1.

Table 1.4-1 Kiggavik Site Waste Manifest 2012

Date	Type of waste	Quantity	Location of Disposal
02-July-12	Ash	3 drums	Baker Lake Dump
02-Aug-12	Ash	2 drums	Baker Lake Dump
16-Aug-12	Untreated wood	1600 lbs.	Baker Lake Dump

As noted in Table 1.4-2 all hazardous waste will be taken to Baker Lake during the 2013 winter haul. Upon receipt, a local contractor will initiate a safe work plan to ensure wastes are handled accordingly with approved facilities.

All drill cuttings with a uranium concentration greater than 0.05 percent are collected and stored in the radioactive storage area for future handling. As required, an inventory of all waste and material remaining on site was recorded upon seasonal shutdown and is summarized in Table 1.4-2.

Table 1.4-2 Kiggavik Site End of Season Inventory 2012

Type of Waste/Product	Quantity	Storage Method
Waste oil and fuel	5 – 205 L bung drums	Stored in secondary containment at site inside a sea container to be transported to Baker Lake over the winter road in 2013
Incinerator Ashes	4 – 205 L ring top drums	Drums are stored inside sea container to be transported to Baker Lake over the winter road in 2013
Diesel Fuel	6 – 205 L drums 5 – 379 L double walled slip tanks	Stored outside in secondary containment at site
Scrap metal	Approximately 10,000 pounds	Loaded inside two sea containers at site to be transported to Baker Lake over the winter road in 2013
Engine filters Oil and Fuel	4 – 205 L ring top drum	Stored inside a sea container to be transported to Baker Lake over the winter road in 2013
Oil cans Empty	2 – 205 L ring top drum	Stored inside a sea container at site to be transported to Baker Lake over the winter road in 2013
Oil contaminated rags	2 – 205 L ring top drum 2 – plastic lined rock bags	Stored inside a sea container to be transported to Baker Lake over the winter road in 2013
Empty/used paint cans	1 – 205 L ring top drum	Stored inside wooden storage building. Upright in mini berm with top secured
Generator Oil	5 – 1 L jugs	In secondary containment in generator building
Jet Fuel	24,000 L	Stored in the Enviro-tanks at fuel cache for 2013 use.
Diesel Fuel	48,4800 L plus 20 - 379 L double walled slip tanks	Stored in the Enviro-tanks at fuel cache for 2013 use.
Gasoline	8 – 20 L plastic jerry cans	Stored inside wooden storage building at site in mini berm
Propane	33 – 100 lb bottle	Upright in a locked fence compound
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		Inside sea container to be hauled into Baker Lake over the winter road 2013

Type of Waste/Product	Quantity	Storage Method
plastic bottles in bags		
Boart Longyear Supplies	<u>Left @ Camp Fall 2012</u> 15 cases–15/40 Motor Oil each containing 4 x 4 liter jugs 8 cases–Antifreeze each containing 4 x 4 liter jugs 12 cans-Quick Start Ether 15 cases-Two Cycle Oil each containing 12 x 1 liter jugs 6 cases-Diesel Conditioner each containing 12 x 1 liter jugs 3 – 20 litre pail 80/90 Gear Oil 8 – 20 litre pails MV36 Hydraulic Oil 17 – 20 liter pails Rod Grease 6 – 3.79 liter pails of paint 50 – aerosol paint cans 15 – cans Brake Cleaner	In sea-can storage container for use in 2013
Boart Longyear Supplies	<u>Shipped up for 2013</u> 64 pails – Hydraulic Oil x 20 liters 48 cases – 15/40 Motor Oil x 16 liters 12 cases – Anti Freeze 8 – cases 2 Cycle Oil 12 cases – Fuel Conditioner 2 – Oxygen Cylinders 2 – Acetylene Cylinders	In sea-can storage container in Baker Lake for use in 2013. To be transported to site during winter haul.
AREVA Supplies	<u>Shipped up for 2013</u> 15 – 20 litre pails 15/40 generator motor oil 1764 – 25 kg bags calcium chloride	In Sea container in Baker Lake for use in 2013. To be transported to site during winter haul.

1.4.3.1 Canada Wide Standards

Efforts are being made to meet the Canada-Wide Standard (CWS) for Dioxins and Furans and Mercury. These include the development and implementation of a Waste Management Plan

involving waste inventory, diversion and sorting prior to incineration. Only allowable materials are incinerated, including paper, food and packaging waste, non-treated wood and solid sewage waste. The potential impact of wastes on emissions is considered in the development of waste management procedures.

1.4.4 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

1.4.4.1 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 last week of August:

- 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
- A final inspection of drill sites, including gamma surveys and the removal of any fuel or contaminated soil
- Drill rigs dismantled and stored appropriately
- Generator shut down and winterized
- Waterlines drained, flushed and winterized with antifreeze

All personnel vacated the site by August 30, 2012. Photograph 1-3 shows the Kiggavik camp during seasonal shutdown.

Photograph 1-3 Winterized Kiggavik Camp

1.4.4.2 Restoration

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 in appropriate containers 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 µSv/h and in no instances exceeding 2.5 µSv/h.

1.4.4.2.1 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. It is AREVA's intention to reclaim disturbed sites in an acceptable manner, following availability of adequate information. 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.

1.4.4.2.2 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 (µSv/h) above background. Following remediation activities, another gamma survey would be conducted to ensure levels have been reduced to below 1 µSv/h above background.

As shown in Table 1.4-3, gamma surveys were conducted throughout the season for each drill location. Readings with the Ludlum 2221 and Trimble ProXrt were made at 1 second intervals at one meter above ground. Please note that although pre gamma survey data is missing for the Granite Grid (GG) drill hole 024/025, the post gamma survey indicated that values were well below the 1 µSv/h value (Figure 1.4-8). 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 (Figure 1.4-16). The post gamma survey will be conducted again during the 2013 field season. During the 2012 field season, all gamma survey dose rates were below 1 µSv/h as shown in Figures 1.4-1 to 1.4-22.

Table 1.4-3 Gamma Survey Data from 2012 Drill Locations

Drill Hole	Pre Gamma	Post Gamma
	Date	Date
BONG-053	June 14, 2012	July 4, 2012
BONG-054		
BONG-055	June 14, 2012	July 15, 2012
BONG-056	July 10, 2012	August 4, 2012
BONG-057		
BONG-057A		

Drill Hole	Pre Gamma	Post Gamma
	Date	Date
BONG-058	July 24, 2012	August 8, 2012
BONG-059	July 24, 2012	August 21, 2012
BONG-060	July 24, 2012	August 21, 2012
END-12-01	June 13, 2012	July 4, 2012
END-12-02		
END-12-02A		
END-12-02B		
END-12-03	July 15, 2012	August 8, 2012
END-12-04		
END-12-05	July 12, 2012	August 4, 2012
END-12-06	July 21, 2012	August 4, 2012
END-12-07	July 15, 2012	August 21, 2012
END-12-08	August 8, 2012	August 21, 2012
END-12-09	August 8, 2012	August 27, 2012
GG-021	July 9, 2012	August 4, 2012
GG-022	July 9, 2012	August 4, 2012
GG-022A		
GG-023	July 24, 2012	August 8, 2012
GG-024	August 21, 2012	August 23, 2012
GG-025		
GG-026	August 8, 2012	August 28, 2012
SLEK-013	June 12, 2012	July 4, 2012
SLEK-014	June 15, 2012	July 4, 2012
SLEK-015	June 15, 2012	July 9, 2012
SLEK-016	June 15, 2012	July 12, 2012

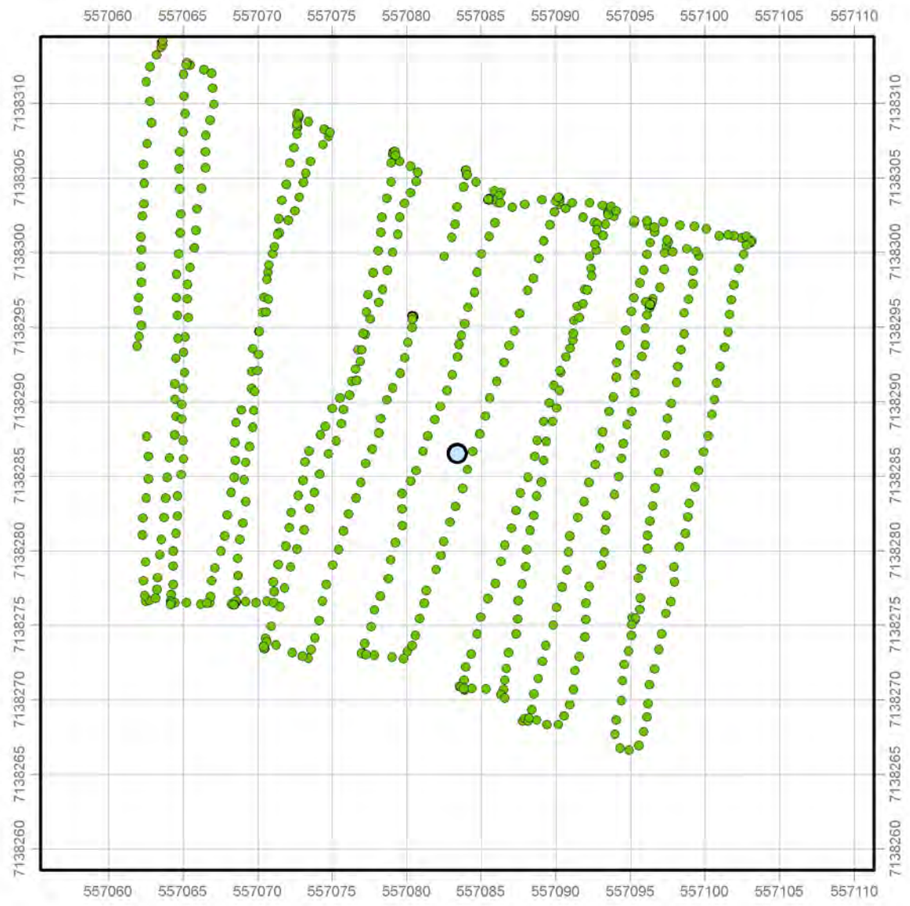
Legend

- Drill Hole

Gamma Value

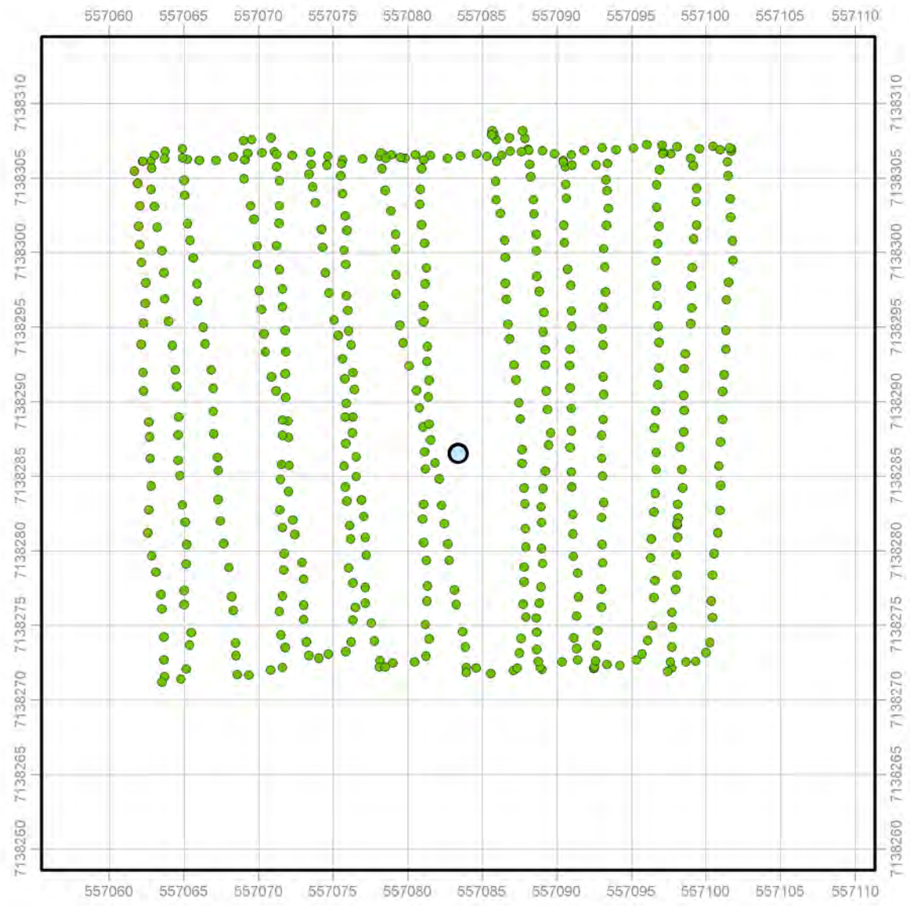
- 0.0 - 0.3 µSv
- 0.3 - 0.6 µSv
- 0.6 - 1.0 µSv
- 1.0 - 2.5 µSv
- > 2.5 µSv

N



SLEK-013
Pre Gamma Survey

Min-Max: 0.038 - 0.069 µSv



SLEK-013
Post Gamma Survey

Min-Max: 0.051 - 0.079 µSv

Projection: NAD 1983 UTM Zone 14N
Compiled: C. CARTER Drawn: C. CARTER
Date: 09/01/2012 Scale: 5m x 5m GRID
File: KI08F089
Data Sources: *AREVA Resources Canada Inc.*

FIGURE 1.4-1
PRE AND POST GAMMA SURVEY
DRILL HOLE SLEK-013

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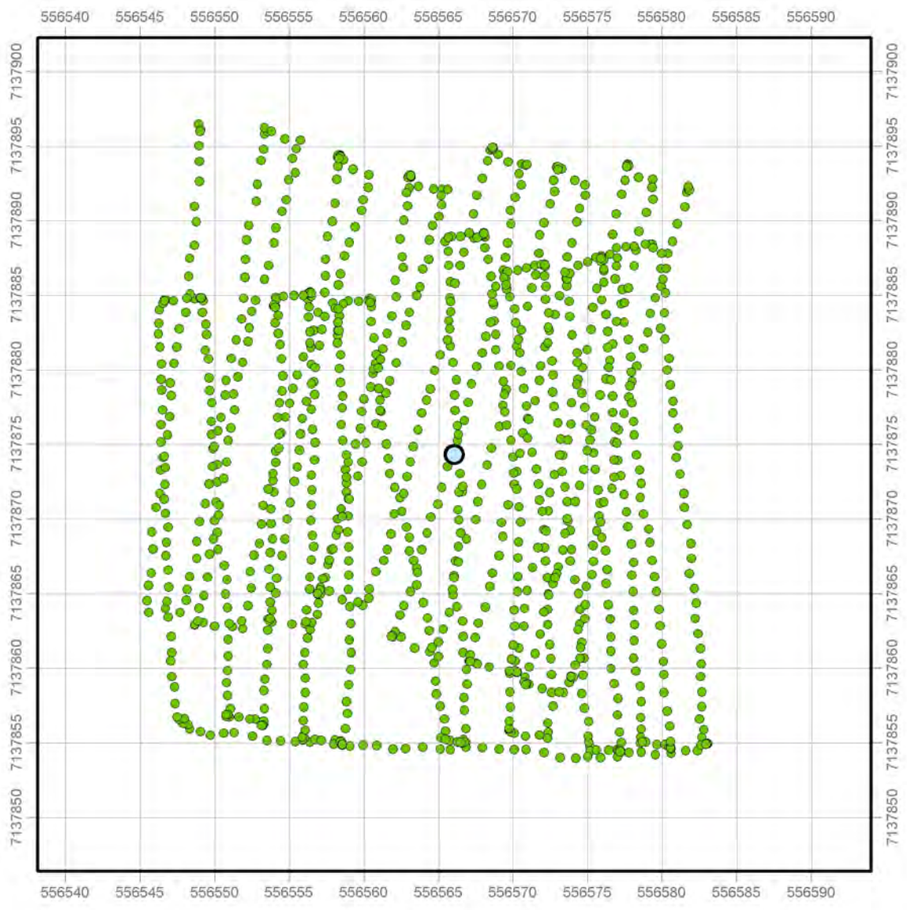
Legend

- Drill Hole

Gamma Value

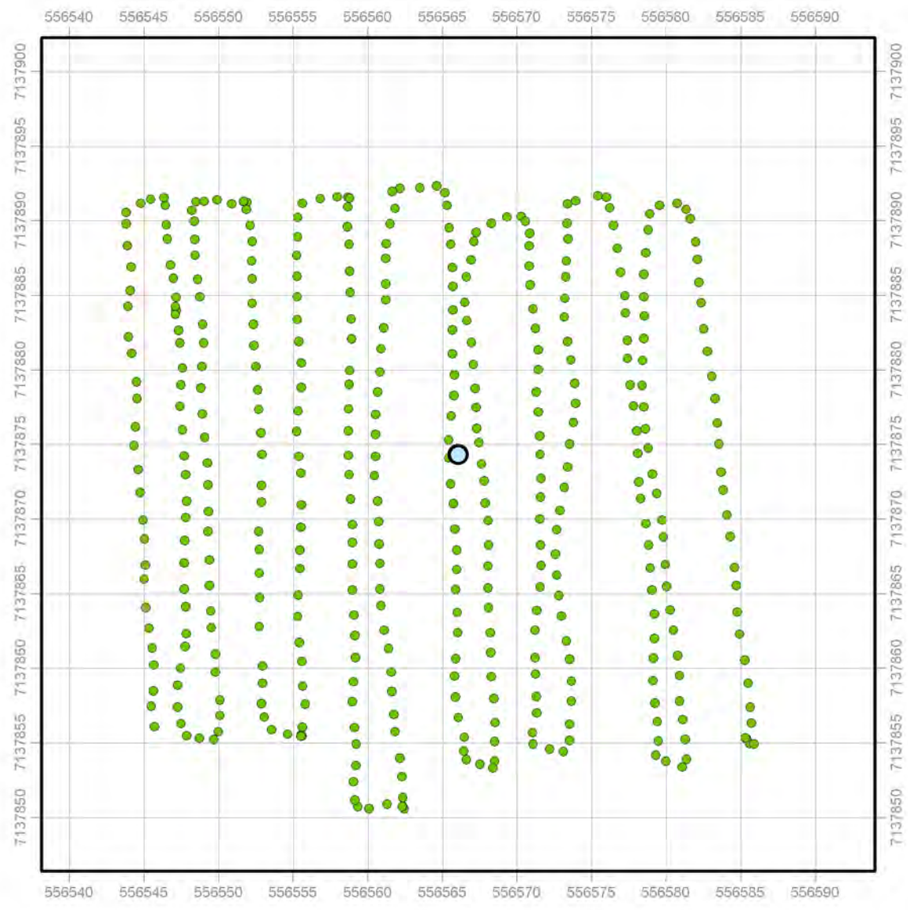
- 0.0 - 0.3 µSv
- 0.3 - 0.6 µSv
- 0.6 - 1.0 µSv
- 1.0 - 2.5 µSv
- > 2.5 µSv

N



SLEK-014
Pre Gamma Survey

Min-Max: 0.040 - 0.069 µSv



SLEK-014
Post Gamma Survey

Min-Max: 0.045 - 0.073 µSv

Projection: NAD 1983 UTM Zone 14N
Compiled: C. CARTER Drawn: C. CARTER
Date: 09/01/2012 Scale: 5m x 5m GRID
File: KI08F090
Data Sources: *AREVA Resources Canada Inc.*

FIGURE 1.4-2
PRE AND POST GAMMA SURVEY
DRILL HOLE SLEK-014

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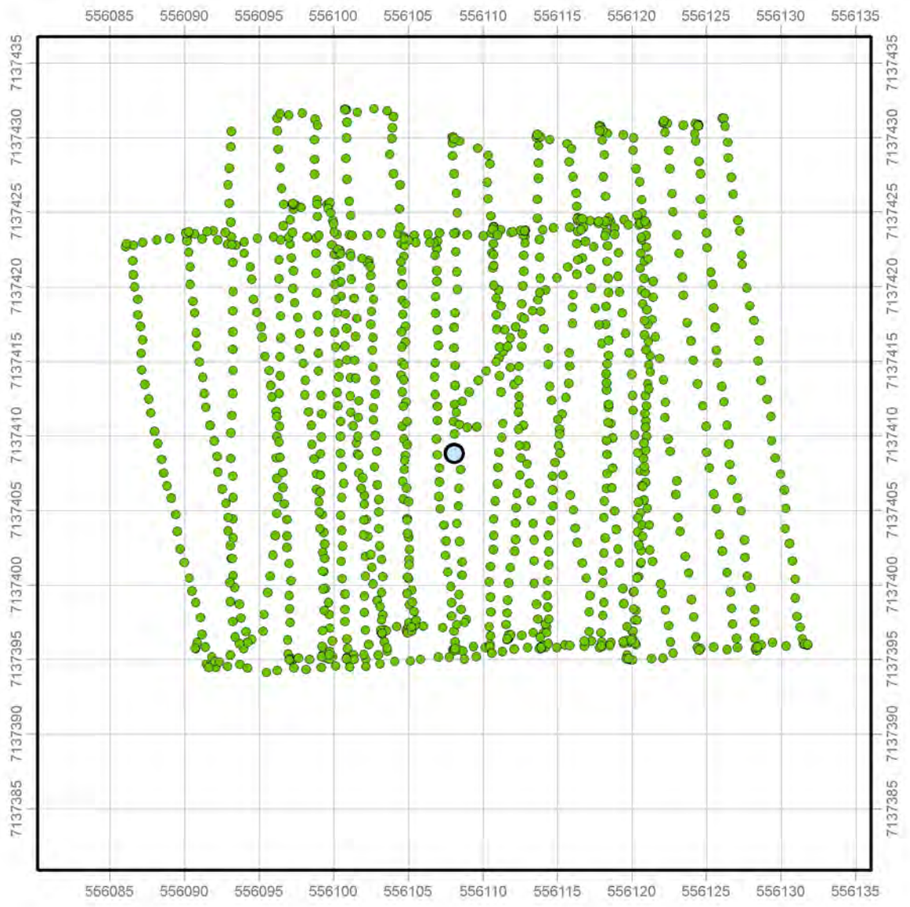
Legend

- Drill Hole

Gamma Value

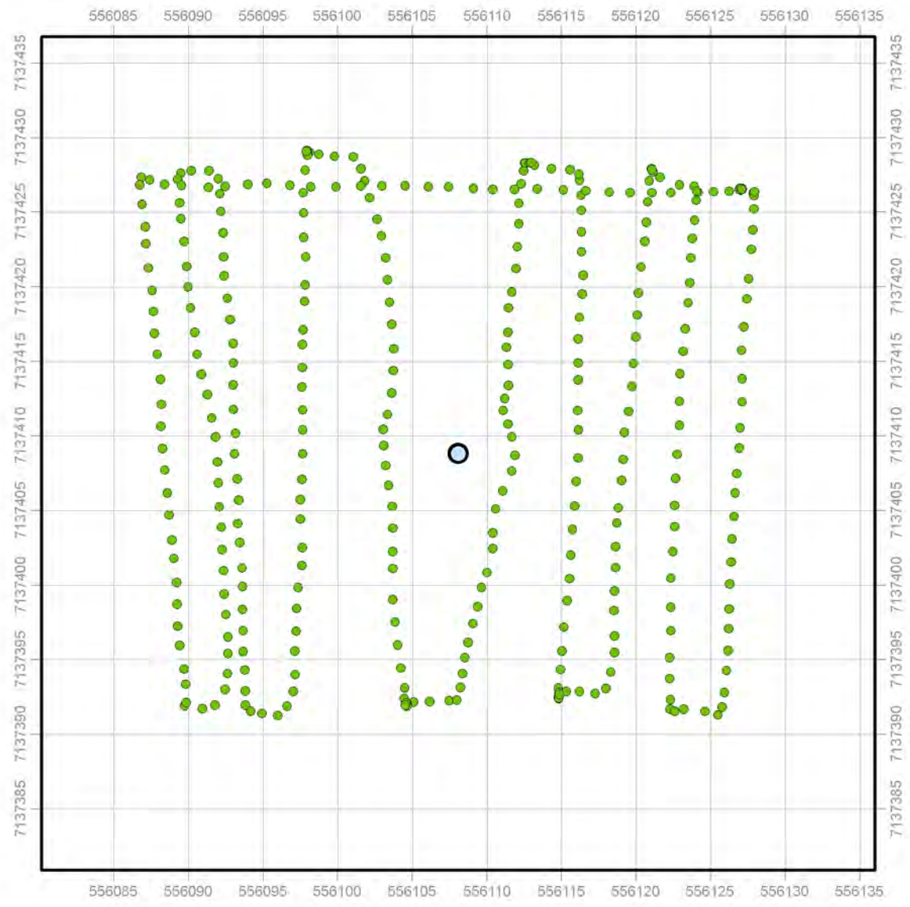
- 0.0 - 0.3 µSv
- 0.3 - 0.6 µSv
- 0.6 - 1.0 µSv
- 1.0 - 2.5 µSv
- > 2.5 µSv

N



SLEK-015
Pre Gamma Survey

Min-Max: 0.040 - 0.069 µSv



SLEK-015
Post Gamma Survey

Min-Max: 0.049 - 0.074 µSv

Projection: NAD 1983 UTM Zone 14N
Compiled: C. CARTER Drawn: C. CARTER
Date: 09/01/2012 Scale: 5m x 5m GRID
File: KI08F091
Data Sources: *AREVA Resources Canada Inc.*

FIGURE 1.4-3
PRE AND POST GAMMA SURVEY
DRILL HOLE SLEK-015

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KIGGAVIK PROJECT

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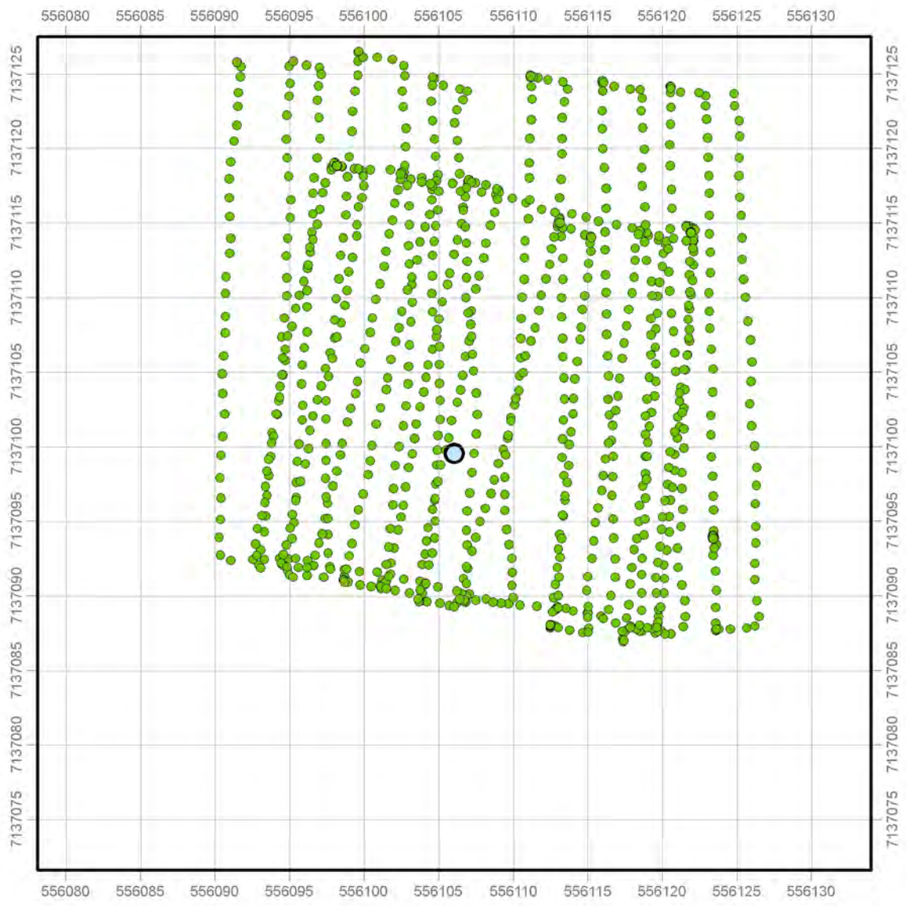
Legend

- Drill Hole

Gamma Value

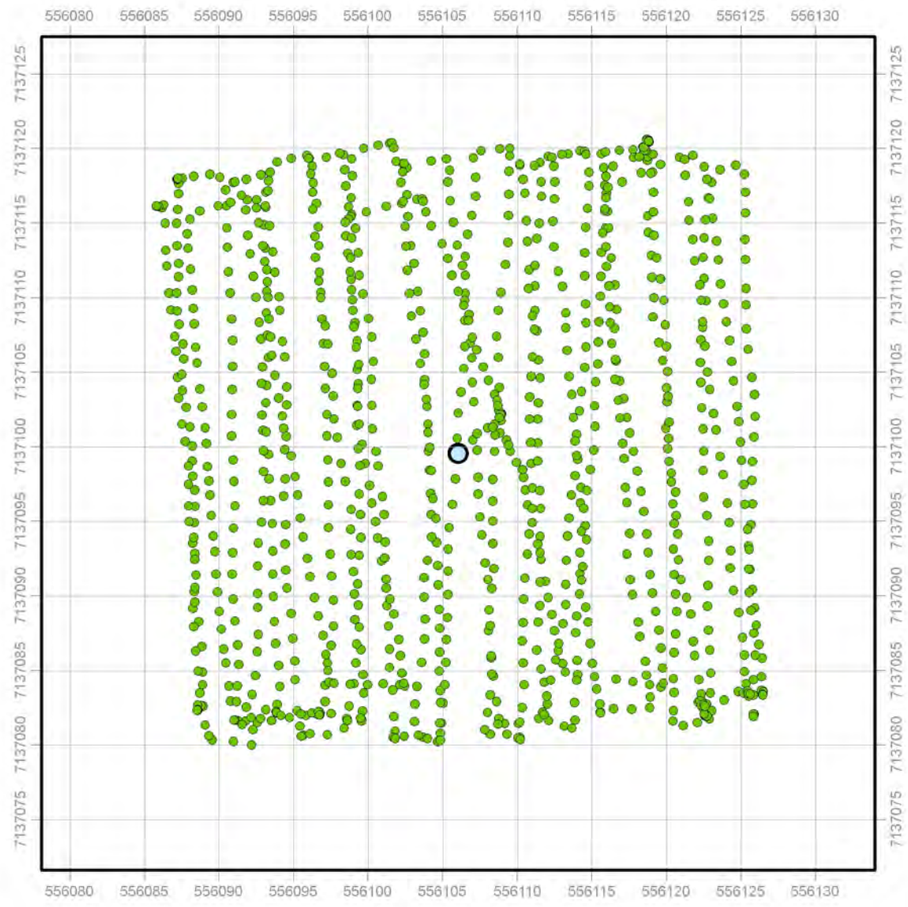
- 0.0 - 0.3 µSv
- 0.3 - 0.6 µSv
- 0.6 - 1.0 µSv
- 1.0 - 2.5 µSv
- > 2.5 µSv

N



SLEK-016
Pre Gamma Survey

Min-Max: 0.045 - 0.078 µSv



SLEK-016
Post Gamma Survey

Min-Max: 0.048 - 0.085 µSv

Projection: NAD 1983 UTM Zone 14N
Compiled: C. CARTER Drawn: C. CARTER
Date: 09/01/2012 Scale: 5m x 5m GRID
File: KI08F092
Data Sources: *AREVA Resources Canada Inc.*

FIGURE 1.4-4
PRE AND POST GAMMA SURVEY
DRILL HOLE SLEK-016

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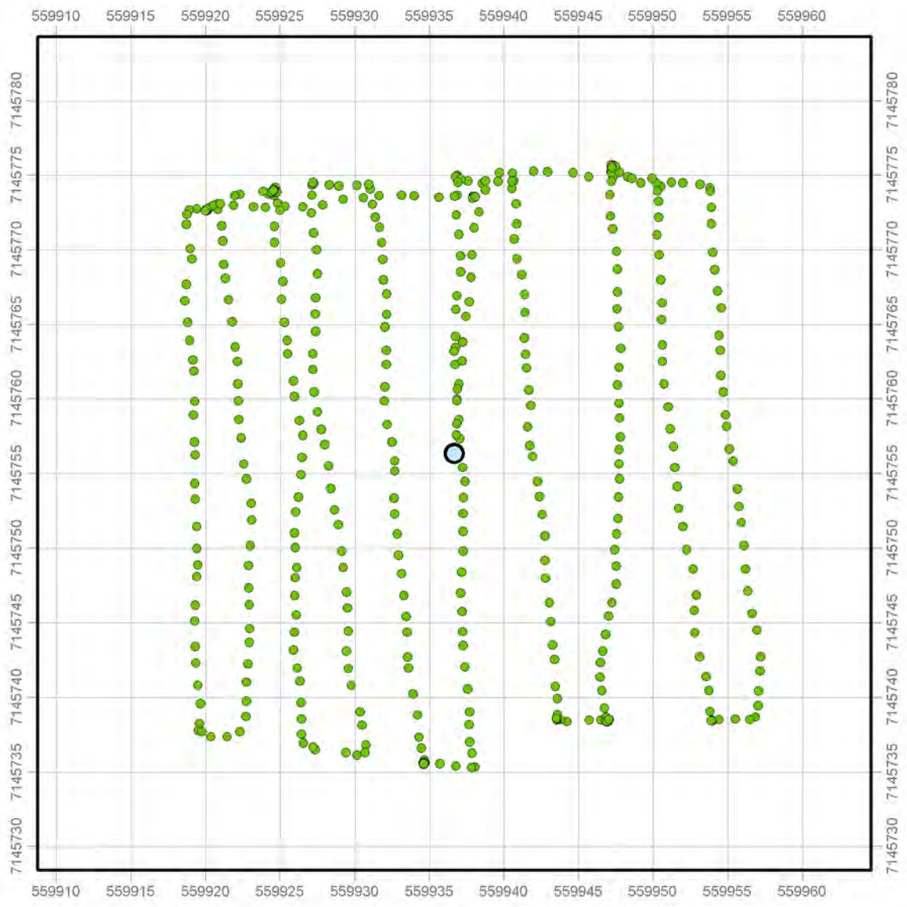
Legend

- Drill Hole

Gamma Value

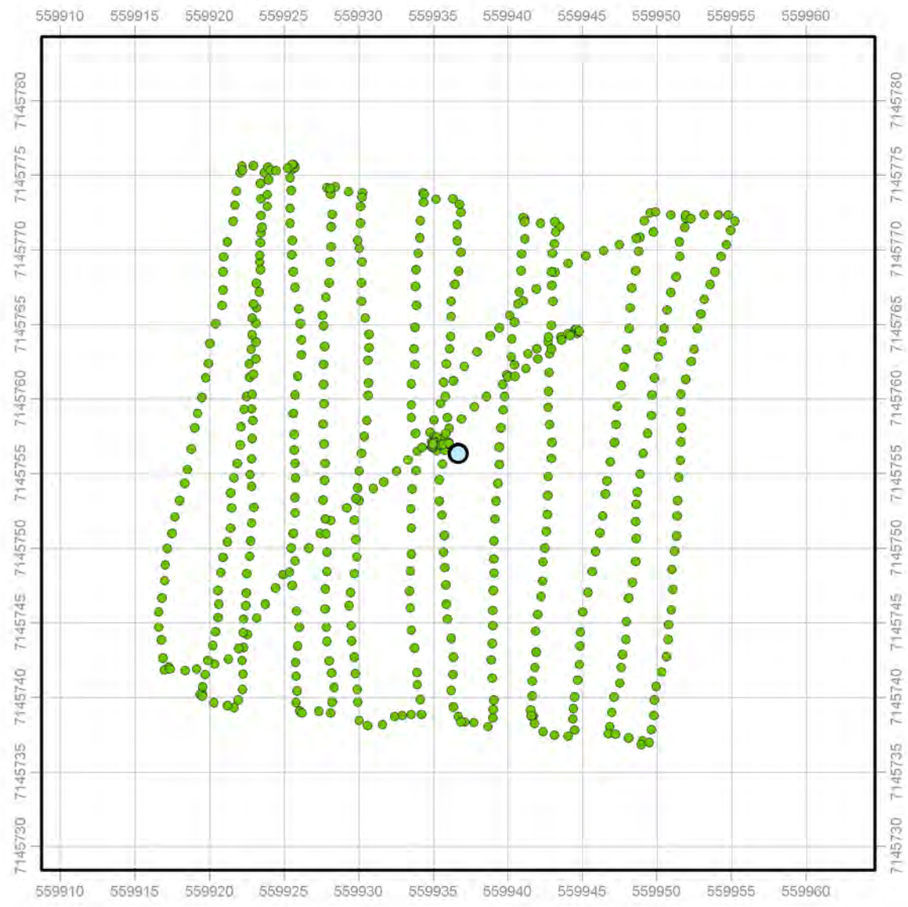
- 0.0 - 0.3 µSv
- 0.3 - 0.6 µSv
- 0.6 - 1.0 µSv
- 1.0 - 2.5 µSv
- > 2.5 µSv

N



GG-021
Pre Gamma Survey

Min-Max: 0.048 - 0.082 µSv



GG-021
Post Gamma Survey

Min-Max: 0.045 - 0.091 µSv

Projection: NAD 1983 UTM Zone 14N
Compiled: C. CARTER Drawn: C. CARTER
Date: 09/01/2012 Scale: 5m x 5m GRID
File: KI08F093
Data Sources: *AREVA Resources Canada Inc.*

FIGURE 1.4-5
PRE AND POST GAMMA SURVEY
DRILL HOLE GG-021

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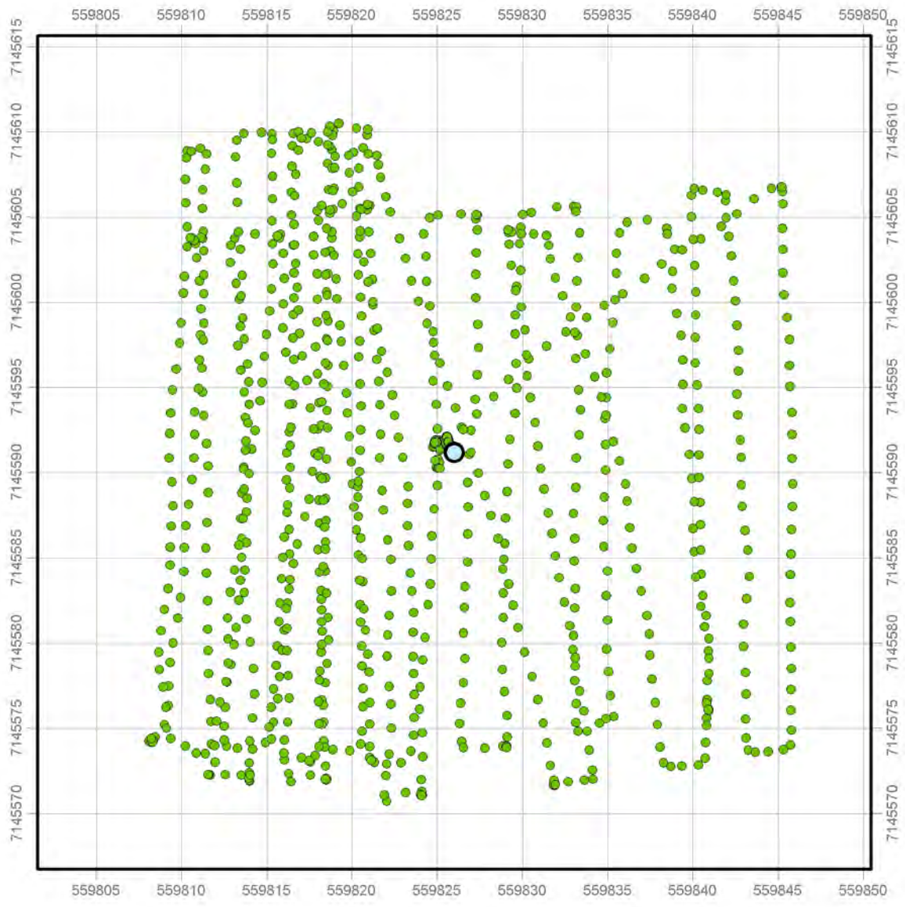
Legend

- Drill Hole

Gamma Value

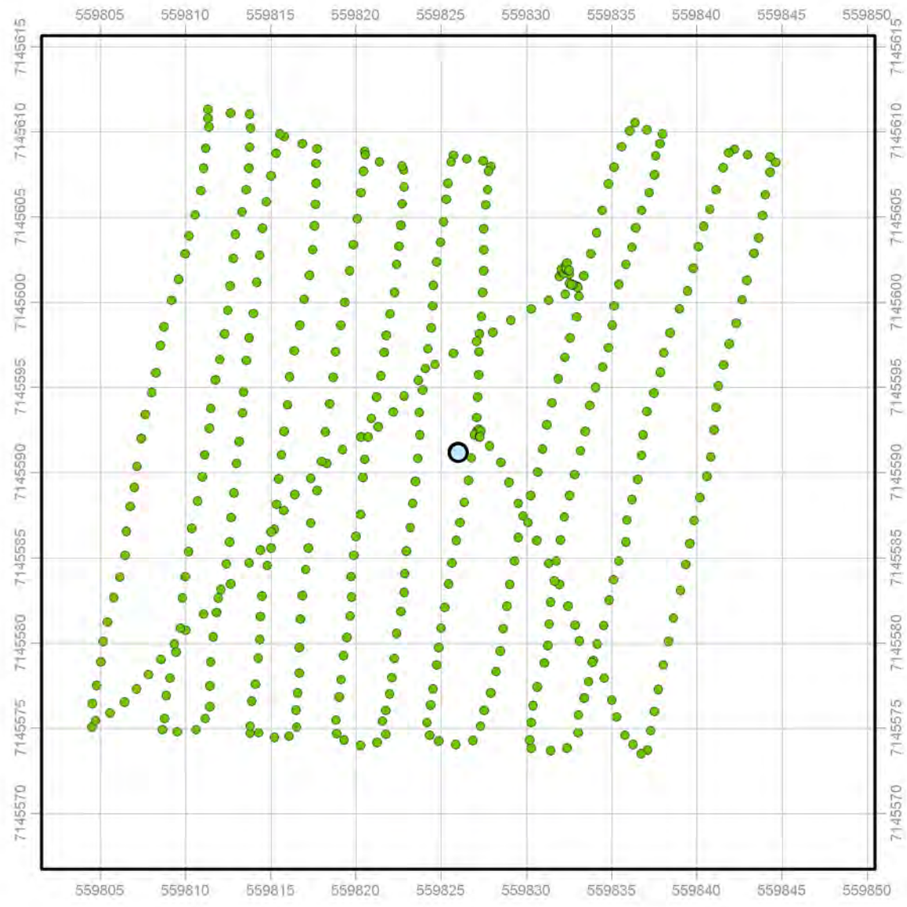
- 0.0 - 0.3 µSv
- 0.3 - 0.6 µSv
- 0.6 - 1.0 µSv
- 1.0 - 2.5 µSv
- > 2.5 µSv

N



GG-022/022A
Pre Gamma Survey

Min-Max: 0.049 - 0.084 µSv



GG-022/022A
Post Gamma Survey

Min-Max: 0.053 - 0.085 µSv

Projection: NAD 1983 UTM Zone 14N
Compiled: C. CARTER Drawn: C. CARTER
Date: 09/01/2012 Scale: 5m x 5m GRID
File: KI08F094
Data Sources: *AREVA Resources Canada Inc.*

FIGURE 1.4-6
PRE AND POST GAMMA SURVEY
DRILL HOLE GG-022/022A

KIGGAVIK PROJECT - 2012 ANNUAL REPORT

KIGGAVIK PROJECT

AREVA

AREVA Resources Canada Inc. - P.O. Box 9204 - 817 - 45th Street West - Saskatoon, SK - S7K 3X5

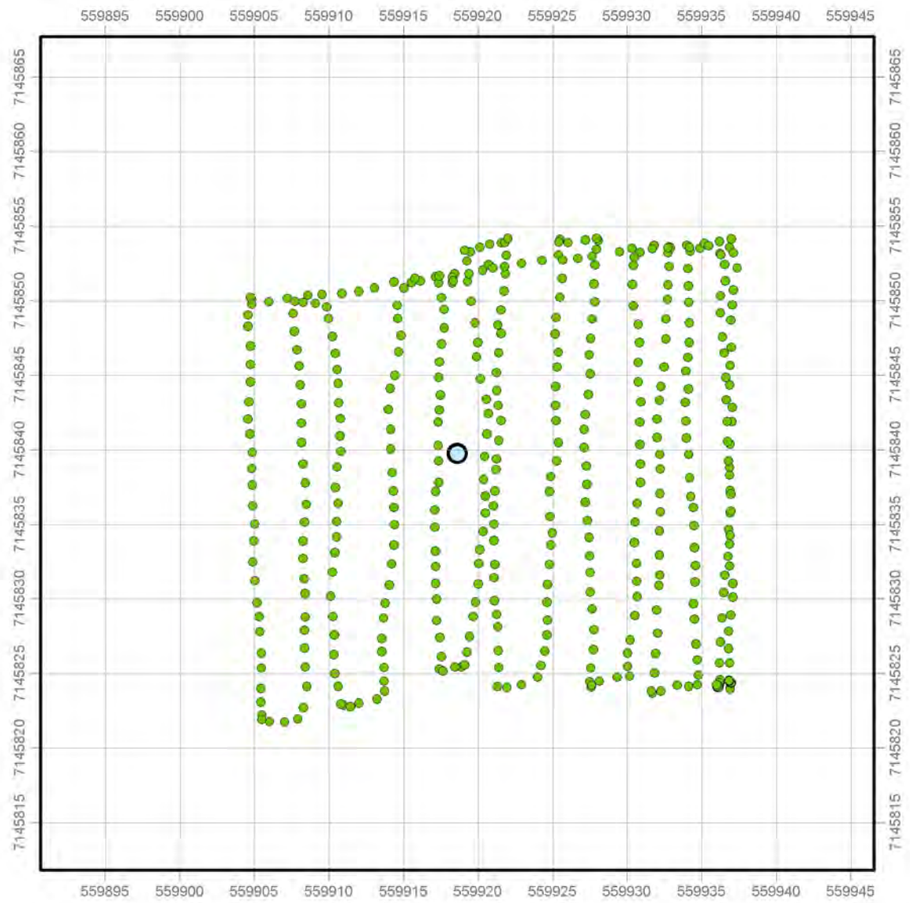
Legend

- Drill Hole

Gamma Value

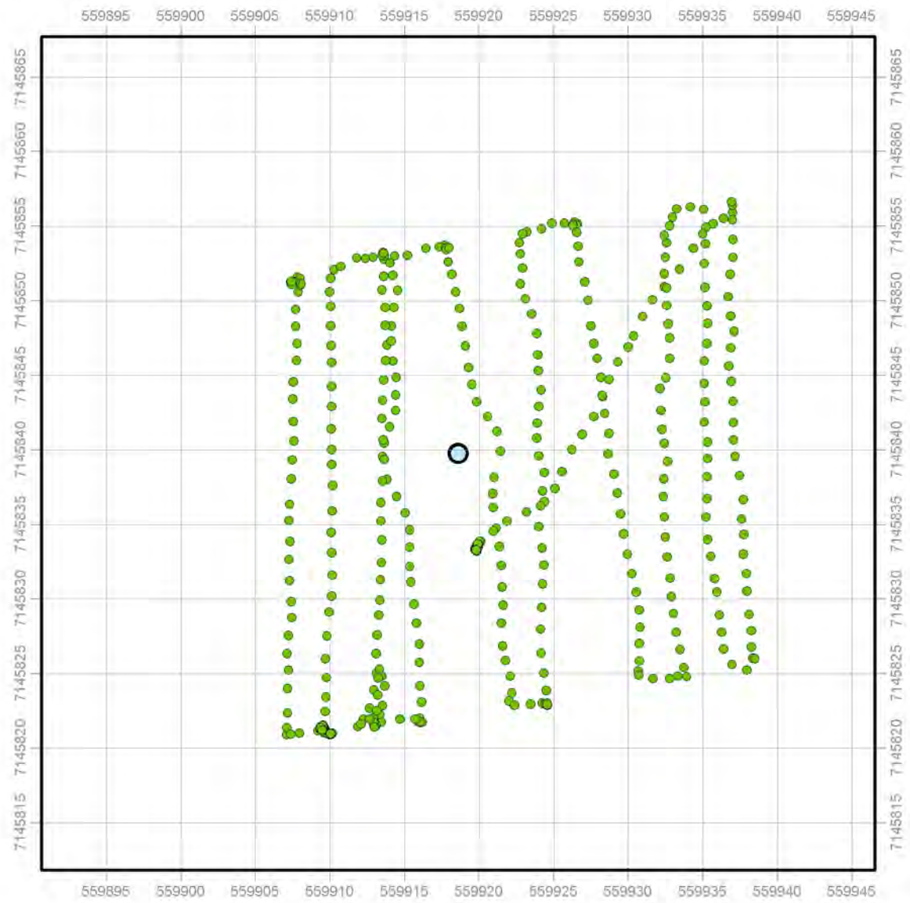
- 0.0 - 0.3 µSv
- 0.3 - 0.6 µSv
- 0.6 - 1.0 µSv
- 1.0 - 2.5 µSv
- > 2.5 µSv

N



GG-023
Pre Gamma Survey

Min-Max: 0.038 - 0.069 µSv



GG-023
Post Gamma Survey

Min-Max: 0.051 - 0.079 µSv

Projection: NAD 1983 UTM Zone 14N
Compiled: C. CARTER Drawn: C. CARTER
Date: 09/01/2012 Scale: 5m x 5m GRID
File: KI08F095
Data Sources: *AREVA Resources Canada Inc.*

FIGURE 1.4-7
PRE AND POST GAMMA SURVEY
DRILL HOLE GG-023

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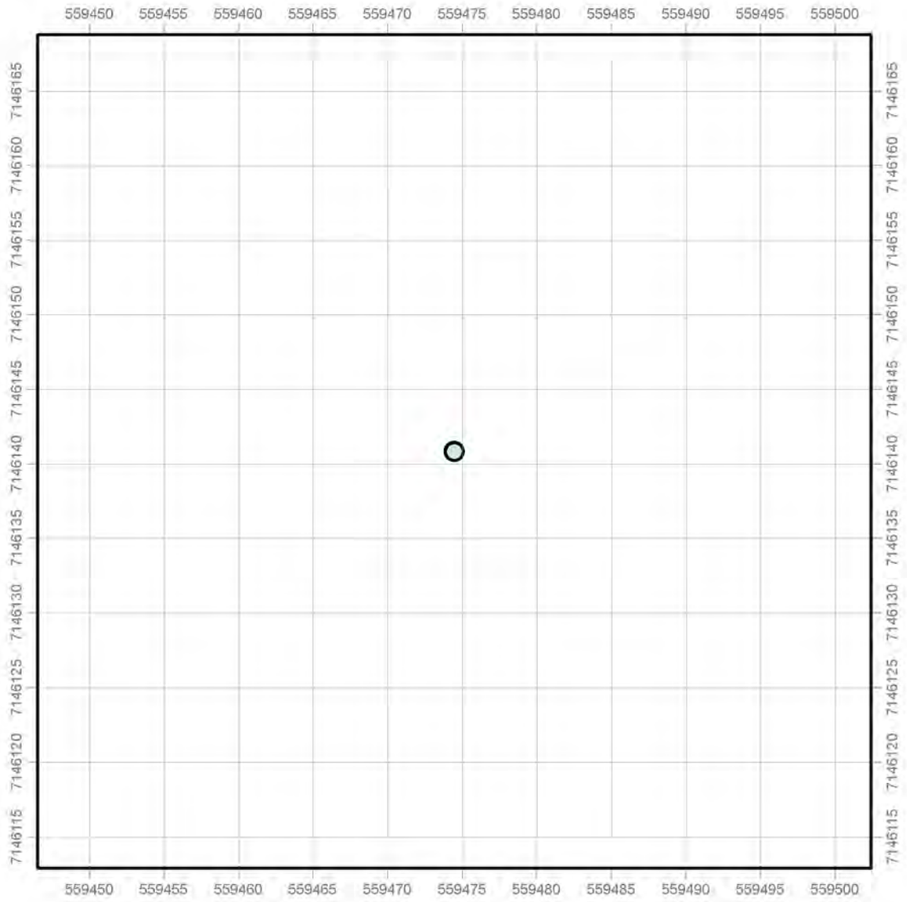
Legend

- Drill Hole

Gamma Value

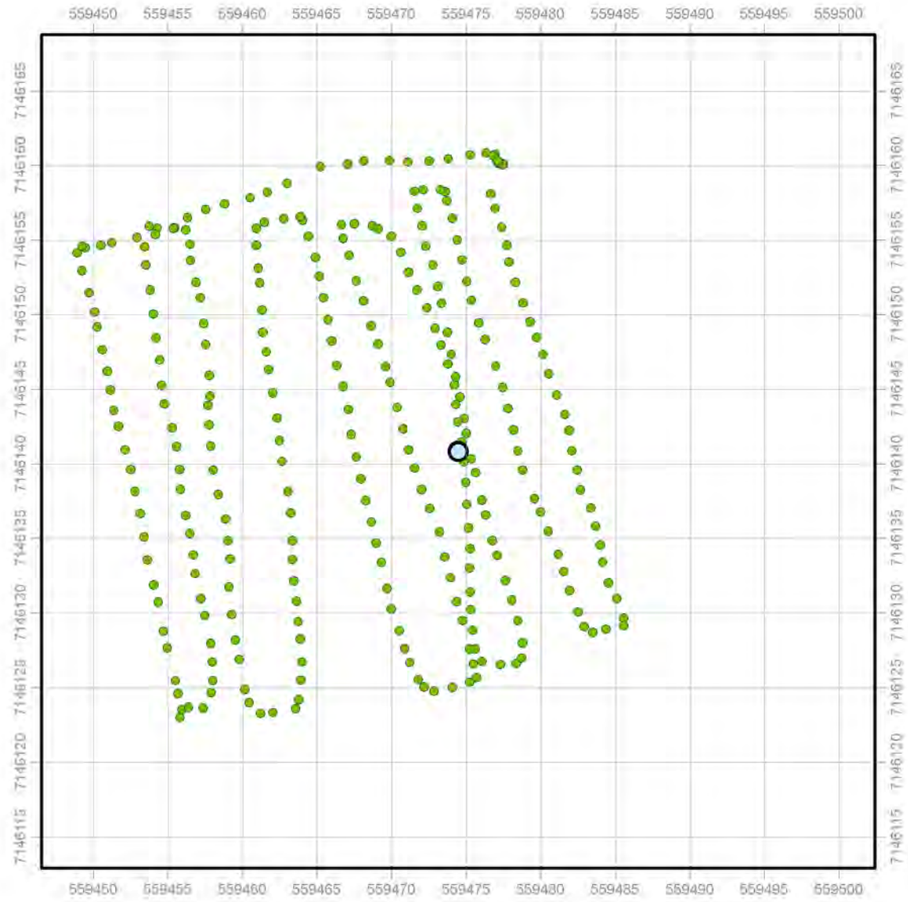
- 0.0 - 0.3 µSv
- 0.3 - 0.6 µSv
- 0.6 - 1.0 µSv
- 1.0 - 2.5 µSv
- > 2.5 µSv

N



GG-024/025
Pre Gamma Survey

Missing Data



GG-024/025
Post Gamma Survey

Min-Max: 0.053 - 0.083 µSv

Projection: NAD 1983 UTM Zone 14N
Compiled: C. CARTER Drawn: C. CARTER
Date: 09/01/2012 Scale: 5m x 5m GRID
File: KI08F096
Data Sources: *AREVA Resources Canada Inc.*

FIGURE 1.4-8
PRE AND POST GAMMA SURVEY
DRILL HOLE GG-024/025

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