



Photograph 3.7-8: CONT-027 Post Drill Remediation August 12, 2015

### **3.7.2.3 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  $\mu\text{Sv/h}$  above background. Following remediation activities, another gamma survey would be conducted to ensure levels have been reduced to below 1  $\mu\text{Sv/h}$  above background.

As shown in Table 3.7-1, gamma surveys were conducted for each drill location both before and after drilling. Readings with the Ludlum 2221 (Ludlum) Scaler Ratemeter and Trimble GPS PRO-XRT were made at one second intervals at one meter above ground. Due to technical difficulties with the Ludlum early in the 2015 field season, an alternative method using the Automess 6150 AD (Automess) was developed and implemented for the remainder of the season. Using the Automess, 49 readings were manually recorded on a 5 m grid spacing for 900  $\text{m}^2$  around the drill hole for both pre and post gamma surveys. During the 2015 field season, all gamma survey dose rates were below 1  $\mu\text{Sv/h}$  as shown in Figure 3.7-1 to Figure 3.7-33 of Appendix B.

**Table 3.7-1: 2015 Drill Hole Gamma Surveys**

<b>Drill Hole</b>	<b>Pre-gamma Date</b>	<b>Pre-Survey Instrument Method</b>	<b>Post-gamma Date</b>	<b>Post-Survey Instrument Method</b>	<b>Figure Number</b>	<b>Dose Rate Less Than 1 (µSv/h)</b>
85W-009	15-Jun-15	Ludlum	22-Jun-15	Ludlum	Figure 3.7-1	Yes
85W-010	15-Jun-15	Ludlum	2-Jul-15	Ludlum	Figure 3.7-2	Yes
85W-011	26-Jun-15	Ludlum	7-Jul-15	Automess	Figure 3.7-3	Yes
85W-012	20-Jun-15	Ludlum	7-Jul-15	Automess	Figure 3.7-4	Yes
85W-013	3-Jul-15	Automess	10-Jul-15	Automess	Figure 3.7-5	Yes
85W-014	20-Jun-15	Ludlum	17-Jul-15	Automess	Figure 3.7-6	Yes
BS-03	13-Jul-15	Automess	24-Jul-15	Automess	Figure 3.7-7	Yes
BS-04	18-Jul-15	Automess	30-Jul-15	Automess	Figure 3.7-8	Yes
BS-05	25-Jul-15	Automess	8-Aug-15	Automess	Figure 3.7-9	Yes
CONT-016	19-Jun-15	Ludlum	7-Jul-15	Automess	Figure 3.7-10	Yes
CONT-017	19-Jun-15	Ludlum	7-Jul-15	Automess	Figure 3.7-11	Yes
CONT-018						
CONT-019	30-Jun-15	Ludlum	7-Jul-15	Automess	Figure 3.7-12	Yes
CONT-020	4-Jul-15	Automess	16-Jul-15	Automess	Figure 3.7-13	Yes
CONT-021						
CONT-022	14-Jul-15	Automess	26-Jul-15	Automess	Figure 3.7-14	Yes
CONT-023	18-Jul-15	Automess	26-Jul-15	Automess	Figure 3.7-15	Yes
CONT-024	23-Jul-15	Automess	29-Jul-15	Automess	Figure 3.7-16	Yes
CONT-025	26-Jul-15	Automess	5-Aug-15	Automess	Figure 3.7-17	Yes
CONT-026	31-Jul-15	Automess	6-Aug-15	Automess	Figure 3.7-18	Yes
CONT-027	5-Aug-15	Automess	12-Aug-15	Automess	Figure 3.7-19	Yes
ST-01	14-Jul-15	Automess	23-Jul-15	Automess	Figure 3.7-20	Yes
ST-02	14-Jul-15	Automess	28-Jul-15	Automess	Figure 3.7-21	Yes
ST-03	23-Jul-15	Automess	6-Aug-15	Automess	Figure 3.7-22	Yes
ST-04	28-Jul-15	Automess	6-Aug-15	Automess	Figure 3.7-23	Yes
AND-15-01	29-Jul-15	Automess	5-Aug-15	Automess	Figure 3.7-24	Yes
AND-15-02	5-Aug-15	Automess	11-Aug-15	Automess	Figure 3.7-25	Yes
AND-15-03	9-Aug-15	Automess	16-Aug-15	Automess	Figure 3.7-26	Yes
AND-15-04	11-Aug-15	Automess	16-Aug-15	Automess	Figure 3.7-27	Yes
CZ-15-01	2-Aug-15	Automess	7-Aug-15	Automess	Figure 3.7-28	Yes
JE-03	9-Aug-15	Automess	20-Aug-15	Automess	Figure 3.7-29	Yes
JE-04	12-Aug-15	Automess	20-Aug-15	Automess	Figure 3.7-30	Yes
JE-05	16-Aug-15	Automess	20-Aug-15	Automess	Figure 3.7-31	Yes
CARB-009	15-Aug-15	Automess	24-Aug-15	Automess	Figure 3.7-32	Yes
HOT90-01	20-Aug-15	Automess	24-Aug-15	Automess	Figure 3.7-33	Yes

## 4 Effects of the Project on Human Health

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AREVA is committed to providing a healthy and safe work environment for all employees and contractors and to ensuring work is performed in a safe and responsible manner. To meet this commitment, AREVA takes every reasonable precaution to ensure the health and safety of personnel to mitigate the potential harmful effects of uranium exploration activities. This commitment is supported through a comprehensive Health and Safety Program.

### 4.1 Health and Safety Program

The Health and Safety Program ensures work activities are performed in a safe and responsible manner and that they are conducted in accordance with the Nunavut *Mine Health and Safety Regulations*, exploration best practices and AREVA safety requirements. AREVA completed the 2015 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 audit completed in 2014 concluded that the health and safety program meets all health and safety requirements.

The Project Geologist was responsible for overseeing the Health and Safety Program with the assistance of the SHEQ Supervisor to ensure worker safety and protection of the environment. All Kiggavik personnel received orientation and appropriate safety training prior to commencing work. Employees and contractors were also required to participate in weekly safety meetings to discuss and reinforce safety issues, reinforce good work practices, and act as the Occupational Health and Safety Committee (OHC). The meeting minutes were forwarded monthly to the Workers' Safety and Compensation Commission (WSCC) Mines Inspector. The monthly accident summary was forwarded to the WSCC Mines Inspector, which outlined the three first aids that occurred during the field program. There were no lost time accidents involving AREVA or contractor personnel.

## **4.2 Radiation Protection**

To prevent radiation exposure during drilling, the Radiation Protection program was implemented to ensure work activities were performed in a safe and responsible manner. The results of the radiation monitoring program indicate that the work activities did not pose a health risk to workers or the public.

The Radiation Protection program was completed using:

- Gamma dosimetry which included optically stimulated luminescent dosimeters (OLDs) and direct reading dosimeters (DRDs/Canaries) for personal dosimetry;
- Automess 6150 AD survey instrument for gamma radiation monitoring;
- Ludlum 2221 with Trimble Pro-Xrt for pre and post gamma surveys;
- Automess 6150 AD survey instrument for pre and post gamma surveys;
- Ludlum 2929 survey instrument and swipes for contamination monitoring; and
- Alpha monitors for radon progeny and long lived radioactive dust (LLRD) monitoring.

The Radiation Protection Program is supported through a comprehensive series of work instructions for worker dosimetry, radiological monitoring, contamination control and the safe handling of radioactive materials.

### **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 Integrated Management System (IMS). Although current activities are not regulated by the CNSC, the Radiation Protection Plan is designed in accordance with CNSC Regulations. The Radiation Protection Plan guides the implementation of the Radiation Protection Program to keep exposures As Low as Reasonably Achievable (ALARA) through ongoing monitoring, management of radioactive materials, and proper abandonment and restoration. The plan is implemented through routine radiation monitoring by AREVA personnel. This includes dosimetry monitoring to determine worker exposure, management of radioisotopes, shipping and receiving of radioactive material, the collection and storage of radioactive materials, and emergency response planning.

All AREVA employees and contractors receive appropriate radiation protection training prior to beginning work to ensure worker safety and protection of the environment. This includes the designation and obligations of Occupational Workers, dose levels and dose limits, and relevant

hazards. 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.

#### **4.2.1.1 Radiological Monitoring**

As part of the Radiation Protection Program, workplace radiological monitoring was performed for gamma radiation, Radon Progeny (RnP) and Long-Lived Radioactive Dust (LLRD) to detect potentially abnormal conditions and estimate worker doses. Appropriate personal protective equipment and ventilation methods were used during all work activities, and continuous monitoring was conducted for LLRD and RnP in the geology core shacks. A summary of the radiological monitoring results is provided in Table 4.2-1. Working Level (WL) is the unit of concentration of radon progeny equivalent to the potential alpha energy concentration that results from 3.7 Bq of each radon decay product. LLRD is expressed in units of bequerel per cubic meter (Bq/m<sup>3</sup>) which refers to number of Bq inhaled or ingested and is used to determine the dose received from radioactive dusts.

**Table 4.2-1: Radiological Area Monitoring Results**

<b>Radiation Type</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Average</b>
Radon Progeny (WL)	0.00010	0.0012	0.00040
Long-Lived Radioactive Dust (Bq/m <sup>3</sup> )	0.00020	0.0053	0.00230

Contamination control measures are implemented to minimize the spread of radioactive materials. When gamma dose rates on contact with the core exceed 10 µSv/h, contamination monitoring is conducted and the affected surface or equipment cleaned if necessary.

#### **4.2.1.2 Radiation Exposure**

The total effective dose of Kiggavik personnel considers gamma radiation and the results from area monitoring for RnP and LLRD in units of millisieverts (mSv). This cumulative dose is compared to dosimetry limits to confirm the adequacy of the Radiation Protection Program.

##### *Gamma Exposures*

Radiation exposure during uranium exploration activities primarily originates from external gamma radiation emitted from mineralized core, rock and drill cuttings. Worker exposures to 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) or Canaries. Action and Administrative Levels are set for gamma radiation dose rates which are which measured by the DRD or Canaries. Worker gamma radiation exposures ranged from 0.020 mSv to 0.040 mSv with an average exposure of 0.028 mSv which are well below the public dose limit of 1 mSv/year.

#### *Radon Progeny and Long-Lived Radioactive Dust Exposures*

Worker exposures to RnP and LLRD are estimated from industry-accepted area monitoring techniques and occupancy time information. Worker exposures to RnP and LLRD ranged from 0.00040 mSv to 0.0060 mSv with an average exposure of 0.0022 mSv.

#### *Total Effective Exposure*

As per the *Radiation Protection Regulations*, the maximum annual dose for an occupational worker is 50 millisievert per year (mSv/year) or an average of 20 mSv/year over 5 years. The maximum annual dose for a member of the public is 1 mSv/year. 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. As shown in Figure 4.2-1, the worker radiation doses were well below regulatory dose limits for members of the public and occupational workers. The maximum dose received by an individual working at Kiggavik in 2015 was 0.040 mSv and the average dose was 0.011 mSv. Therefore, the Kiggavik personnel exposures were below the regulatory limit for members of the public.

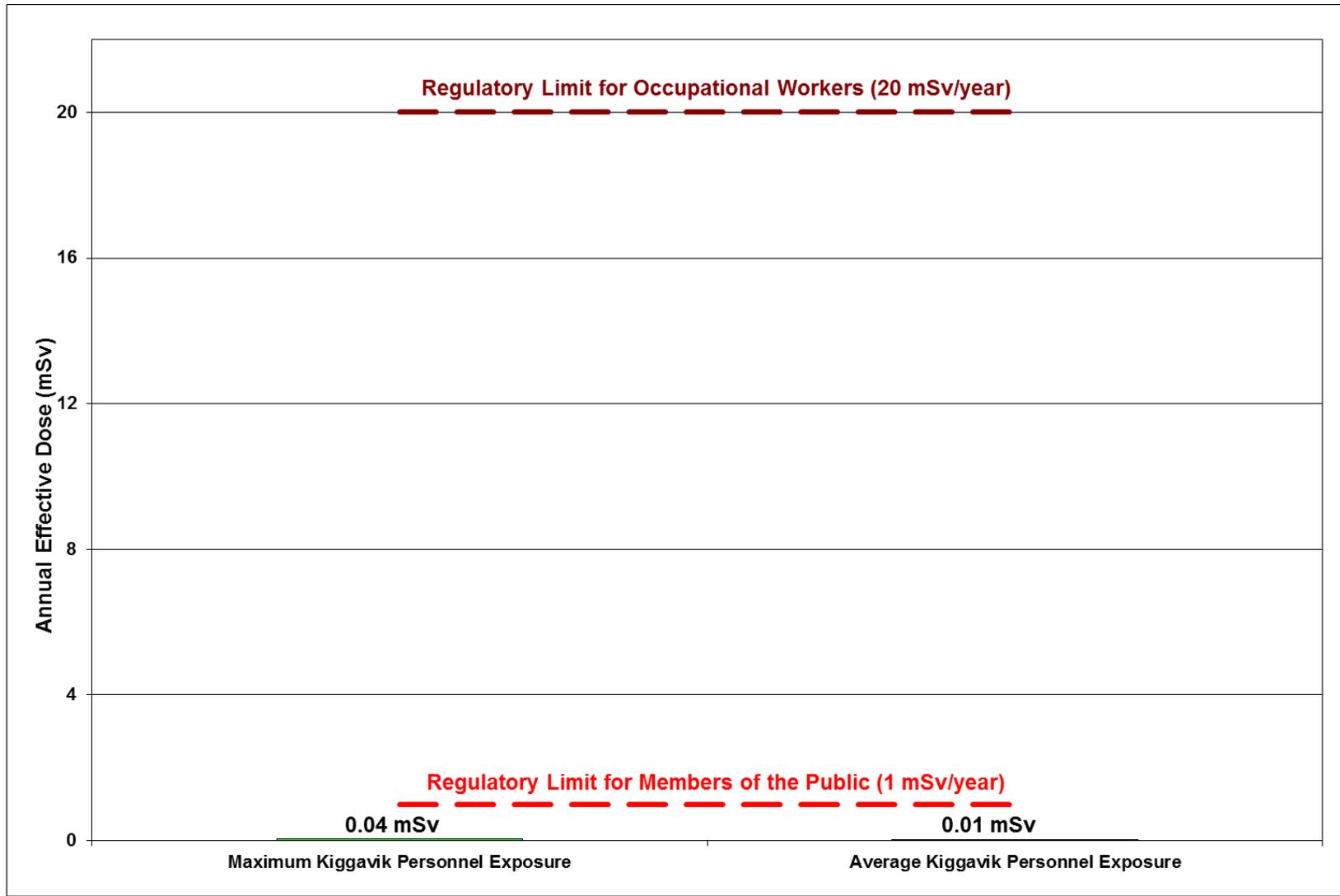


Figure 4.2-1: 2015 Kiggavik Personnel Annual Effective Dose

## 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 2015, local people were hired for work carried out at the Kiggavik camp and in Baker Lake. Northern companies were successful in winning contracts. In addition to providing direct employment and business contracts, AREVA sponsored several events in the Kivalliq region in 2015.

### 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 2015, a Community Liaison Officer was hired to work afternoons throughout the year.

The Project contracted Inuit workers through Peter's Expediting Ltd. (PEL), a company based in Baker Lake, for the winter haul, camp operations and maintenance, wildlife monitoring, and kitchen help. The Project's drilling contractor, Boart Longyear, hired four graduates from the Arviat drill program as drill helpers at the Kiggavik site. Kivallingmiut Aviation, the helicopter contractor, also hired one local Baker Lake residents to support operations in Baker Lake. Table 5.1-1 summarizes the employment provided to local Inuit workers for the past seven years.

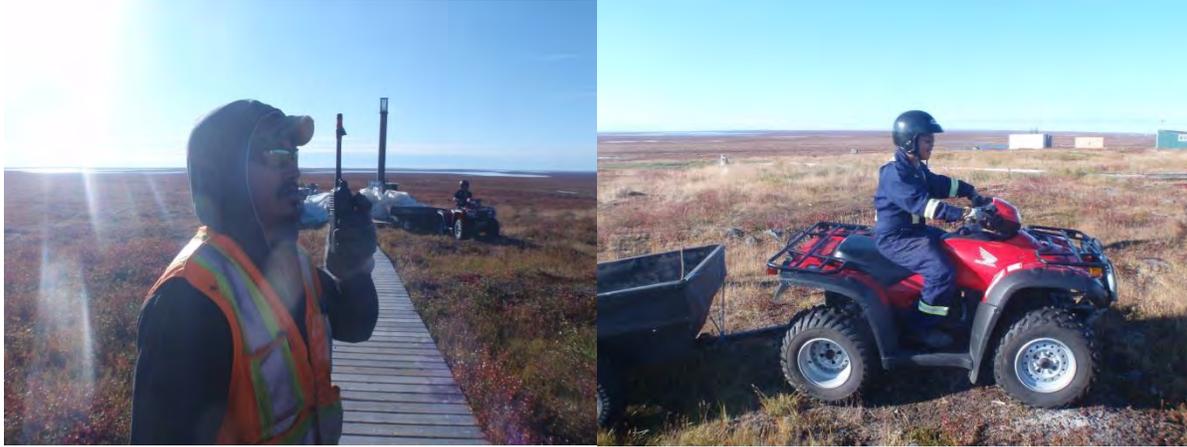
**Table 5.1-1: Local Employment**

Year		AREVA Employees	Contracted Workers	Total
2009	Inuit Workers	3	31	34
	Hours	2,993	10,205	13,198
2010	Inuit Workers	3	27	30
	Hours	3,076	6,495	9,571
2011	Inuit Workers	2*	17	19*
	Hours	2,044	4,980	7,024
2012	Inuit Workers	3*	10	13*
	Hours	1,830	4,332	6,162
2013	Inuit Workers	3**	19	22**
	Hours	2,059	6,752	8,811
2014	Inuit Workers	1	11	12
	Hours	1,239	3,352.5	4,591.5
2015	Inuit Workers	1	7***	8***
	Hours	1107	3309	4416

\* 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.

\*\*\*Includes six Inuit workers hired by PEL and one non-Inuit worker hired by Kivallingmiut Aviation who worked in Baker Lake during the summer field season.



**Photograph 5.1-1: Camp Maintenance Workers**



**Photograph 5.1-2: Camp Maintenance Workers Closing Camp**

## **5.2 Locally Contracted Work**

Many goods and services obtained for the Kiggavik Project were contracted to local suppliers. The total value of the contracts to northern vendors in 2015 was \$2.7M, 69% of the total exploration and mine development contract expenditures of \$3.9M. Much of this work went to companies with offices in Baker Lake and Rankin Inlet. There was also accommodation and meals in other Kivalliq communities. Table 5.2-1 summarizes the value of contracts awarded to northern businesses since 2007. The work contracted to local companies in 2015 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**

	<b>Inuit Owned companies*</b>	<b>Nunavut companies**</b>	<b>Other Northern Companies***</b>	<b>Total Northern Expenditures</b>	<b>Total Contract Expenditures</b>	<b>% spent total northern</b>	<b>% spent Inuit owned Firms</b>
2007	\$1.0M	\$0.90M	\$0.75	\$2.65M	\$8.5M	30%	11%
2008	\$1.75M	\$1.2M	\$1.2M	\$4.15M	\$13.7M	30%	13%
2009	\$1.4M	\$0.76M	\$0.60M	\$2.75M	\$14.5M	19%	10%
2010	\$2.2M	\$1.00M	\$0.33M	\$3.5M	\$12.5M	28%	18%
2011	\$2.4M	\$0.36M	\$0.26M	\$3.03M	\$9.2M	33%	26%
2012	\$2.2M	\$0.5M	\$0.06M	\$2.76M	\$7.1M	39%	31%
2013	\$2.30M	\$0.55	\$0.58M	\$3.43	\$6.8M	50%	34%
2014	\$3.00M	\$0.50	\$0.31M	\$3.79M	\$6.9M	55%	43%
2015	\$2.14M	\$0.34M	\$0.26M	\$2.74M	\$4.2M	65%	51%
<b>Total</b>	<b>\$18.4M</b>	<b>\$6.1M</b>	<b>\$4.4M</b>	<b>\$28.8M</b>	<b>\$83.4M</b>	<b>35%</b>	<b>22%</b>

\*Companies qualifying as Inuit owned Firms

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

\*\*\*Northern based companies from outside of Nunavut

### **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 2015 is shown in Table 5.3-1.

**Table 5.3-1: Sponsorships and Donations for 2015**

<b>Category</b>	<b>Organization</b>	<b>Activity</b>
Community	Baker Lake Hamlet	Hamlet Days feast
	Baker Lake Hamlet	Festival By the Lake
	Baker Lake Search and Rescue	Annual General Meeting
	Coral Harbour Youth Centre	Purchase equipment
	Baker Lake Hamlet	Nunavut Day Celebrations
	Repulse Bay Hamlet	Naujaat Day Celebration
Sports and Recreation	Baker Lake	Fishing Derby
	Arviat	Danse Competition
Education	Baker Lake high school	Valentine's Day Dance
	Kivalliq Communities	Science Camp
	Baker Lake high school	Graduation award, Grad Party
	Rankin Inlet high school	Graduation award
	Chesterfield Inlet high school	Graduation award
	Arviat High School	Graduation Award
	Coral Harbour High School	Graduation Award
	Repulse Bay High School	Graduation Award
	Whale Cove High School	Graduation Award
Environment	Baker Lake Health Committee	Spring cleanup
Health & Safety	Rankin Inlet RCMP	Bicycle helmets for Bike Rodeo

## **6 Community Engagement**

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Information sharing and community engagement are requirements of the environmental assessment process as well as one of AREVA's corporate commitments. This section presents the engagement activities that were carried out by AREVA in Nunavut in 2015 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 2015 on a daily basis. A bilingual Community Liaison Officer was present each afternoon to speak with visitors.

#### **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)
- District Education Authority
- Hunter and Trappers Organization
- Health Committee
- Justice Committee
- Business Community
- Aberdeen Lake People

During 2015, the Baker Lake CLC met on two occasions and visited the Kiggavik site once. The dates are shown in Table 6.1-1. 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 at [www.kiggavik.ca](http://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
- Information and updates on local employment opportunities and sponsorships
- Updates on Wildlife Monitoring at Kiggavik

**Table 6.1-1: Community Information, Involvement and Engagement Activities - 2015**

<b>Community</b>	<b>Group</b>	<b>Date</b>	<b>Purpose/ Topic</b>
Baker Lake	Community Liaison Committee	Feb 27	Discussion of the Public Hearings about to be carried out in Baker Lake by NIRB.
		Jul 2	The Public Hearings carried out by NIRB and the path forward
		Aug 12	Visit to Kiggavik
	Hamlet Council	Jan 13	Discuss topics prior to Final NIRB Hearings
		Aug 12	End of Exploration Season Update
	Public Meeting	Feb 4	Overview of FEIS at joint meeting with NPMO and CNSC. NIRB Public Meeting same night.
Chesterfield Inlet	Hamlet Council/ Hunters and Trappers Organization	Jan 15	Discuss topics prior to NIRB Final Hearings
	Public Meeting	Feb 5	Overview of FEIS at joint meeting with NPMO and CNSC
Rankin Inlet	Public Meeting	Feb 5	Overview of FEIS at joint meeting with NPMO and CNSC
Arviat	Hunters and Trappers Organization	Jan 14	Special meeting to discuss EA issues
Regional Organizations, Inuit, Government and IPG meetings	KIA	Sep 24	Meeting with KIA staff in Rankin Inlet regarding Security deposits
	Nunavut Mine Training Roundtable	Apr 9	Annual meeting in Iqaluit
	Northern Project Management Office	Apr 15	Update meeting in Iqaluit
	Kivalliq Mayors	Sep 22	Presentation at annual meeting in Arviat

<b>Community</b>	<b>Group</b>	<b>Date</b>	<b>Purpose/ Topic</b>
	MLA for Baker Lake	July 8	Project Update meeting in Baker Lake
		Aug 12	Project Update meeting in Baker Lake
	Federal Senator for Nunavut	Apr 15	Project Update meeting in Iqaluit
Transboundary meetings	Hudson Bay Roundtable	Apr 22-24	Meeting at annual meeting in Winnipeg, MB
		Sep 23-24	Meeting at annual meeting in Rankin Inlet, NU
	Lutsel K'e	Jan 8	Meeting with Lands and Wildlife Committee re outstanding Kiggavik EA & transboundary issues
		Jan 9	Public meeting re Kiggavik EA and transboundary issues

### 6.1.3 Kiggavik Blog

On June 29, 2010 a new communication initiative, the Kiggavik Blog [www.kiggavik.ca](http://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 6.1-2. Blog activity was highest in March and May coinciding with the Final Hearing and the NIRB report than for the remainder of the year. There were 4698 site visits in 2015, similar to 2013 and higher than 2014.

**Table 6.1-2: Statistics for Kiggavik Blog**

<b>Month</b>	<b>Site Visits</b>	<b>Page views</b>	<b>Unique visitors</b>	<b>Average Pages viewed per visit</b>
December 2015	197	492	160	2.50
November 2015	328	731	225	2.23
October 2015	193	455	163	2.36
September 2015	202	474	158	2.35
August 2015	260	557	233	2.14
July 2015	331	737	255	2.23
June 2015	3348	643	299	1.85

Month	Site Visits	Page views	Unique visitors	Average Pages viewed per visit
May 2015	653	1523	513	2.35
April 2015	431	950	337	2.20
March 2015	787	1,906	607	2.42
February 2015	562	1542	417	2.74
January 2015	406	973	303	2.40
	<b>2015</b>	<b>4,698</b>	<b>10,983</b>	<b>3,670</b>
	2014	3,856	10,469	3,114
	2013	4,670	13,954	3,516
	2012	4,211	10,589	3,075

### 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 2015 are detailed in this section and are listed in Table 6.1-1. 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.

#### Hamlet Representatives

Kiggavik team members met with the Mayor and Councils of Baker Lake and Chesterfield Inlet prior to the NIRB final hearings to discuss remaining issues that Hamlets may have. Team members met a second time with the Mayor and Council of Baker Lake near the end of the summer exploration season to provide a summary of the season.

## **Hunters and Trappers Organizations/ Kivalliq Wildlife Board**

AREVA met with the HTOs in Chesterfield Inlet and Arviat prior to the final hearings for the Kiggavik Environmental Assessment to discuss remaining issues.

## **6.2 Kivalliq Community Involvement**

Community involvement for the Kiggavik project began in 2006. Community involvement activities for 2015 are described in this section.

The Kiggavik Project has been speaking with high school students and giving awards at graduations in the Kivalliq region since 2006. In 2015, awards for excellence in math, science and Inuktitut were given to students in the seven Kivalliq communities.

Prior to the Kiggavik Final NIRB Hearings, AREVA along with the Northern Project Management Office and the Canadian Nuclear Safety Commission held public meetings in Baker Lake, Chesterfield Inlet and Rankin Inlet.

AREVA continued its Homeland visit program in 2015 bringing a total of seven Inuit to their former homeland on two trips. Since 2006, AREVA has carried out 29 Homeland visits with 123 participants.

## Appendix A Compliance with Conditions

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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.

### A.1 Nunavut Impact Review Board file no. 06AN085

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

#### A.1.1 Original NIRB Screening Decision – April 3, 2007

RECOMMENDATION/CONDITION	COMPLIANCE ACTION
AANDC imposed mitigation measures, 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: <ul style="list-style-type: none"><li>a. Location and Area</li><li>b. Time</li><li>c. Equipment</li><li>d. Methods and Techniques</li><li>e. Control or Prevention of Flooding, Erosion and Subsidence of Land</li><li>f. Use, Storage, Handling and Disposal</li></ul>	Refer to Section A.4 for AANDC permit conditions.

RECOMMENDATION/CONDITION	COMPLIANCE ACTION
<p>of Chemical or Toxic Material</p> <ul style="list-style-type: none"> <li>g. Wildlife and Fisheries Habitat</li> <li>h. Objects and Places of Recreational, Scenic and Ecological Value</li> <li>i. Petroleum Fuel Storage</li> <li>j. Matters Not Consistent with Regulations</li> </ul>	
<p>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.</p>	<p>AANDC conducted a field inspection pursuant to the Federal Land Use Permit on July 23, 2015. Refer to section 1.4.1 for details on this inspection.</p>
<p>KIA imposed mitigation measures and/or Environment Terms and Conditions pursuant to the IOL Licence in regard to:</p> <ul style="list-style-type: none"> <li>a. General Standards</li> <li>b. Fuel and Chemical Storage</li> <li>c. Campsites</li> <li>d. Fisheries</li> <li>e. Ground Disturbance</li> <li>f. Wildlife</li> <li>g. Any other conditions recommended by the appropriate Community Lands and Resource Committee (CLARC)</li> </ul>	<p>Refer to Section A.5 KIA Land Use Licence.</p>
<p>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</p>	<p>Continual communication efforts are made with all regulatory agencies and boards.</p>

RECOMMENDATION/CONDITION	COMPLIANCE ACTION
forwarded to them for re-screening	
GN – DOE CO's should conduct random inspections of the location from May to August to monitor compliance with DIAND Caribou Protection Measures	The Baker Lake conservation officer discussed Caribou Protection Measures implemented in the 2015 field season with the Wildlife Monitor.
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 2015 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 A.1.2 below)	Refer to Section A.1.2 Summary of Proponent Commitments.
AREVA shall operate in accordance with	AREVA is committed to maintaining

RECOMMENDATION/CONDITION	COMPLIANCE ACTION
commitments made in all the Operation Plans (namely Spill Contingency, Abandonment and Restoration, Noise Abatement, Waste Management, Wildlife Mitigation and Monitoring, Radiation Safety and the Environmental Code of Practice)	compliance as part of AREVA's commitment to continuous improvement. Management Plans are continually reviewed and are submitted with this annual report.
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, 2012, 2013 and 2014. This submission represents the Annual Report for the 2015 exploration field program.
Shall abide by DIAND Caribou Protection Measures (see A.2) 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 3.6.
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

RECOMMENDATION/CONDITION	COMPLIANCE ACTION
	through on-going awareness. Employees request fishing licences from the SHEQ Supervisor who obtains them from the Conservation Officer.
Compliance with the <i>CWS for Dioxins and Furans</i> , and the <i>CWS for Mercury</i> . Efforts to achieve compliance reported in annual report.	Refer to Section 3.2.1.
Adherence to conditions in Appendix B <i>Archaeological and Paleontological Resources – Terms and Conditions for Land Use Permit Holders</i> (see A.1.3 below)	Refer to Section A.1.3
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.

### A.1.2 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; 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	Ongoing through the implementation of the Wildlife Mitigation and Monitoring Plan; proper

<b>RECOMMENDATION/CONDITION</b>	<b>COMPLIANCE ACTION</b>
mitigated by avoiding wildlife during flights and avoiding low flying. This will require ongoing communication and diligence.	training and awareness to all site employees/contractors. Refer to Section 3.6 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	Ongoing through the implementation of the 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. Additional improvements were made with the addition of filter berms around the sump area to increase retention time of water in the sump area. During the 2015 inspection, it was deemed as an improvement by the AANDC inspector. The sump was continuously monitored through 2015 to ensure proper containment.
No garbage to remain on site	Ongoing through the implementation of the Waste Management Plan.
Camp to be decommissioned when no longer	Addressed in the Abandonment and

RECOMMENDATION/CONDITION	COMPLIANCE ACTION
in use	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. Non-compliance identified during spill in 85W area (See Section 3.4.2)
Sumps, including those created for the disposal of drill cuttings are located above the high water mark of any water body to prevent contents from entering any water body frequented by fish	No sumps are located within the high water 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	On ice drilling has not been conducted to date. If such activities take place in the future, all proper methods will be applied to ensure drilling additives and muds do not enter the water. AREVA uses non-toxic materials wherever possible.
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 SHEQ personnel. 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	Any materials on ice surface are for immediate

<b>RECOMMENDATION/CONDITION</b>	<b>COMPLIANCE ACTION</b>
lakes or streams. Materials on ice surface must be for immediate use.	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 Section 3.3.2 for information regarding artesian encountered during the 2015 field season.
Winter road travel will not begin until the ground is sufficiently frozen to provide support and to avoid surface damage and rutting	In compliance and ongoing. This is done by following the Environmental Code of Practice; proper training and awareness is provided.
Locate winter road stream crossings that will minimize grades. Avoid bank disturbance and mechanized clearing immediately adjacent to any watercourse.	Committed to conduct when required and achievable.
Winter road lake and stream crossings to be constructed entirely of ice and snow materials and stream crossings are to be removed or notched prior to spring break-up.	Committed to conduct when required and achievable.

### A.1.3 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 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.	AREVA will promptly contact CLEY should any 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.

RECOMMENDATION/CONDITION	COMPLIANCE ACTION
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; Previously hired an independent consultant to conduct heritage surveys and investigations.

#### A.1.4 Additional NIRB Terms and Conditions

Terms and conditions contained in [August 30, 2007 letter](#):

RECOMMENDATION/CONDITION	COMPLIANCE ACTION
<i>Spill Contingency Plan</i>	
AREVA to consult and implement recommendations found in the 2003 CCME guidance document PN 1326 entitled "Environmental Code of Practice for Aboveground Storage Tank Systems Containing Petroleum Product and Allied Petroleum Products"	The site layout and tanks have been designed by a consulting professional engineer and have been installed by a registered company/petroleum contractor to ensure compliance with the <i>Canadian Council of Ministers of the Environment (CCME) Environmental Code of Practice for Aboveground and Underground Storage Tank Systems Containing Petroleum and Allied Petroleum Products, 2003</i> . 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
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	

RECOMMENDATION/CONDITION	COMPLIANCE ACTION
maintenance; operation, maintenance and inspection procedures and an emergency response plan.	<p>placed on timbers located under each saddle to provide an increased bearing area.</p> <p>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.</p> <p>All necessary changes and appropriate training requirements have been made in both the Project's Spill Contingency Plan and the Emergency Response Manual.</p>
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	In compliance and ongoing through the implementation of the Spill Contingency Plan.
<i>Drilling and Disposal of Radioactive Substances</i>	
Use of biodegradable and non-toxic additives (Canadian Environmental Protection Act lists CaCl <sub>2</sub> as a toxic substance)	Committed to minimize the use of CaCl <sub>2</sub> when drilling conditions allow.
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	Committed to conduct when required and achievable as per Uranium Exploration Plan.

RECOMMENDATION/CONDITION	COMPLIANCE ACTION
mineralization zone; this should be at least 10 m above and below each mineralization zone.	
All land-based artesian holes shall be documented, plugged and sealed with grout.	Refer to section 3.3.2 for information regarding all artesian holes encountered during the 2015 field season.
Core storage areas should be located at least 100 m from the high waterline of all water bodies.	Ongoing through the implementation of the Radiation Protection Program and appropriate site planning.
<i>Physical Environment</i>	
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	Ongoing throughout field season. Importance communicated to employees and contractors during orientation and on-going awareness. ATV and snowmobile use is strictly controlled.
Additional camp facilities to be located on gravel, sand or other durable land	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.
New sleeping units properly designed to prevent any 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 [January 9, 2009 letter](#):

<b>RECOMMENDATION/CONDITION</b>	<b>COMPLIANCE ACTION</b>
<p>The Proponent shall make all efforts to minimize the use of aerial surveys to obtain information about caribou. It is recommended that the Proponent employ daily stationary ground observations and satellite caribou collar data in obtaining the necessary monitoring data.</p>	<p>In replacement of aerial surveys, ground observations are used by the Wildlife Monitor. Satellite caribou collar data from the government is provided to AREVA. See Section 3.6 for further details on wildlife monitoring and mitigation.</p>
<p>The Proponent shall not conduct aerial surveys with flight altitudes less than 120 m above ground level between June 1 and August 15.</p>	<p>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 <math>\geq</math> 120 m.</p>
<p>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.</p>	<p>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.</p>
<p>Where wildlife are present, AREVA shall maintain a minimum flight altitude of 610 m above ground level where it is safe to do so</p>	<p>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.</p>
<p>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.</p>	<p>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</p>

RECOMMENDATION/CONDITION	COMPLIANCE ACTION
	the GN-DoE monthly during the field season. See Section 3.6 for further details on monitoring and mitigation.

## A.2 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
<i>Caribou Protection Areas</i>	
No activity, without approval of Land Use Inspector, between May 15 and July 15 within the Caribou Protection Areas	AREVA does not conduct any activity within the designated 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.	
<i>Caribou Protection - General</i>	
In the event that caribou cows calve outside of the Caribou Protection Areas, operations will be suspended within the area(s) occupied by cows and/or calves between May 15 and	These requirements are included in the Wildlife Monitoring and Mitigation Plan. Employees are made aware of these commitments and they are monitored by

RECOMMENDATION/CONDITION	COMPLIANCE ACTION
<p>July 15.</p> <p>The following operations will be suspended in the presence of caribou cows and calves:</p> <ul style="list-style-type: none"> <li>• blasting</li> <li>• overflights at &lt; 300 m above ground</li> <li>• snowmobile and ATV use outside vicinity of camp</li> </ul>	<p>AREVA staff and Wildlife Monitors. See Section 3.6 for further information.</p>
<i>Caribou Protection - Migration</i>	
<p>No operation will block or cause diversion to migration</p>	<p>Ongoing through the implementation of the Wildlife Mitigation and Monitoring Plan; proper training and awareness provided to all site employees/contractors. See Section 3.6 for further information.</p>
<p>All activities that may interfere with migration will cease during migration</p>	
<i>Caribou Crossing</i>	
<p>No camp construction, caching of fuel or blasting will occur within 10 km of a Designated Caribou Crossing between May 15 and September 1</p>	<p>Ongoing through the implementation of the Wildlife Mitigation and Monitoring Plan; proper training and awareness provided to all site employees/contractors. See Section 3.6 for further information.</p>
<p>No diamond drilling operations within 5 km of a Designated Caribou Crossing between May 15 and September 1</p>	
<i>Additional</i>	
<p>Concentrations of caribou should be avoided by low level aircraft at all times</p>	<p>Ongoing through the implementation of the Wildlife Mitigation and Monitoring Plan; proper training and awareness provided to all pilots. Refer to Section 3.6 for more information</p>

### A.3 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
<i>Archaeological Sites and Artifacts</i>	
<p>Artifacts must be left where they are found. All land users are responsible for reporting the location of, or any removal or disturbance of, artifacts to CLEY.</p>	<p>During orientation, personnel are informed of their responsibility to report the discovery of archaeological sites or artifacts. They are also informed that they shall not disturb known or suspected sites or artifacts.</p>
<p>The NPC and CMC shall continue to hold a central registry of archaeological sites and continue to monitor land use activities to protect 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.</p>	<p>AANDC Land Use Permit N2014C0001 and the site orientation inform all employees of these requirements.</p>
<i>Caribou Protection</i>	
<p>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 caribou calving areas during calving season and</p>	<p>KIA Land Use Licence KVL306C02 and AANDC Land Use Permit N2014C0001</p> <p>These requirements are included in the Wildlife Mitigation and Monitoring Plan. Employees are made aware of these commitments and they are monitored by AREVA staff and Wildlife Monitors. See</p>

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

RECOMMENDATION/CONDITION	COMPLIANCE ACTION
<p>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.</p>	<p>All lands will be cleaned up prior to the expiry of the existing permits and licences in accordance with the Spill Contingency Plan, Waste Management Plan, and Abandonment and Restoration Plan.</p>
<p>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)</p>	<p>Clean-up activities are outlined within the Abandonment and Restoration Plan, and will be completed prior to the expiry of existing permits and licences.</p>
<p><i>Hydrocarbon Exploration</i></p>	
<p>Hydrocarbon exploration shall continue to be restricted in the area encompassing southern Southampton Island and Coats Island, as at present.</p>	<p>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).</p>
<p><i>Hydroelectric Development</i></p>	
<p>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.</p>	<p>The project proposal is not for hydroelectric development (conformity requirement 2.13 is not applicable).</p>
<p><i>Local Purchase of Supplies and Services</i></p>	
<p>Whenever practicable, and consistent with sound</p>	<p>AREVA employs people from the local</p>

RECOMMENDATION/CONDITION	COMPLIANCE ACTION
procurement management, land users will follow the practice of local purchase of supplies and services. (Code of Good Conduct, Appendix G)	community, and contractors employ from surrounding communities of the region. Various services and supplies are provided by local companies.
<i>Low Level Flights</i>	
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.	The project proposal does involve absolutely necessary low level flights, the proponent has or will consult with the communities, and pilots will avoid disturbance to wildlife and 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.
Low level flights shall not take place unless absolutely necessary. Should they be necessary, pilots shall avoid disturbance to people and wildlife wherever possible.	
<i>Mine Closure and Restoration</i>	
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).
<i>Academic and / or Scientific Research</i>	
Local and traditional knowledge shall be sought and, when available and relevant, shall be integrated with the scientific knowledge.	The project proposal does not involve academic and/or scientific research (conformity requirements are not applicable).
Research programs conducted in the Keewatin shall, where possible, rely on local services and local employment.	

<b>RECOMMENDATION/CONDITION</b>	<b>COMPLIANCE ACTION</b>
<p>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.</p>	
<p>Academic and scientific researchers shall make all reasonable efforts to consult the NRI concerning research topics or fields that would be of benefit and interest to local residents.</p>	
<p><i>Transportation and/or Communications Corridors</i></p>	
<p>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.</p>	<p>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).</p>
<p>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 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.</p>	

RECOMMENDATION/CONDITION	COMPLIANCE ACTION
<i>Uranium Development</i>	
Uranium development shall not take place until the NPC, NIRB, the NWB, and the NWMB have reviewed all of the issues relevant to uranium exploration and mining. Any review of uranium exploration and mining shall pay particular attention to questions concerning health and environmental protection.	The project proposal is not for uranium development (conformity requirements 3.5 and 3.6 are not applicable).
Any future proposal to mine uranium must be approved by the people of the region.	

#### **A.4 Aboriginal Affairs and Northern Development Canada**

The following table lists terms and conditions of the AANDC Land Use Permit N2014C0001 (Received May 30, 2014, Expires May 29, 2016).

RECOMMENDATION/CONDITION	COMPLIANCE ACTION
Shall not conduct land use operation on any lands not designated in the accepted application, unless otherwise authorized in writing by the Engineer.	Ongoing through operations.
Shall remove from Territorial Lands, all scrap metal, discarded machinery and parts, barrels and kegs, buildings and building material.	All wastes will be removed upon permanent cessation of activity as per the approved Waste Management Plan and Abandonment and Restoration Plan.

RECOMMENDATION/CONDITION	COMPLIANCE ACTION
Shall not construct an adit or drill site within 31 metres of the normal high water mark of a water body unless approval in writing is obtained from the Engineer.	Ongoing through operations. Should drilling within 31 m of the water mark be required, AREVA will seek the Engineer's approval.
Shall contact or meet with a Land Use Inspector at least 48 hours prior to commencement of the land use operation	Ongoing through regular communication prior to commencement of operations.
Shall provide notification to the Engineer of commencement of the land use operation by emailing <a href="mailto:landsmining@aandc.gc.ca">landsmining@aandc.gc.ca</a> or telephone at (867) 975-4283	Ongoing through regulator communication prior to commencement of operations.

RECOMMENDATION/CONDITION	COMPLIANCE ACTION
<p>Shall submit an annual report to the Engineer by March 30 of each year of permitted activities. The report must contain, but not limited to, the following information:</p> <ul style="list-style-type: none"> <li>a) A summary of activities undertaken for the year including</li> <li>b) A map showing the following items with exact coordinates (degrees/min/sec, in NAD 83): <ul style="list-style-type: none"> <li>i. All drilling locations</li> <li>ii. All fuel caches</li> <li>iii. Any other location where activities were conducted</li> </ul> </li> <li>c) A work plan for the following year, including any progressive reclamation work undertaken.</li> </ul>	<p>This annual report</p>
<p>Advise the Land Use Inspector at least 10 days prior to the completion of land use operation of:</p> <ul style="list-style-type: none"> <li>a) His plan for removal or storage of equipment and materials, and</li> <li>b) When final clean-up and restoration of the lands used will be completed</li> </ul>	<p>Ongoing through regular communication. Final clean-up will occur upon permanent cessation of activities.</p>
<p>Shall complete all clean-up and restoration of lands used prior to the expiry date of the permit.</p>	<p>Noted – Restoration will be completed upon permanent cessation of activity prior to the expiry of the permit.</p>
<p>The Engineer reserves the right to impose closure to any area to the permittee in periods when dangers to natural resources are severe</p>	<p>Noted.</p>

RECOMMENDATION/CONDITION	COMPLIANCE ACTION
Shall not use any equipment except of the type, size and number listed in the accepted application, unless otherwise authorized in writing by the Land Use Inspector	Ongoing.
All garbage and debris must be kept in a covered container until disposed of and must be kept as to avoid access by wildlife	Garbage is kept inside or in appropriate containers until incinerated or stored in sea-containers for disposal at a licensed facility.
Shall plug all bore holes as the land use operation progresses	All drill holes are cemented and grouted as required.
Shall refill and restore bore-hole craters as the land use operation progresses	Ongoing – Refer to Section 3.7.2. Where clean cuttings are not available, gravel will be used to backfill craters.
Shall not erect camps or store material on the surface ice of streams	Noted
Cut and cap all anchors as close to the ground as possible when completed at any drill holes	Noted
Ensure land use area is kept clean and tidy at all times	Ongoing through operations. Personnel are informed of requirements during site orientation.
Shall remove any obstruction to natural drainage caused by any part of this land use operation	Noted.
Shall not cut any stream bank unless authorized in writing by a Land Use Inspector	Noted.
Shall not construct interceptor or off-shoot drainage ditches unless approved in writing by the Land Use Inspector	Noted.

RECOMMENDATION/CONDITION	COMPLIANCE ACTION
Shall install erosion control structures as the land use operation progress unless otherwise authorized by a Land Use Inspector	Noted.
Shall prepare the site in such a manner as to prevent rutting of the ground surface	Walkways around camp prevent rutting and 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 not use chemicals in connect with the land use operation without the prior approval of the Engineer	Comply with list provided in application.
Shall not to allow any drilling waste to spread to the 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. See 3.4.2 for drill waste in 85W area
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 for disposal at an approved facility.

RECOMMENDATION/CONDITION	COMPLIANCE ACTION
Shall dispose of all combustible waste petroleum products by removal	Noted – All waste petroleum products will be transported to a licensed facility for disposal
Shall dispose of all toxic or persistent substances in a manner as approved in writing by the Engineer	Noted
Shall dispose of all fluids used to wash machinery and equipment at the Kiggavik camp as indicated in the land use application	Noted
Shall remove and treat hydrocarbon contaminated soils on site or transport them to an approved disposal site for treatment	Noted – All hydrocarbon contaminated soils are backhauled from site for transfer to a licensed disposal facility
Shall ensure that appropriate spill response equipment and clean-up materials (e.g. shovels, pumps, barrels, drip pans, and absorbents) must be readily available during any transfer of fuel or hazardous substances, as well as at fuel caches and drill sites	Ongoing through operations. Spill kits are available at all fuel cache and drill sites.
Shall report all spills immediately in accordance with instructions contained in “Spill Report” form NWT 1752(05/93). Twenty four (24) hour spill report line (867) 920-8130.	Ongoing through operations. See Section 3.4.2.
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 obstruct the movement of fish	Ongoing through operations

RECOMMENDATION/CONDITION	COMPLIANCE ACTION
<p>Shall not extract water from any fish-bearing waterbody unless the water intake is equipped with a screen of appropriate mesh size to ensure that there is no entrapment of fish</p>	<p>Ongoing through operations. The drill contractor is aware of the requirement and continues to use the appropriate mesh size.</p>
<p>The operation is in an area where bears may be encountered. Proper food handling and garbage disposal procedures will lessen the likelihood of bears being attracted to the operation. Information about the latest bear detection and deterrent techniques can be obtained from the Department of Renewable Resources.</p>	<p>AREVA continues open communication with the local Conservation Officer to ensure proper deterrents are on hand and that personnel are aware of how to use the deterrents.</p>
<p>Shall not harass wildlife. This includes persistently worrying or chasing animals, or disturbing large groups of animals. Shall not hunt or fish, unless proper Nunavut authorizations have been acquired.</p>	<p>Ongoing through implementation of the Wildlife Mitigation and Monitoring Plan and training during site orientation.</p>
<p>Shall not disturb or destroy the nests or eggs of any birds. If nests are encountered and/or identified, precaution must be taken to avoid further interaction and/or disturbance. If active nests are discovered (with eggs or young), the area must be avoided until nesting is complete and the young have left the nest.</p>	<p>Ongoing through implementation of the Wildlife Mitigation and Monitoring Plan and training during site orientation.</p>
<p>Shall not feed the wildlife</p>	<p>Implementation of the Wildlife Monitoring and Mitigation Plan; Communicated as site rule during orientation, training and awareness.</p>

RECOMMENDATION/CONDITION	COMPLIANCE ACTION
Fuel storage must be a minimum of 31 m from normal high water mark	The main and camp fuel caches are located > 31 m from the normal high water mark.
Shall ensure re-fuelling of all equipment occurs a minimum of 31 m from the high water mark of any water body	Ongoing through proper planning, inspection, and training.
Shall not allow petroleum products to spread to surrounding lands or into water bodies and prevent access by wildlife	Fuels are properly contained within secondary containment structures.
Mark all fuel containers with Permittee's name	Ongoing.
Shall keep on hand, at all time during the land use operation, a copy of the Land Use Permit	Ongoing through operations.
<p>Shall provide in writing to the Engineer, at least forty-eight (48) hours prior to commencement of land use operation, the following information:</p> <ul style="list-style-type: none"> <li>a. Person, or persons, in charge of the field operation to whom notices, orders, and reports may be served;</li> <li>b. Alternates;</li> <li>c. All the indirect methods for contacting the above person(s).</li> </ul>	The Kiggavik Contact list is provided to all regulators prior to commencement of field operations.
Shall submit to the Engineer a contingency plan, for chemical and petroleum spills, for use during the construction and operation of the winter road	In addition to the contractor spill response policy, AREVA also maintains the Kiggavik Spill Contingency Plan

RECOMMENDATION/CONDITION	COMPLIANCE ACTION
<p>Shall abide by and comply with all applicable lawful rules, acts, regulations, and by-laws of Canada, Nunavut, any Municipal or regulatory body or authority having jurisdiction the Nunavut Land Claim Agreements, and all other agreements, permits, licenses, and other instruments whatsoever related to the project</p>	<p>This commitment to compliance is ongoing through operations. Regulatory requirements are regularly reviewed to ensure that recent updates or amendments that may influence operations are noted and implemented in advance of land use operation.</p>
<p><i>Caribou Protection Measures</i></p>	
<p>Shall not, without approval, conduct any activity between May 15 and July 15 within the Caribou Protection Areas depicted on the map certified by the Engineer as the “Caribou Protection Map” annexed to the Land Use Permit.</p> <p>Upon approval by the Land Use Inspector, may operate within the Caribou Protection Areas beyond the May 15 deadline provided that when monitoring information indicates the caribou cows are approaching the area of operation, activities will cease, personnel will be removed who are not required for maintenance and protection of the camp facilities and equipment, unless otherwise directed by the Land Use Inspector. Activities may resume prior to July 15 within those parts of the Caribou Protection Areas released by the Land Use Inspector for the reason that caribou cows are not expected to use those parts for calving or post-calving.</p>	<p>AREVA does not operate within the Caribou Protection Areas depicted on the map.</p>

RECOMMENDATION/CONDITION	COMPLIANCE ACTION
<p>In the event that caribou cows calve outside of the Caribou Protection Areas, the Permittee shall suspend operations within the area(s) occupied by cows and/or calves between May 15 and July 15.</p> <p>In the event that caribou cows and calves are present, the permittee shall suspend:</p> <ul style="list-style-type: none"> <li>i. Blasting;</li> <li>ii. Overflights by aircraft at any altitude of less than 300 m above ground level; and</li> <li>iii. The use of snowmobiles and ATV (all-terrain vehicles) outside the immediate vicinity of the camp.</li> </ul>	<p>Compliance achieved through implementation of the Wildlife Mitigation and Monitoring Plan, which is communicated to all personnel during site orientation. See Section 3.6 for further information.</p>
<p>During migration of caribou, operation shall not be placed as to block or cause substantial diversion to migration. Activities shall cease that may interfere with migration, such as airborne geophysics surveys or movement of equipment, until the migrating caribou have passed.</p>	<p>Ongoing through implementation of the Wildlife Mitigation and Monitoring Plan. See Section 3.6 for further information.</p>
<p>Shall not, between May 15 and September 1, construct any camp, cache any fuel, or conduct any blasting within 10 km of any “Designated Crossing” as outlined on the map certified by the Engineer as the “Caribou Protection Map” annexed to this Land Use Permit.</p>	<p>AREVA will not construct camp, cache fuel, or conduct blasting within 10 km of a caribou crossing. No activities are conducted within 10 km of a caribou crossing.</p>

RECOMMENDATION/CONDITION	COMPLIANCE ACTION
<p>Shall not, between May 15 and September 1, conduct any diamond drilling operation within 5 km of any “Designated Crossing” as outlined on the map certified by the Engineer as the “Caribou Protection Map” annexed to this Land Use Permit.</p>	<p>AREVA will not drill within 5 km of a designated caribou crossing.</p>
<p>Archaeological and Paleontological Terms and Conditions</p>	
<p>Shall avoid any known or suspected archaeological and/or paleontological sites</p>	<p>Ongoing through operations and personnel are trained during site orientation</p>
<p>Shall not remove, disturb, or displace any archaeological artifact or site, or any paleontological site or fossil</p>	<p>Ongoing through operations and personnel are trained during site orientation</p>

RECOMMENDATION/CONDITION	COMPLIANCE ACTION
<p>Shall immediately cease any activity should a suspected archaeological, paleontological, or burial site be discovered during the course of a land use operation. Immediately contact the AANDC Land Administration division (867) 975-4283 or (867) 975-4285 and Department of Culture, Language, Elders and Youth at (867) 934-2046 or (867) 975-5500 or 1 (866) 934-2035. Permission to resume land use operations must be obtained from the Engineer. At such time the Engineer may, at his/her discretion, require that you have an archaeologist or paleontologist perform the following functions:</p> <ul style="list-style-type: none"> <li>a) Survey</li> <li>b) Inventory and documentation of the archaeological or paleontological resources of the land use area</li> <li>c) Assessment of potential for damage to archaeological or paleontological sites</li> <li>d) Mitigation</li> <li>e) Marking boundaries of archaeological or paleontological sites</li> <li>f) Site restoration</li> </ul>	<p>AREVA maintains a map of known archaeological sites to ensure that any new sites are properly reported if encountered during the course of land use operations. Training for personnel is provided during site orientation.</p>
<p>Shall ensure that all persons working under the authority of the permit are aware of these conditions pertaining to archaeological sites and artifacts as well as paleontological sites and fossils.</p>	<p>AREVA maintains a map of known archaeological sites to ensure that any new sites are properly reported if encountered during the course of land use operations. Training for personnel is provided during site orientation.</p>

## A.5 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
<i>Licence Terms and Conditions</i>	
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 19, 2015.
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.

RECOMMENDATION/CONDITION	COMPLIANCE ACTION
Any damage or injury to lands or property caused by licensee will be repaired, rebuilt, replaced and restored to the satisfaction of KIA.	Addressed in the Abandonment and 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 <sup>th</sup> each year	Obtained agreement from KIA allowing all revised Plans to be submitted with the Annual Report in January of each year.
<i>Schedule A: General Standards</i>	
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 combustible 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.

RECOMMENDATION/CONDITION	COMPLIANCE ACTION
Housekeeping – keep lands free of garbage and debris	Addressed through formal daily site 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.

RECOMMENDATION/CONDITION	COMPLIANCE ACTION
No petroleum storage containers within 12 m of the normal high water mark.	In compliance through the implementation of the Spill Contingency Plan; generally adhere to the more stringent condition of 31 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 licensee 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 >31 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 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.

## A.6 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
<i>General</i>	
Annual fees paid in advance of water use	Ongoing.
<p>File an annual report by March 31<sup>st</sup> containing the following:</p> <ul style="list-style-type: none"> <li>a. A summary report of water use and waste disposal activities;</li> <li>b. A list of unauthorized discharges and a summary of follow-up actions taken;</li> <li>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;</li> <li>d. A description of all progressive and or final reclamation work undertaken,</li> </ul>	Fulfilled with submission of this 2015 Annual Report. Annual Reports had previously been submitted for 2007, 2008, 2009, 2010, 2011, 2012, 2013 and 2014.

RECOMMENDATION/CONDITION	COMPLIANCE ACTION
<p>including photographic records of site conditions before, during and after completion of operations;</p> <p>e. Report all artesian flow occurrences as required under Part F, Item 6;</p> <p>f. A summary of all information requested and results of the Monitoring Program; and</p> <p>g. Any other details on water use or waste disposal requested by the Board by November 1 of the year being reported.</p>	
<p>Notify NWB of any changes in operating plans or conditions associated with the project at least 30 days prior to the change</p>	<p>Continual communication efforts are made with all regulatory agencies and boards and amendments applied for as necessary.</p>
<p>Install flow meters or other such devices, or implement suitable methods required for measuring of water volumes</p>	<p>Complete on camp water supply and all drilling rigs on June 18, 2015. Meters were installed on drilling rigs indicate total water removed from water source and are located between the water pump and the drilling rig setup. Refer to Section 3.1 for further information.</p>
<p>Include proposed implementation timetable with submitted plans for Board approval and direction and implement plans as approved</p>	<p>All plans have been implemented.</p>
<p>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</p>	<p>Plans are included as an addendum to this Annual Report.</p>

RECOMMENDATION/CONDITION	COMPLIANCE ACTION
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 paper 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.
<i>Water Use</i>	
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	Streams were not used as water sources.

RECOMMENDATION/CONDITION	COMPLIANCE ACTION
writing.	
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 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 ordinary high water mark of any water body	Training and awareness. Inspections are 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.
<i>Waste Disposal</i>	
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 31 m from the high water mark.

<b>RECOMMENDATION/CONDITION</b>	<b>COMPLIANCE ACTION</b>
<p>Shall not practice on-site land filling of domestic waste, unless otherwise approved by the Board in writing.</p> <p>AREVA is authorized to dispose of all acceptable food waste, paper waste and untreated wood products in an incinerator.</p> <p>AREVA shall not open burn plastics, wood 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.</p>	<p>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.</p>
<p>Provide authorization from all communities in Nunavut receiving wastes from the Kiggavik Project prior to backhauling and disposal of wastes</p>	<p>Received written consent from the Hamlet of Baker Lake in 2007, forwarded to NWB. No waste was disposed of in any community in 2015.</p>
<p>Backhaul and dispose of all hazardous wastes, waste oil and non-combustible waste at a licensed waste disposal site</p>	<p>Hazardous waste generated during 2015 was backhauled during the field season and disposed of at an licensed facility.</p>
<p>Shall maintain records of all waste backhauled and records of confirmation of proper disposal of backhauled waste.</p>	<p>Waste manifests are completed for all waste backhauled, and records are available.</p>
<p>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</p>	<p>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</p>

RECOMMENDATION/CONDITION	COMPLIANCE ACTION
writing.	greater than 100 m from any water body.
<p>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.</p> <p>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.</p>	<p>Sewage waste is collected and incinerated. The ashes are backhauled for disposal in an approved waste disposal site.</p>
<p>Shall ensure that any hazardous materials, including waste oil, receive proper treatment and disposal at an approved treatment facility.</p>	<p>Hazardous materials are stored on site until they are backhauled for shipment to a licensed facility.</p>
<i>Camps, Access Infrastructures and Operations</i>	
<p>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.</p>	<p>Operation is seasonal from May to September. Informed through training and awareness. The camp does not impact surface drainage.</p>
<p>Conduct activities in a way to minimize impacts on surface drainage</p>	<p>Drainage and flow are considered prior to activities.</p>
<p>Winter lake and stream crossings shall be constructed entirely of water, ice or snow. Choose locations that minimize disturbance by</p>	<p>This is ongoing through proper selection of routes for the Winter Haul of materials.</p>

RECOMMENDATION/CONDITION	COMPLIANCE ACTION
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 break-up.	
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 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	The winter haul is performed only when the ground is capable of supporting the equipment or vehicles without rutting.
<i>Drilling Operations</i>	
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, Management Plans are reviewed regularly and the current plans are included in Appendix C.
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	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

RECOMMENDATION/CONDITION	COMPLIANCE ACTION
application received dated October 9, 2008.	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. There was a failure to contain drilling waste on one occasion (See Section 3.4.2). Progressive reclamation underway (See Section 3.7.2).
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.
<p>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:</p> <ol style="list-style-type: none"> <li>a. Shall analyze water encountered from the artesian flow to confirm the quality of the water as per Part J, Item 12;</li> <li>b. Shall adhere to the operational and mitigation measures as outlined in the technical support document “Drilling in Low Flow Artesian Conditions” submitted</li> </ol>	When low flow artesian ( $\leq 95$ 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.

RECOMMENDATION/CONDITION	COMPLIANCE ACTION
<p>as part of the application dated March 29, 2011.</p> <p>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.</p>	
<p>Record the depth of permafrost – include in annual report</p>	<p>The pneumatic packer testing and installation of thermistors did not occur through the 2015 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 1.2).</p>
<p>No on-ice drilling</p>	<p>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.</p>
<p>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.</p>	<p>Drill platforms are located on stable ground and set up on timbers to prevent ground disturbance and damage to permafrost.</p>
<p>AREVA shall establish water quality conditions of</p>	<p>There were no drill holes completed within</p>

RECOMMENDATION/CONDITION	COMPLIANCE ACTION
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.	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.
<i>Modifications</i>	
<p>AREVA may, without written consent from the Board, carry out Modifications to the Water Supply Facilities and Waste Disposal Facilities provided that such Modifications are consistent with the terms of this Licence and the following requirements are met:</p> <ul style="list-style-type: none"> <li>a. AREVA has notified the Board in writing at least 60 days prior to beginning Modifications;</li> <li>b. Modifications do not place AREVA in contravention of the Licence or the <i>Act</i></li> <li>c. Modifications are consistent with the NIRB Screening Decision;</li> <li>d. The Board has not, during the 60 days following notification of the proposed Modifications, informed AREVA that</li> </ul>	Management is aware of these conditions and will comply to them if modifications are required.

RECOMMENDATION/CONDITION	COMPLIANCE ACTION
<p>review of the proposal will require more than 60 days; and</p> <p>e. The Board has not rejected the proposed Modifications.</p>	
<p>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.</p>	Noted
<p>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.</p>	Noted
<i>Spill Contingency Planning</i>	
<p>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.</p>	<p>The plan is reviewed at least annually and reviews are submitted with the annual report.</p>
<p>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.</p>	<p>Non-compliance noted in Section 3.4.2; however 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.</p>

RECOMMENDATION/CONDITION	COMPLIANCE ACTION
<p>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.</p>	<p>Addressed through training and regular inspections.</p>
<p>If an unauthorized discharge of waste occurs, or if such a discharge is foreseeable, AREVA shall:</p> <ul style="list-style-type: none"> <li>a. Employ the approved Spill Contingency Plan</li> <li>b. Report the spill immediately to the 24-Hour Spill Line at (867) 920-8130 and to the Inspector at (867) 975-4295; and</li> <li>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.</li> </ul>	<p>See Section 3.4.2. Addressed through training and inspections.</p>
<p>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.</p>	<p>See summary of spill of drill cuttings in Section 3.4.2.</p>
<p>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</p>	<p>Noted. There was no drilling conducted within 31 m of End Grid Lake during the 2015 season.</p>

RECOMMENDATION/CONDITION	COMPLIANCE ACTION
available for the storage of fuel and all external pumps and motorized equipment used.	
<i>Abandonment and Restoration or Temporary Closing</i>	
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 ensure physical stability of surface disturbance are currently being investigated (See Section 3.7)
All sumps are backfilled to pre-existing natural contours of the land.	This will be done where required to the satisfaction of the inspector. For progressive reclamation underway see Section 3.7.2.
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	Currently not required.

RECOMMENDATION/CONDITION	COMPLIANCE ACTION
match the natural channel. Measures shall be implemented to minimize erosion and sedimentation.	
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 consultation and approval by the GN, Department of Environment and an Inspector.	This is addressed in the Abandonment and Restoration Plan and the Spill Contingency Plan.
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 $\mu\text{Sv}$ at 1 m from the surface and not to exceed 2.5 $\mu\text{Sv}$	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	Completed as required for all drill holes to date.

RECOMMENDATION/CONDITION	COMPLIANCE ACTION	
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.		
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 proposed long term core handling and mitigation measures for the long term storage or removal.	Condition is noted; AREVA is committed to its compliance if required	
Shall contour and stabilise all disturbed areas to a pre-disturbed state upon completion of work.	Addressed in the Abandonment and Restoration Plan	
<i>Monitoring Program</i>		
Measure and record, in cubic metres, daily water quantities for camp, drilling and other purposes.	Conducted and recorded daily by site staff. Please refer to Section 3.3.1 for further 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 Section 3.3.1 for GPS coordinates.	
Provide GPS coordinates (in degrees, minutes	Incinerator	64° 26' 26.97" N

RECOMMENDATION/CONDITION	COMPLIANCE ACTION	
and seconds of latitude and longitude) of all waste locations		97° 39' 30.47" W
	Grey Water Discharge Point (south of Kitchen)	64° 26' 26.75" N 97° 39' 31.68" W
Provide follow-up monitoring and analytical 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 the source of contamination and possible mitigation measures required. Plans to address this matter shall be submitted to the NWB within the Annual Report.	Lab analysis was determined to be subject to error. AREVA re-sampled the camp water supply referenced under Licence 2BE-KIG0708 on June 27, 2009. Analysis conducted by the Saskatchewan Research Council (SRC) Laboratory showed no traces of grease and oil	
All sampling, preservation and analysis to be conducted in accordance with the <i>Standard Methods for the Examination of Water and Wastewater</i>	Noted	
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,	Ongoing, refer to Section 3.7.2.2	

RECOMMENDATION/CONDITION	COMPLIANCE ACTION
<p>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.</p>	
<p>All data, monitoring results and information required by this “Monitoring” section to be included in the Annual Report.</p>	<p>In compliance through submission of this Annual Report</p>
<p>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, Item 10, and monitoring shall include the following:</p> <p>Total Suspended Solids</p> <p>pH</p> <p>Electrical Conductivity</p> <p>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</p> <p>Trace Arsenic and Mercury</p>	<p>There were no drill holes completed within 31 m of the ordinary high water mark at the End Grid areas.</p>
<p>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</p>	<p>There was no drilling within 31 m of the ordinary high water mark at the End Grid area.</p>

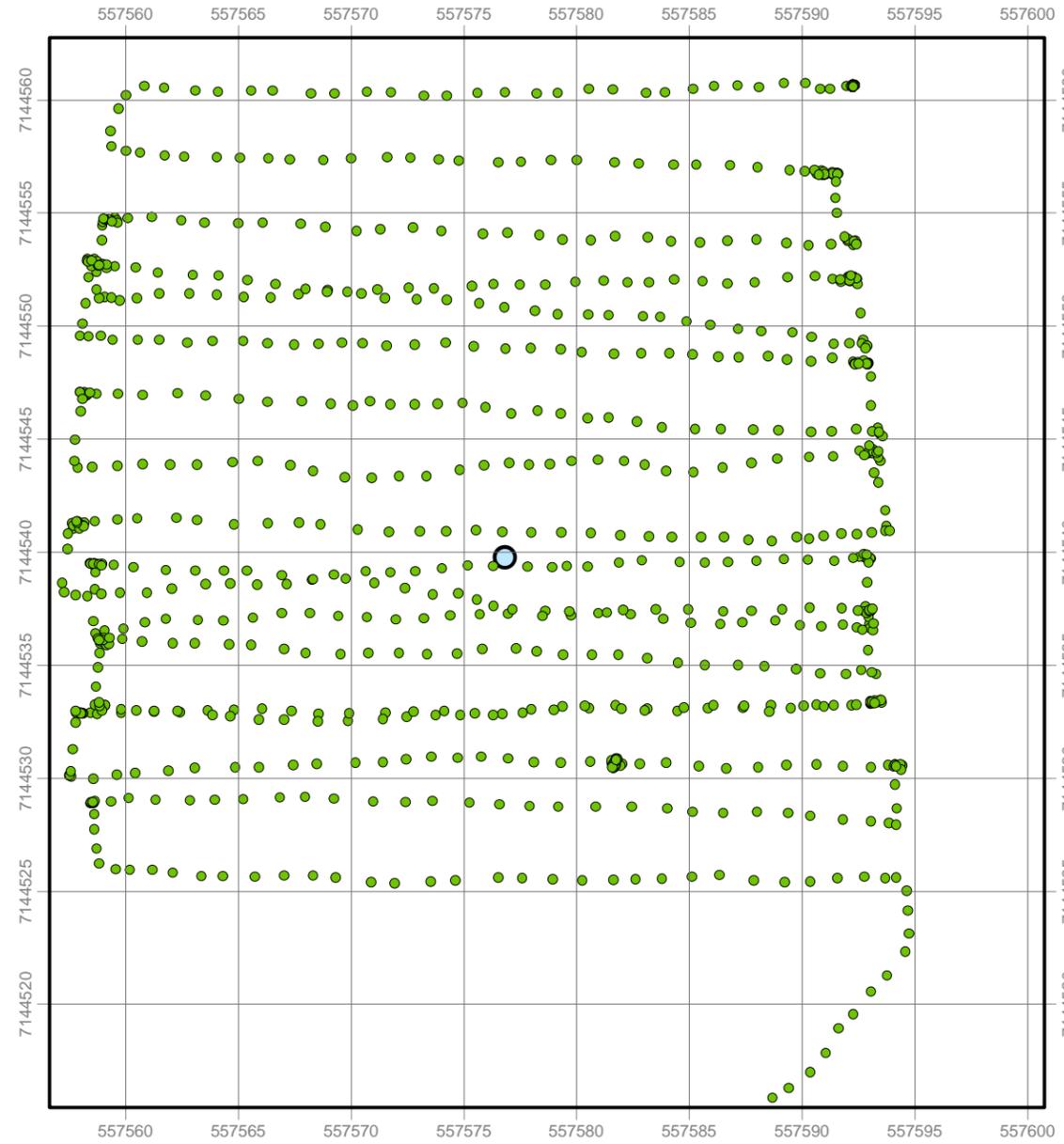
RECOMMENDATION/CONDITION	COMPLIANCE ACTION
report.	
<p>AREVA shall determine water quality of low-flow artesian conditions identified in Part F, Item 6, by including the following analyses:</p> <p>Total Suspended Solids</p> <p>pH</p> <p>Electrical Conductivity</p> <p>Total Trace Metals as determined 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</p> <p>Trace Arsenic and Mercury</p>	<p>Completed for the one artesian encountered during the season (See Section 3.3.2)</p>

## Appendix B Gamma Survey Results

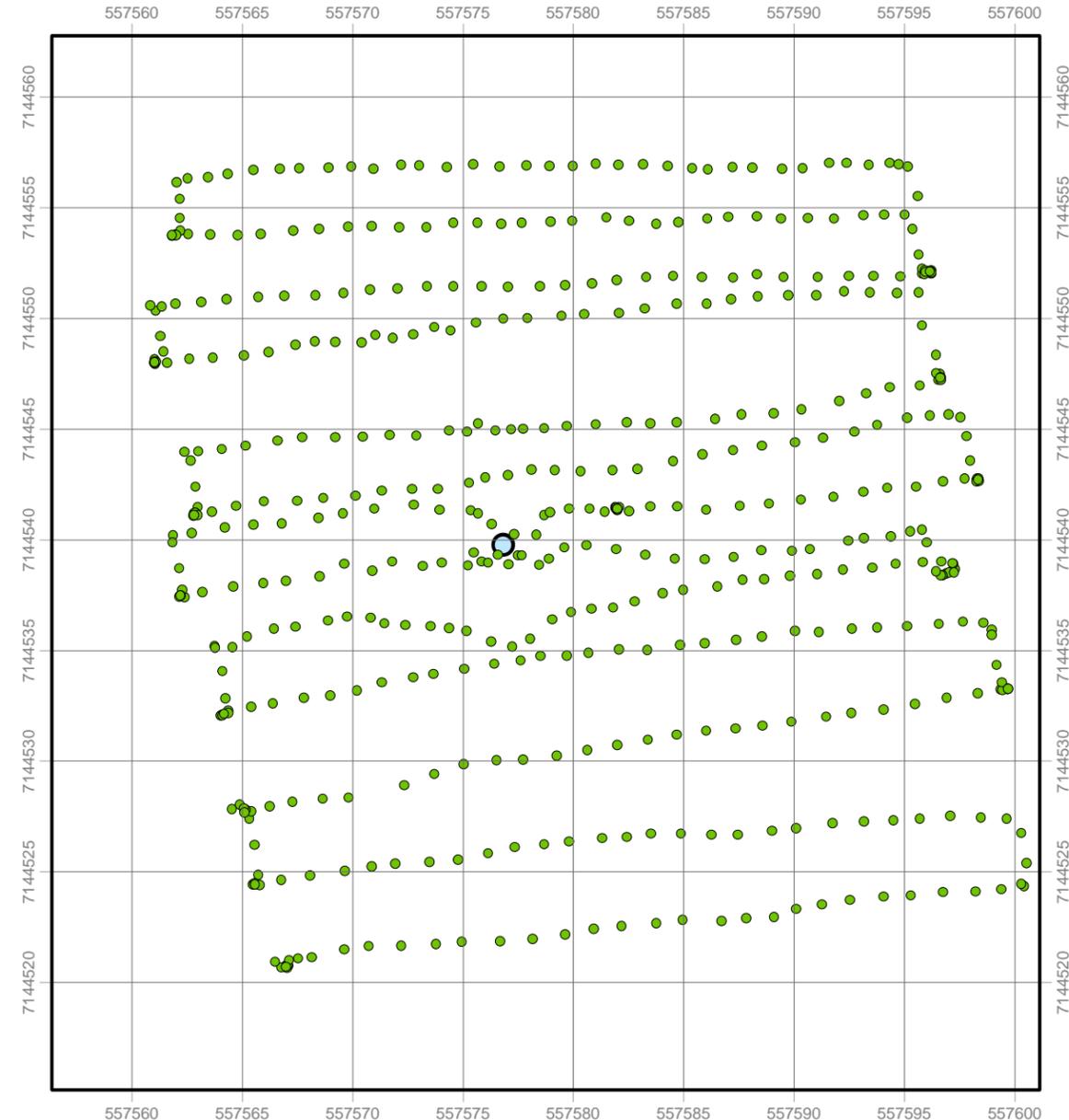
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**Legend**

-  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



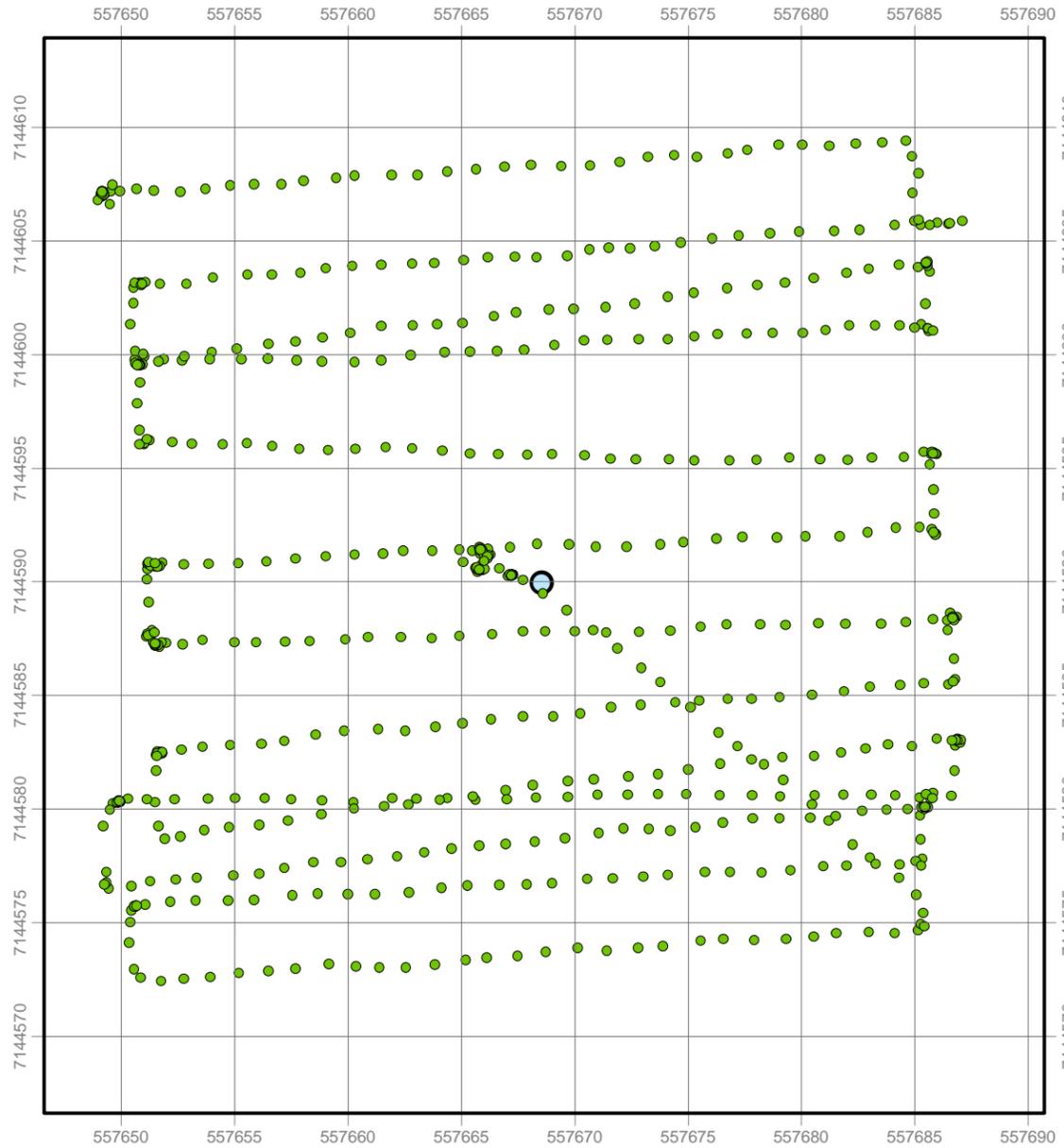
**85W-009**  
**Pre Gamma Survey**  
 Point Count: 1063  
 Min-Max: 0.039 - 0.075 µSv



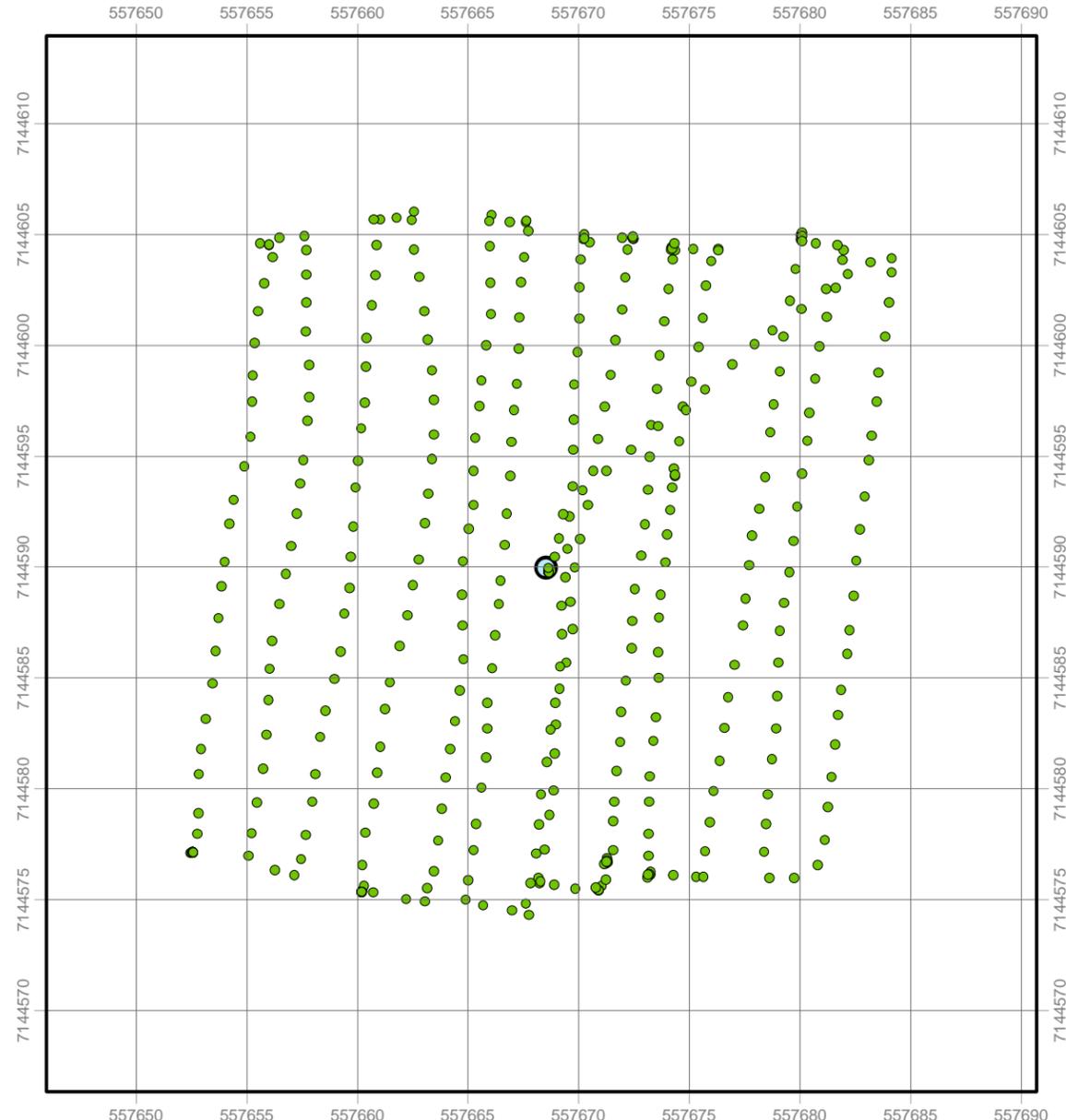
**85W-009**  
**Post Gamma Survey**  
 Point Count: 527  
 Min-Max: 0.044 - 0.221 µSv



- Legend**
- Drill Hole
  - 0.0 - 0.3  $\mu\text{Sv}$
  - 0.3 - 0.6  $\mu\text{Sv}$
  - 0.6 - 1.0  $\mu\text{Sv}$
  - 1.0 - 2.5  $\mu\text{Sv}$
  - > 2.5  $\mu\text{Sv}$



**85W-010**  
**Pre Gamma Survey**  
 Point Count: 718  
 Min-Max: 0.041 - 0.102  $\mu\text{Sv}$

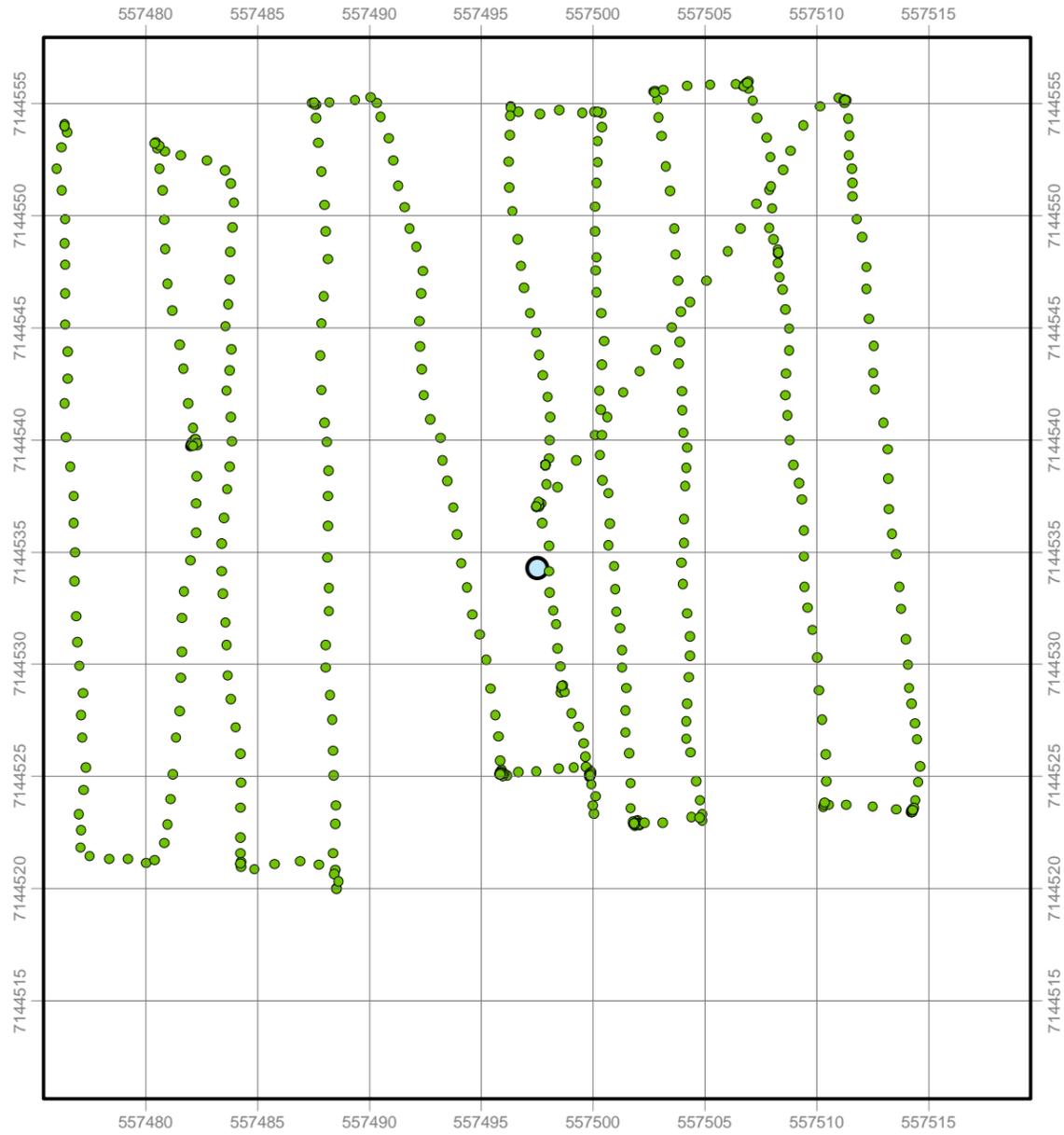


**85W-010**  
**Post Gamma Survey**  
 Point Count: 413  
 Min-Max: 0.047 - 0.087  $\mu\text{Sv}$

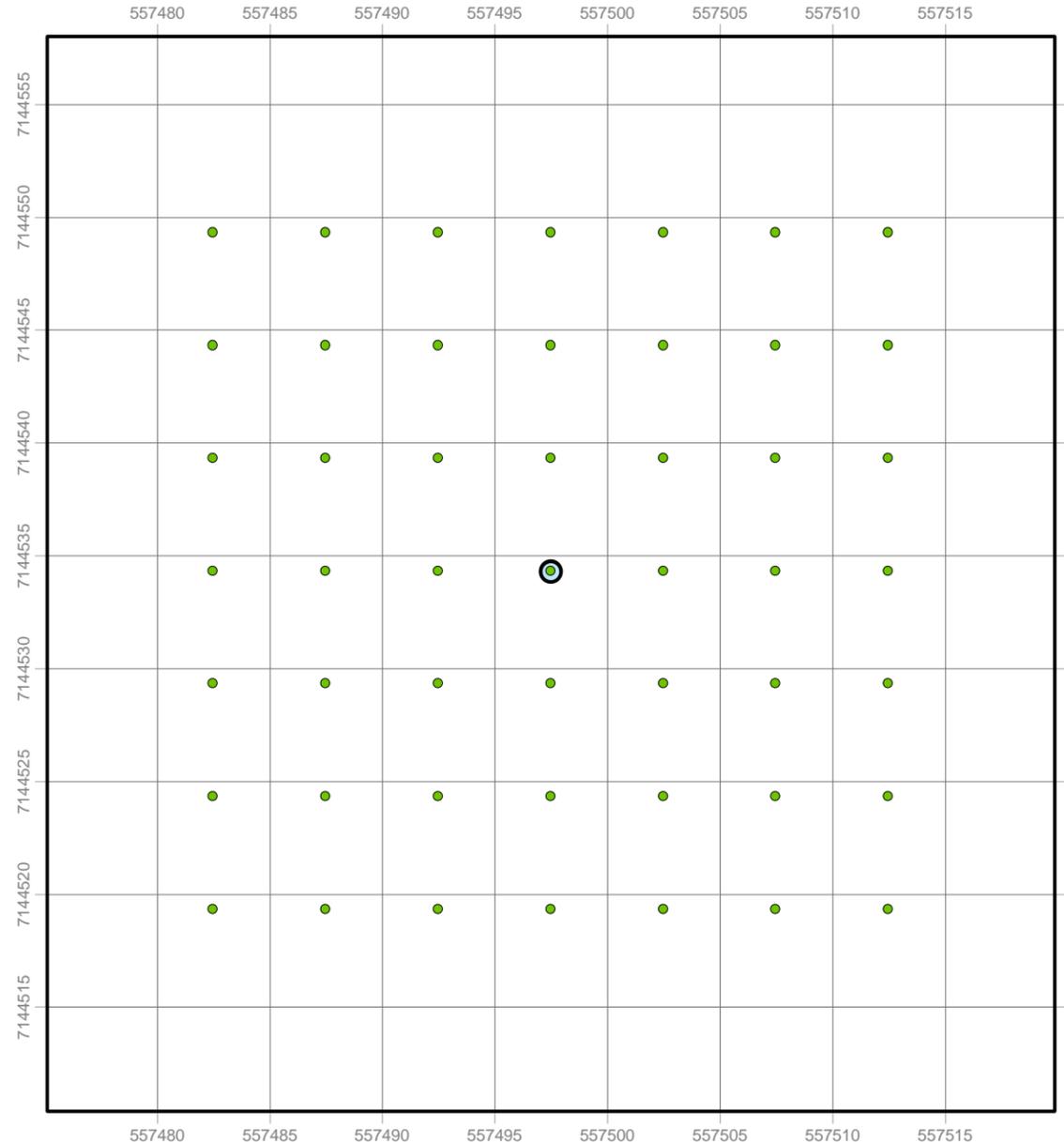


**Legend**

-  Drill Hole
-  0.0 - 0.3  $\mu\text{Sv}$
-  0.3 - 0.6  $\mu\text{Sv}$
-  0.6 - 1.0  $\mu\text{Sv}$
-  1.0 - 2.5  $\mu\text{Sv}$
-  > 2.5  $\mu\text{Sv}$

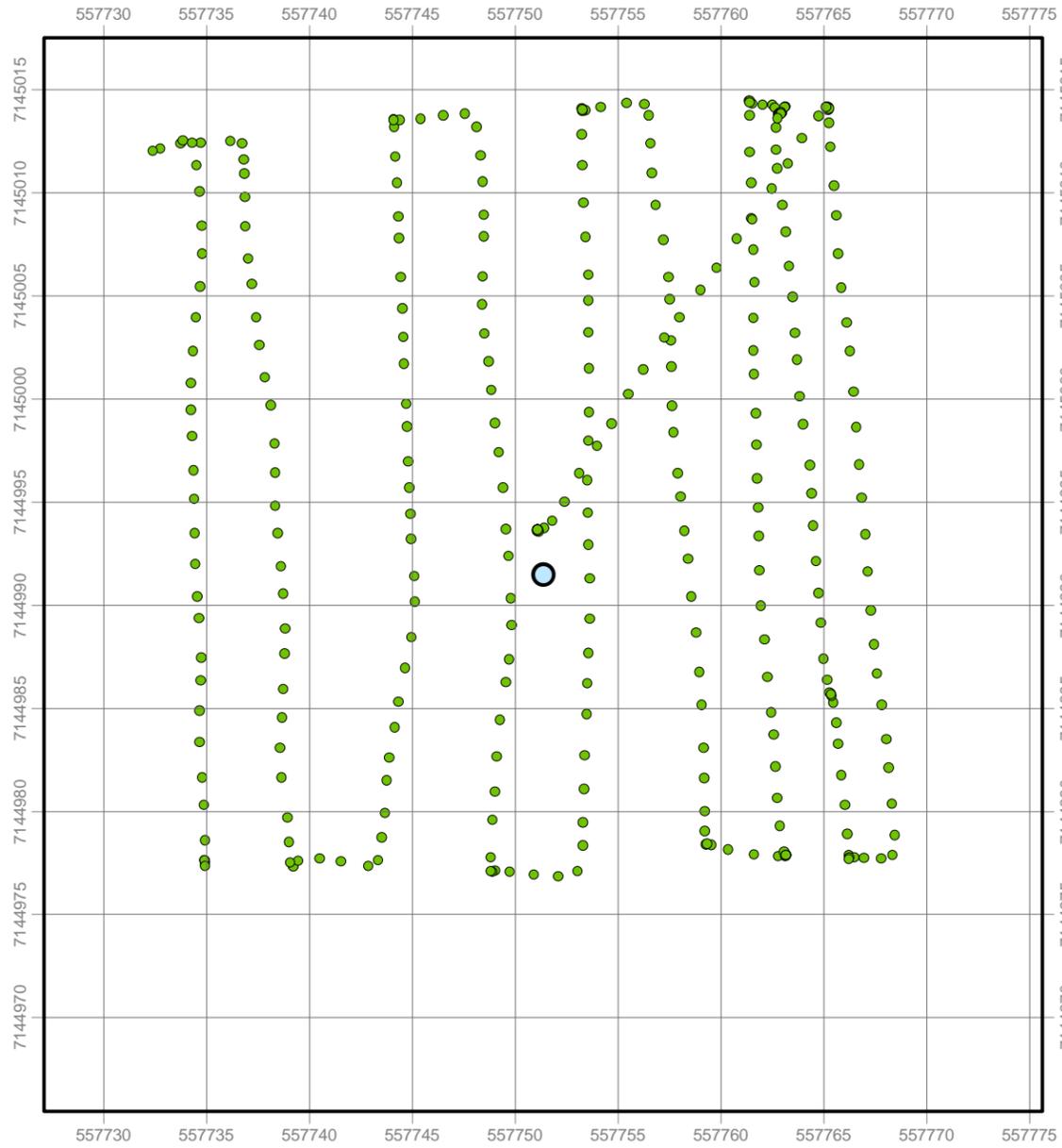
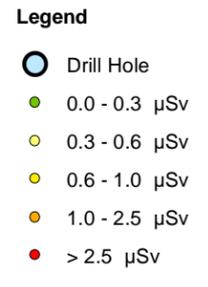


**85W-011**  
**Pre Gamma Survey**  
 Point Count: 573  
 Min-Max: 0.031 - 0.060  $\mu\text{Sv}$

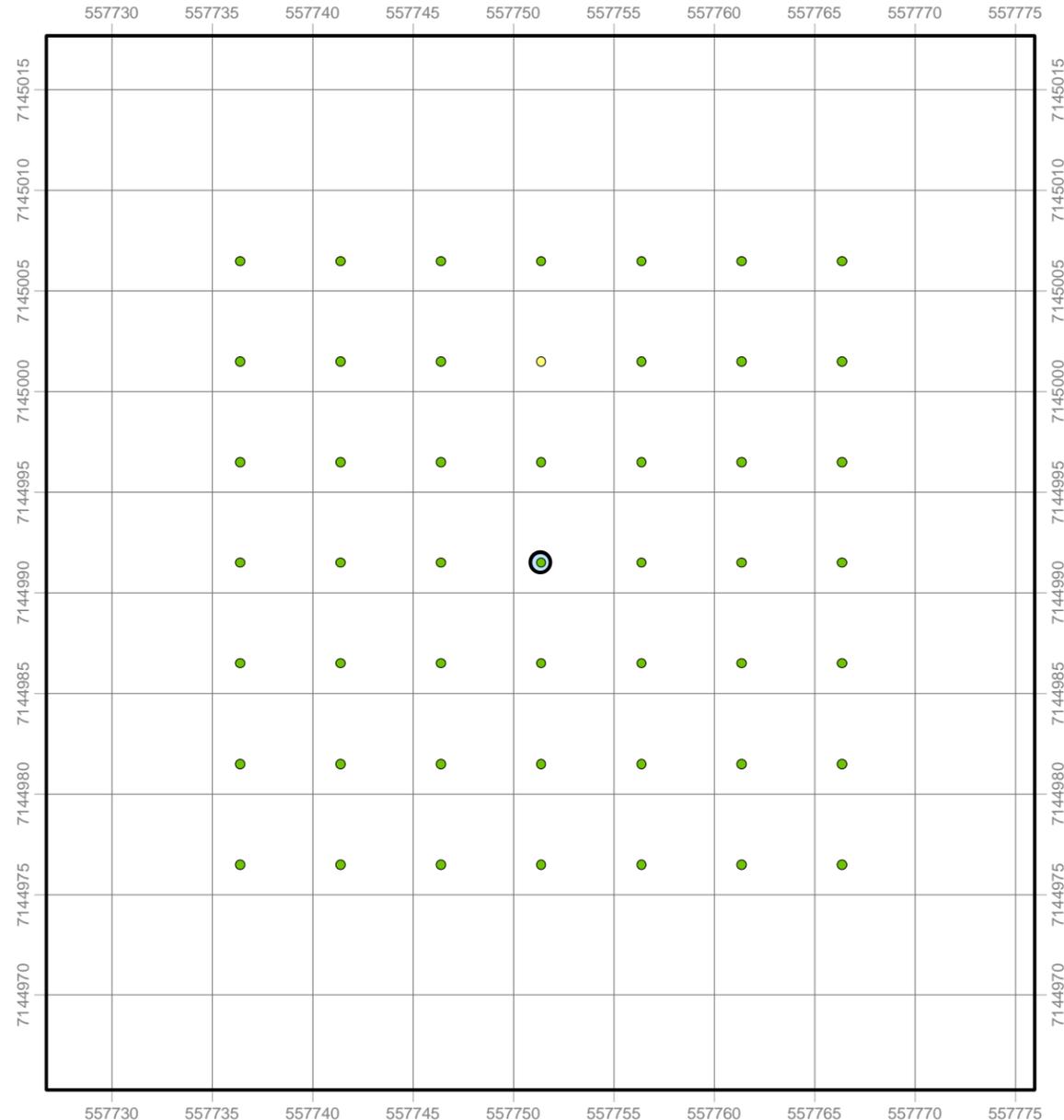


**85W-011**  
**Post Gamma Survey**  
 Point Count: 49  
 Min-Max: 0.01 - 0.23  $\mu\text{Sv}$





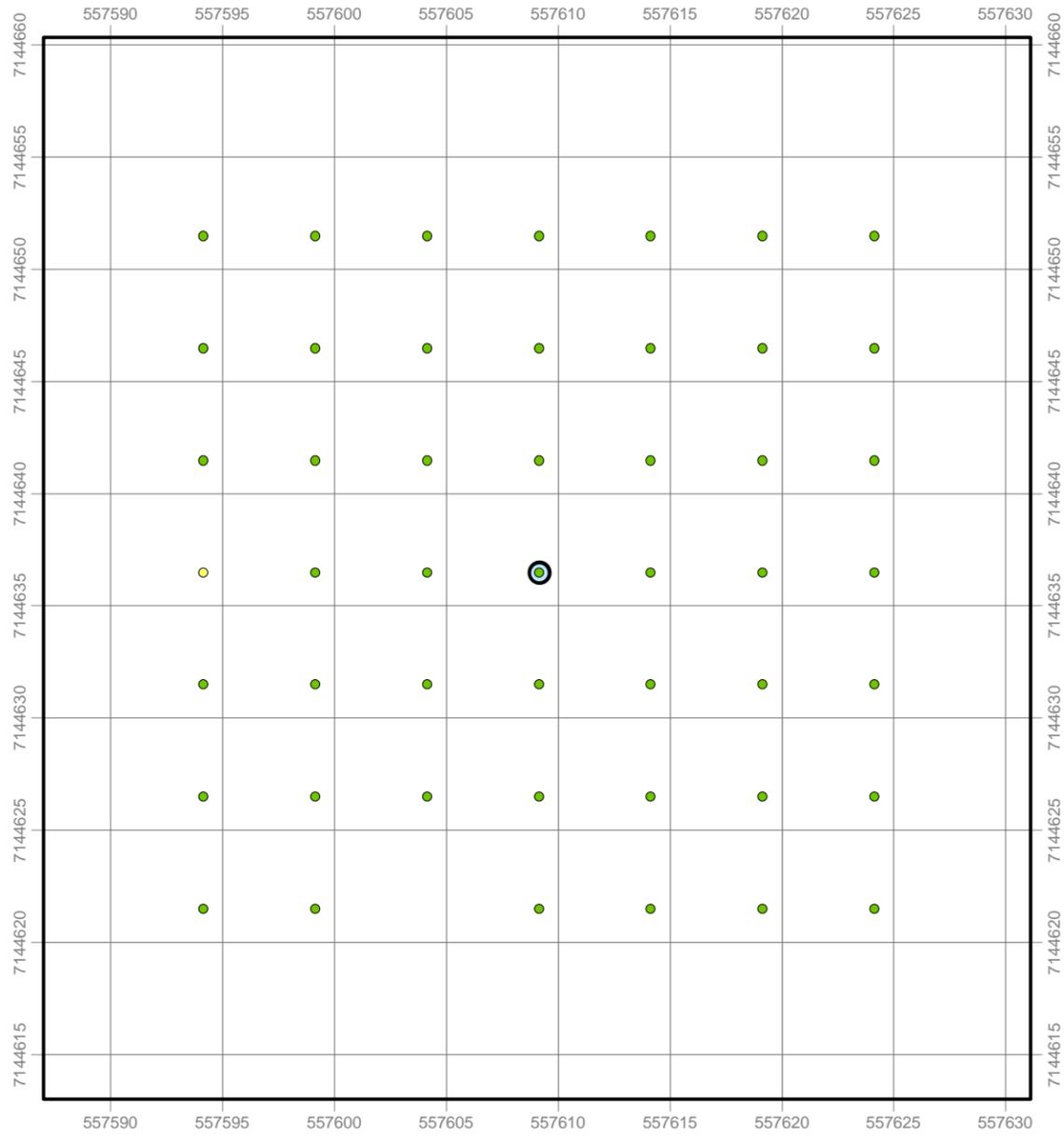
**85W-012**  
**Pre Gamma Survey**  
 Point Count: 362  
 Min-Max: 0.054 - 0.098  $\mu\text{Sv}$



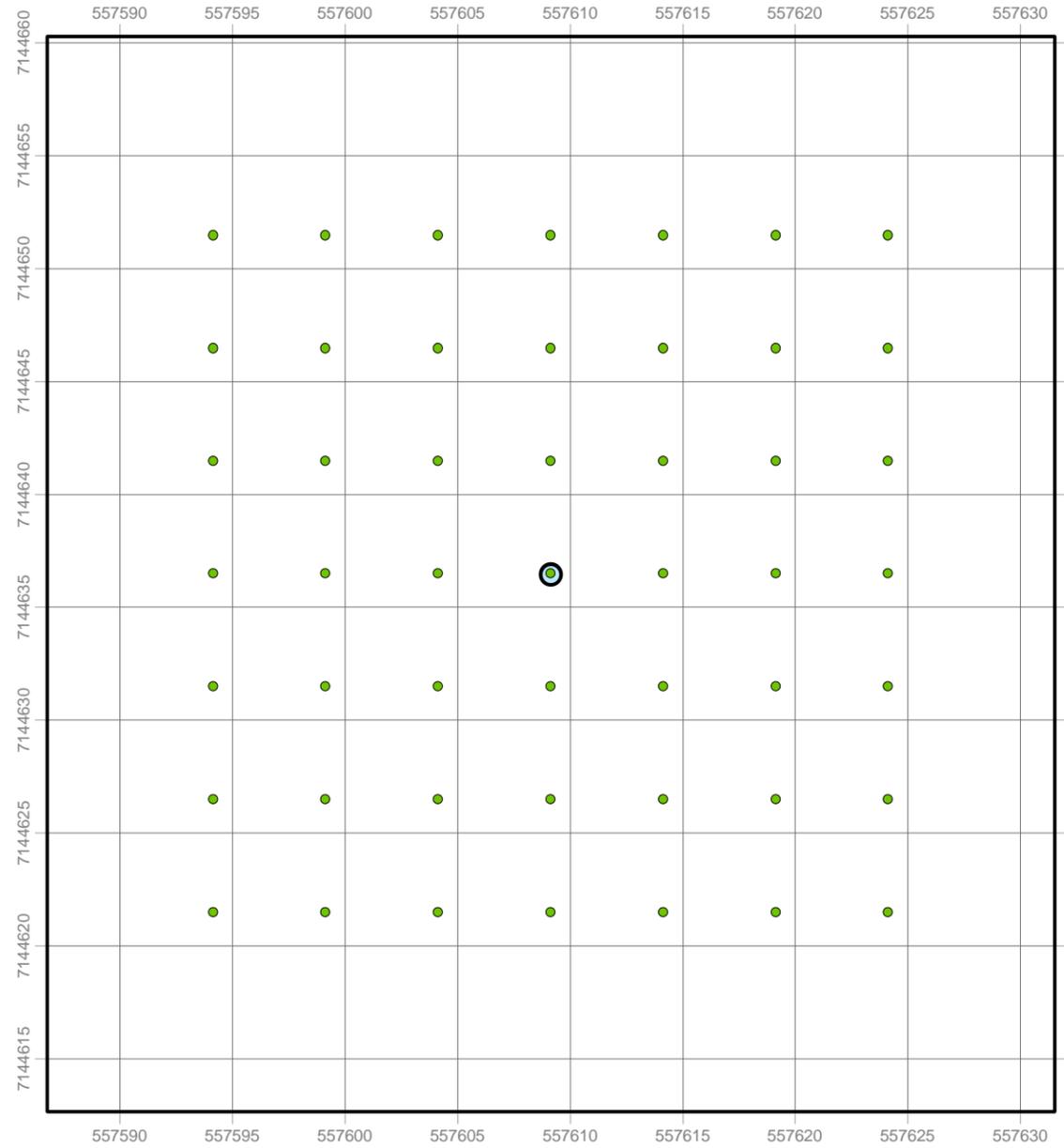
**85W-012**  
**Post Gamma Survey**  
 Point Count: 49  
 Min-Max: 0.01 - 0.32  $\mu\text{Sv}$



- Legend**
-  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



**85W-013**  
**Pre Gamma Survey**  
 Point Count: 48  
 Min-Max: 0 - 0.5 µSv

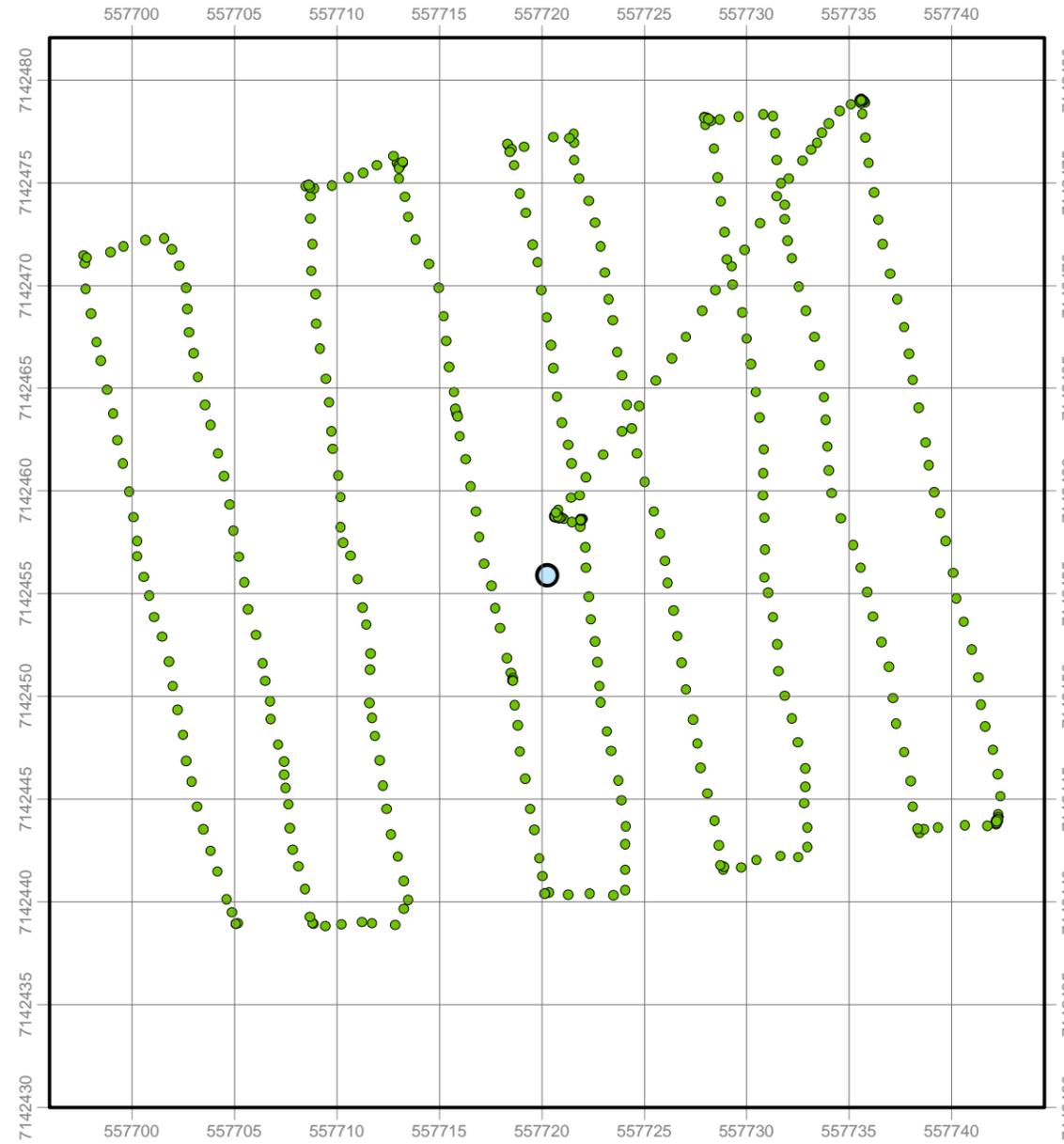


**85W-013**  
**Post Gamma Survey**  
 Point Count: 49  
 Min-Max: 0.01 - 0.21 µSv

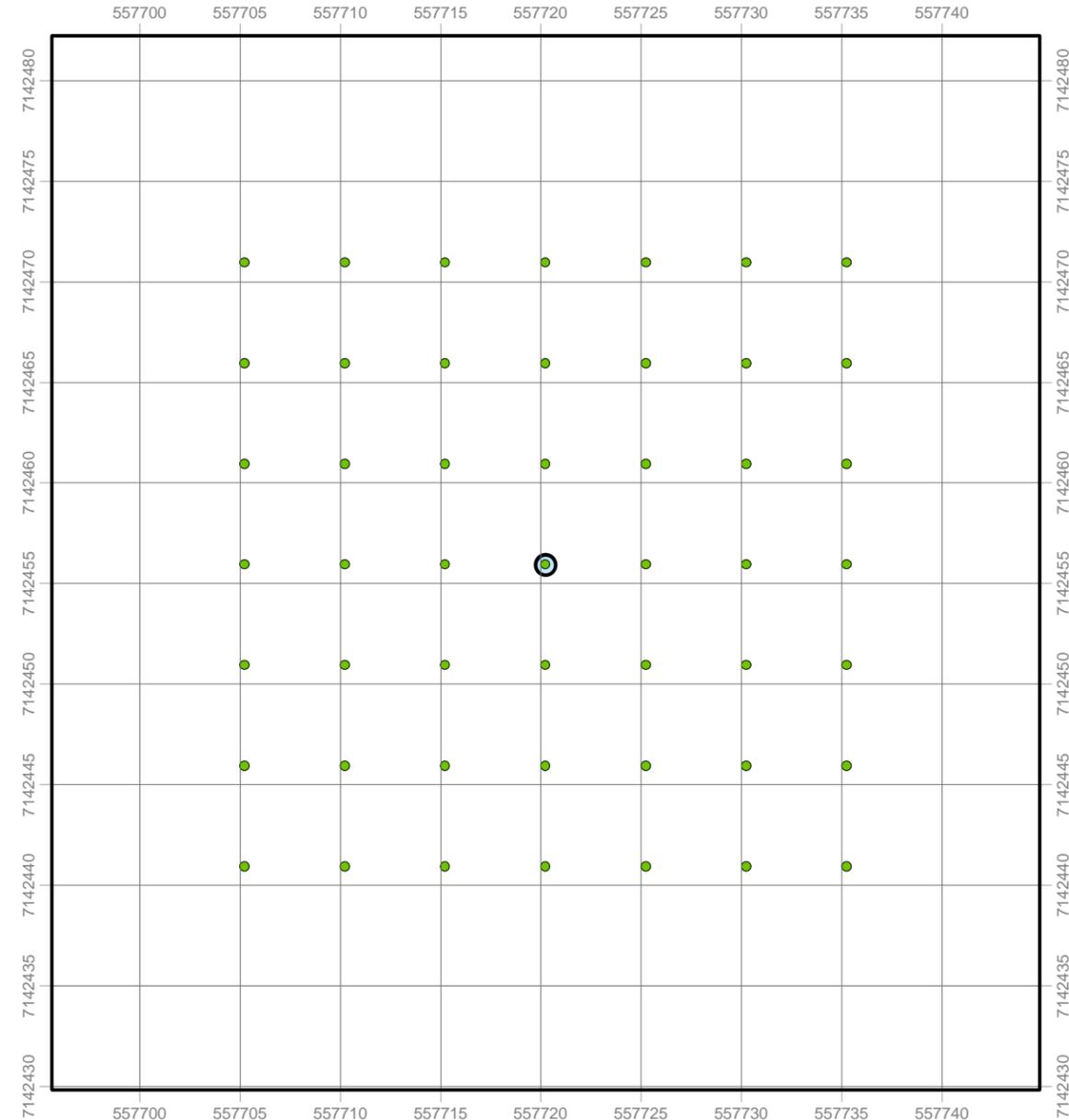


**Legend**

-  Drill Hole
-  0.0 - 0.3  $\mu\text{Sv}$
-  0.3 - 0.6  $\mu\text{Sv}$
-  0.6 - 1.0  $\mu\text{Sv}$
-  1.0 - 2.5  $\mu\text{Sv}$
-  > 2.5  $\mu\text{Sv}$



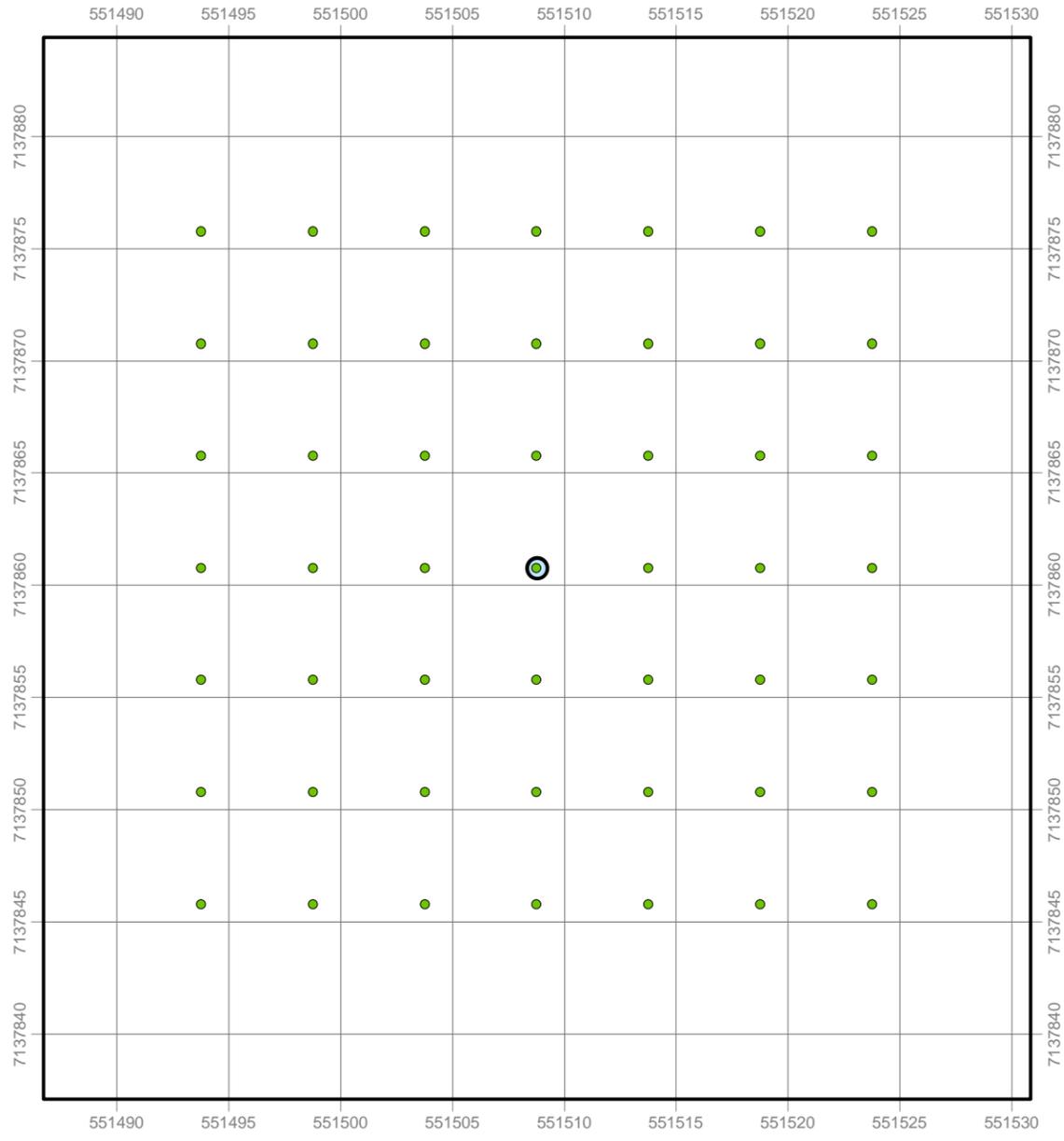
**85W-014**  
**Pre Gamma Survey**  
 Point Count: 463  
 Min-Max: 0.043 - 0.081  $\mu\text{Sv}$



**85W-014**  
**Post Gamma Survey**  
 Point Count: 49  
 Min-Max: 0.01 - 0.3  $\mu\text{Sv}$

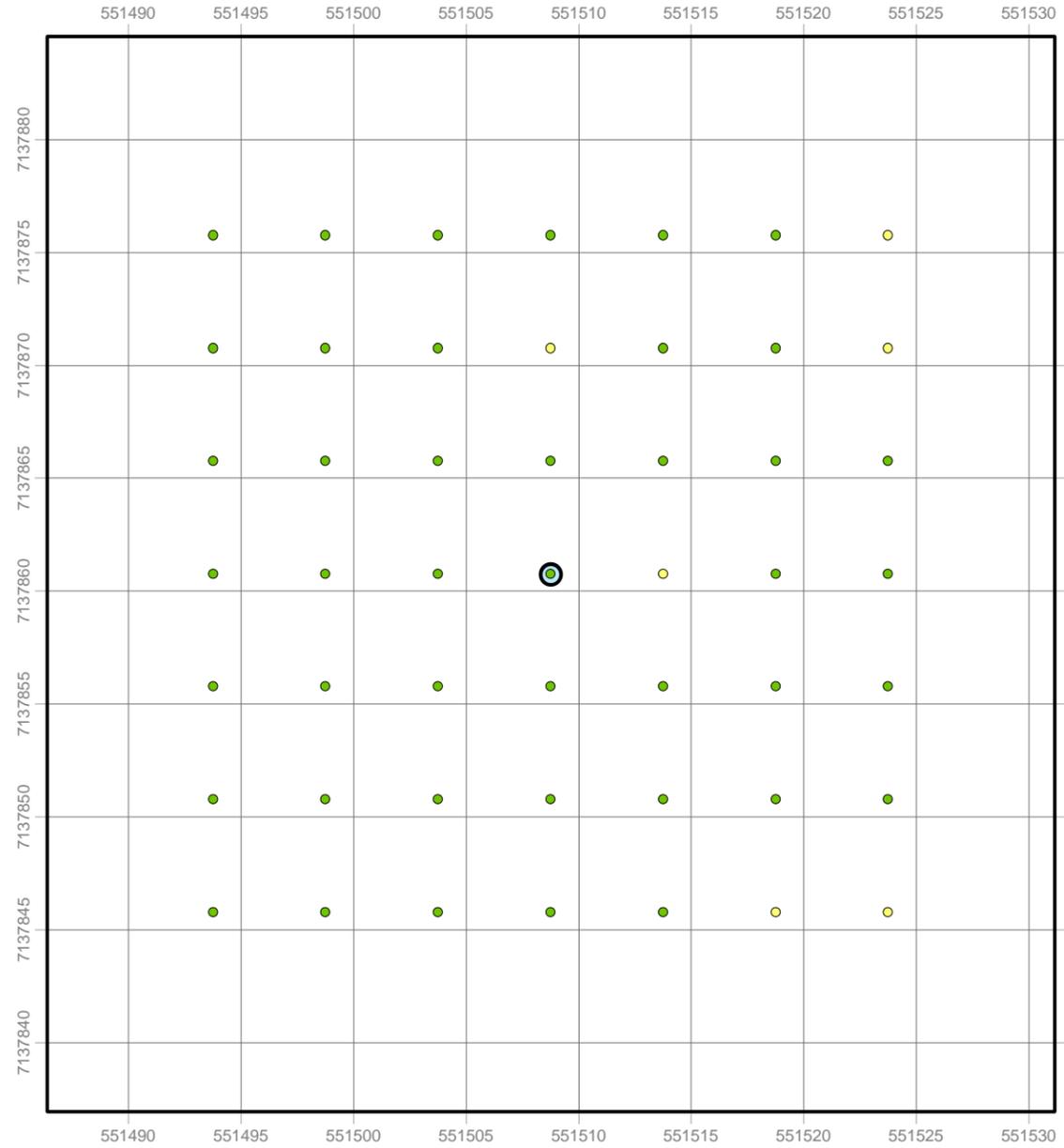


- Legend**
-  Drill Hole
  -  0.0 - 0.3 µSv
  -  0.3 - 0.6 µSv
  -  0.6 - 1.0 µSv
  -  1.0 - 2.5 µSv
  -  > 2.5 µSv



**BS-03  
Pre Gamma Survey**

**Point Count: 49**  
**Min-Max: 0.02 - 0.27 µSv**



**BS-03  
Post Gamma Survey**

**Point Count: 49**  
**Min-Max: 0.08 - 0.36 µSv**



Projection: NAD 1983 UTM Zone 14N  
 Compiled: T. Lohman Drawn: T. Lohman  
 Date: 11/23/2015 Scale: 5m x 5m Grid  
 File: KI08F176  
 Data Sources: Natural Resources Canada, Geobase®, Nation  
 Topographic Database, AREVA Resources Canada  
 Inc.

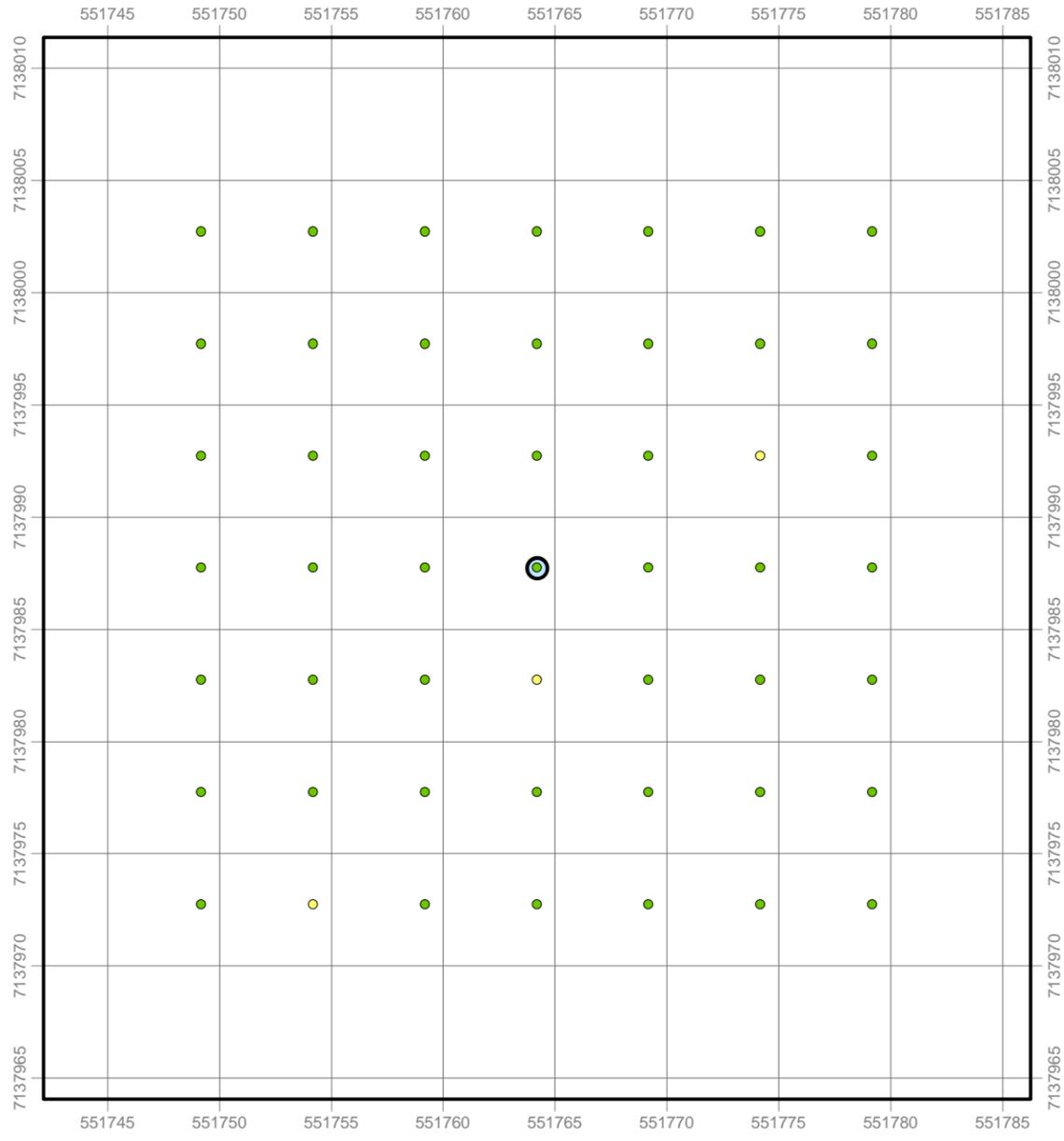
**PRE AND POST GAMMA SURVEY  
DRILL HOLE BS-03**

Figure 3.7-7  
 2015 KIGGAVIK Annual Report



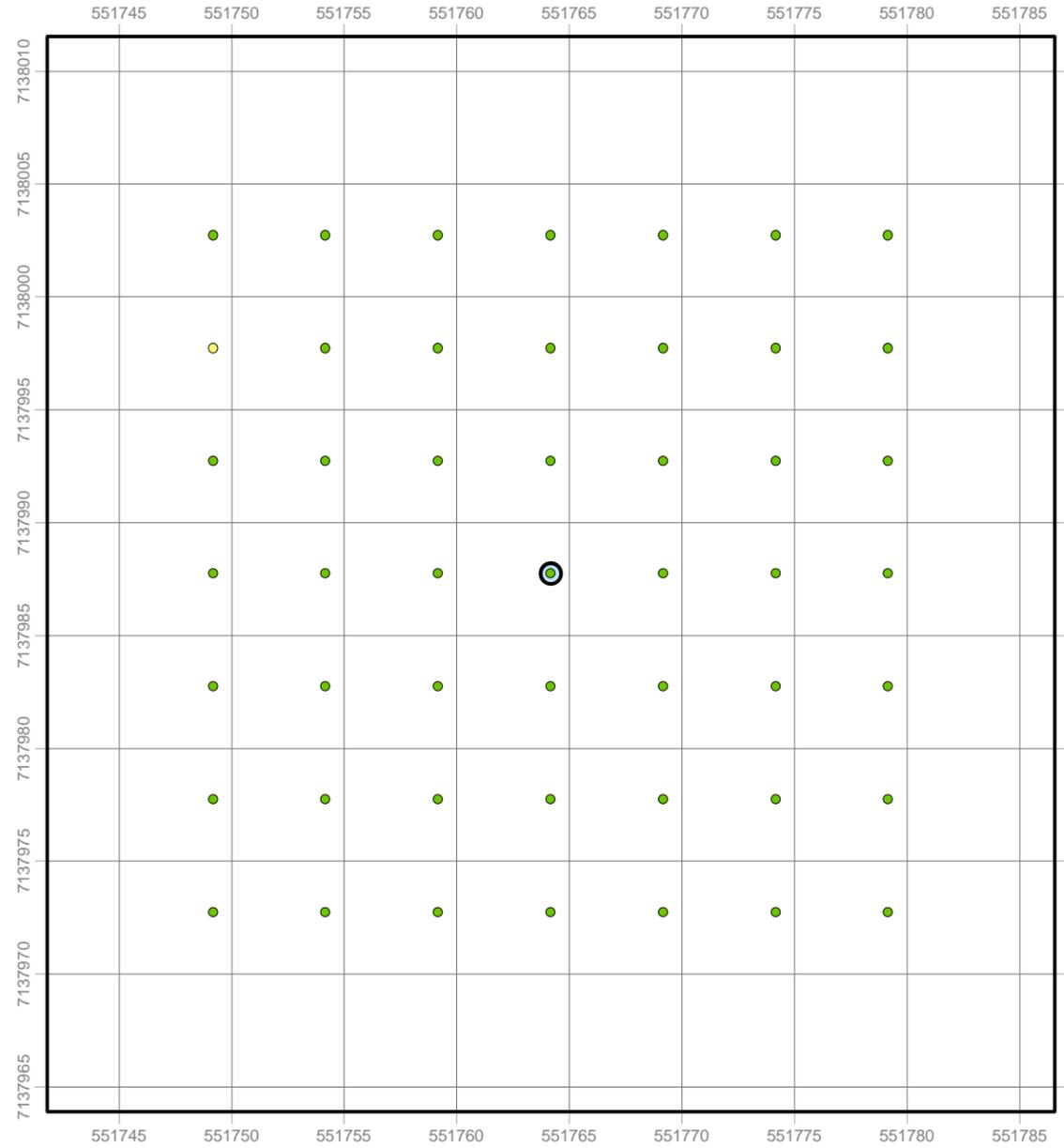
**Legend**

-  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



**BS-04  
Pre Gamma Survey**

**Point Count: 49**  
**Min-Max: 0.04 - 0.47 µSv**



**BS-04  
Post Gamma Survey**

**Point Count: 49**  
**Min-Max: 0.01 - 0.31 µSv**

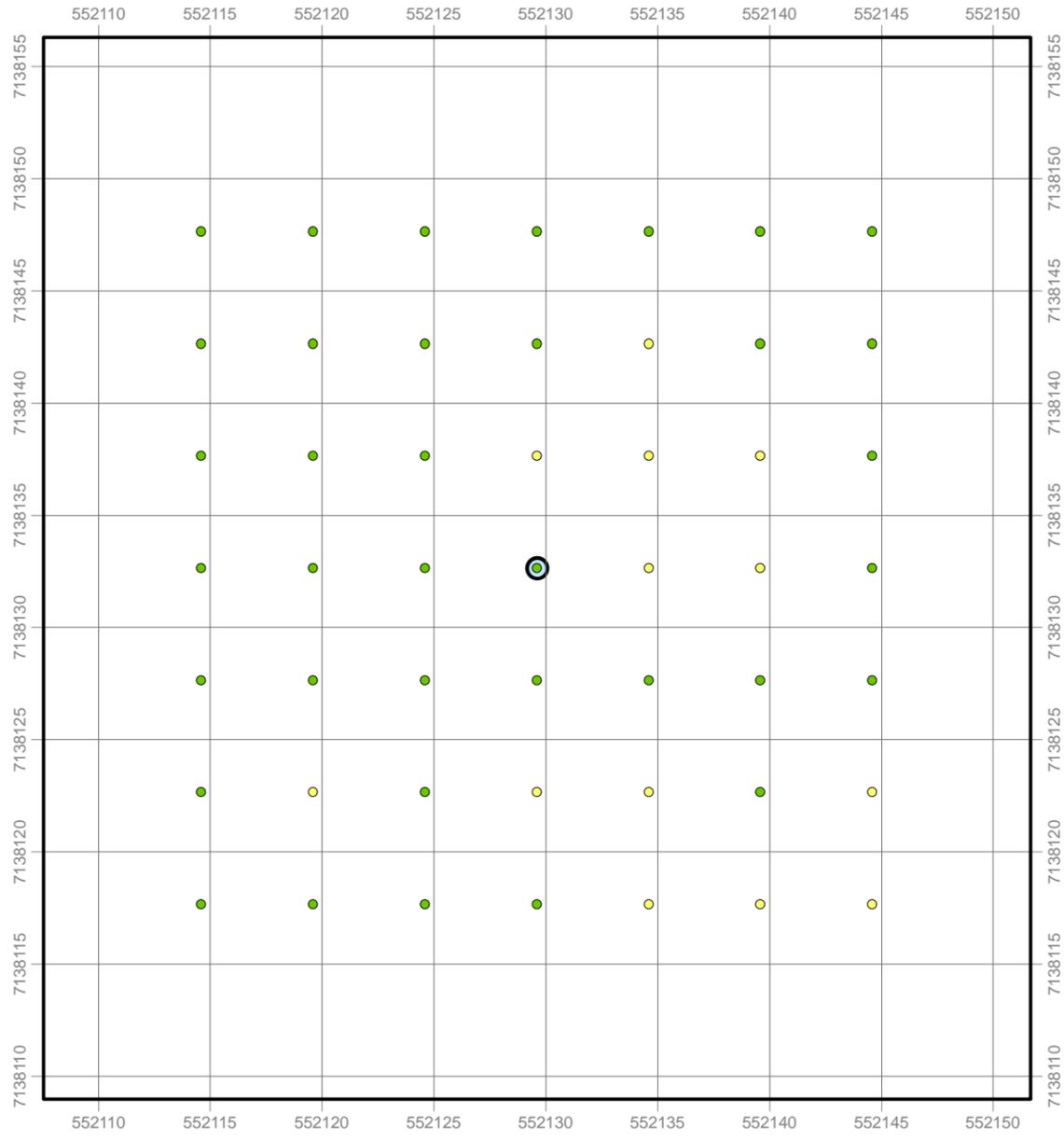
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 Compiled: T. Lohman      Drawn: T. Lohman  
 Date: 11/23/2015      Scale: 5m x 5m Grid  
 File: K108F177  
 Data Sources: Natural Resources Canada, Geobase®, Nation  
 Topographic Database, AREVA Resources Canada  
 Inc.

**PRE AND POST GAMMA SURVEY**  
**DRILL HOLE BS-04**  
 Figure 3.7-8  
 2015 KIGGAVIK Annual Report

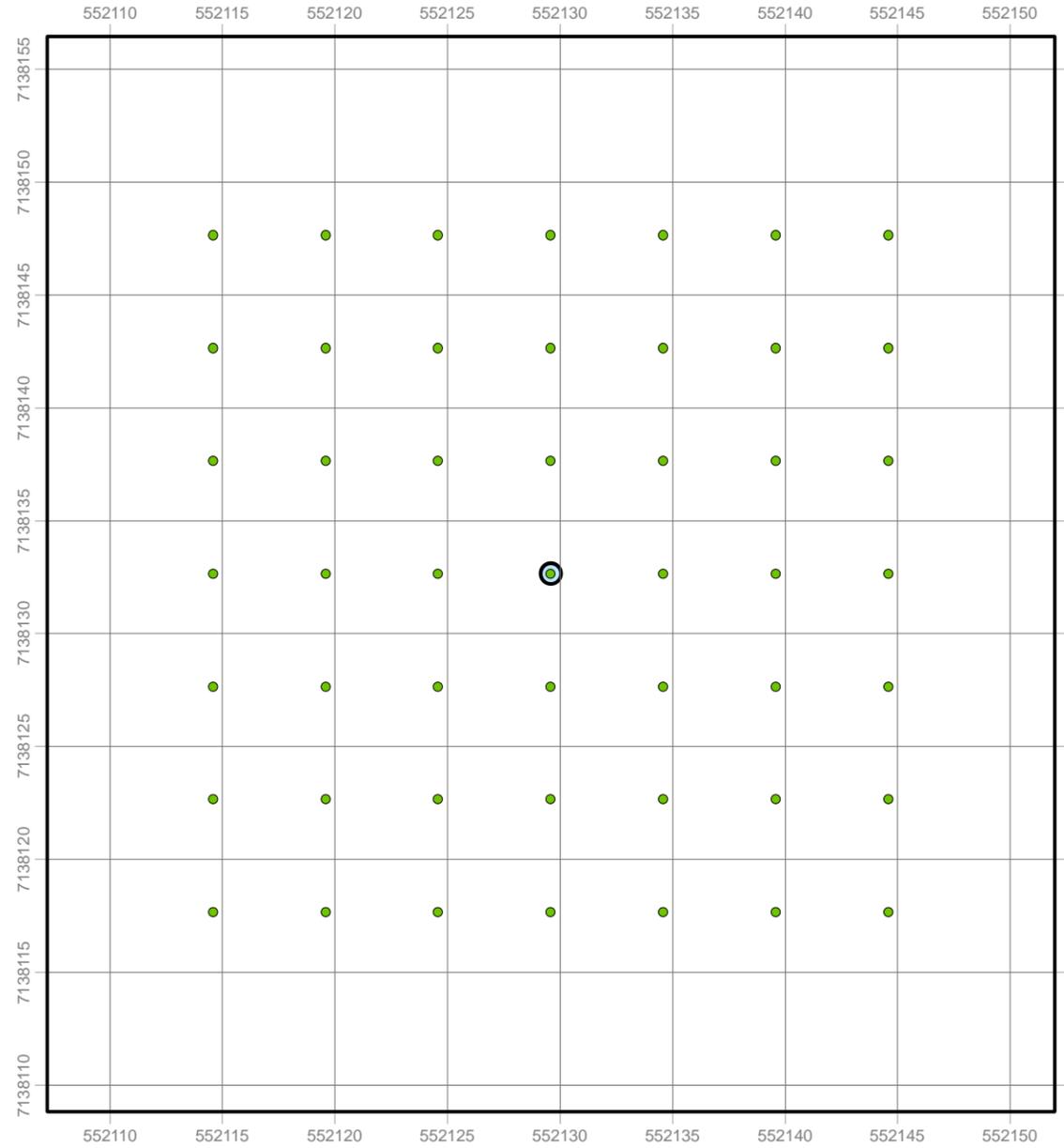


**Legend**

-  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



**BS-05**  
**Pre Gamma Survey**  
 Point Count: 49  
 Min-Max: 0.15 - 0.42 µSv



**BS-05**  
**Post Gamma Survey**  
 Point Count: 49  
 Min-Max: 0.02 - 0.24 µSv

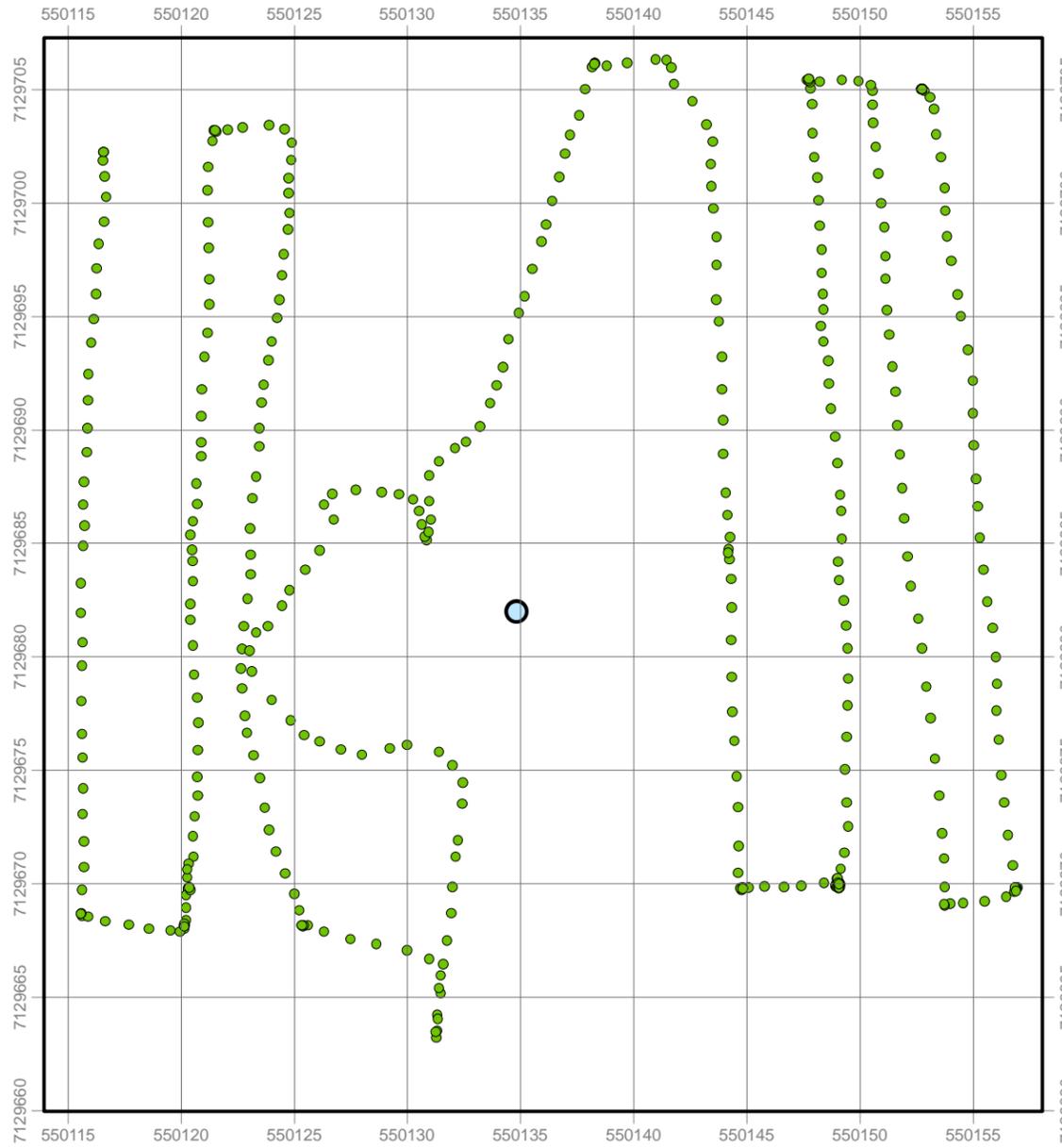
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 File: KI08F178  
 Data Sources: Natural Resources Canada, Geobase®, Nation  
 Topographic Database, AREVA Resources Canada  
 Inc.

**PRE AND POST GAMMA SURVEY**  
**DRILL HOLE BS-05**  
 Figure 3.7-9  
 2015 KIGGAVIK Annual Report

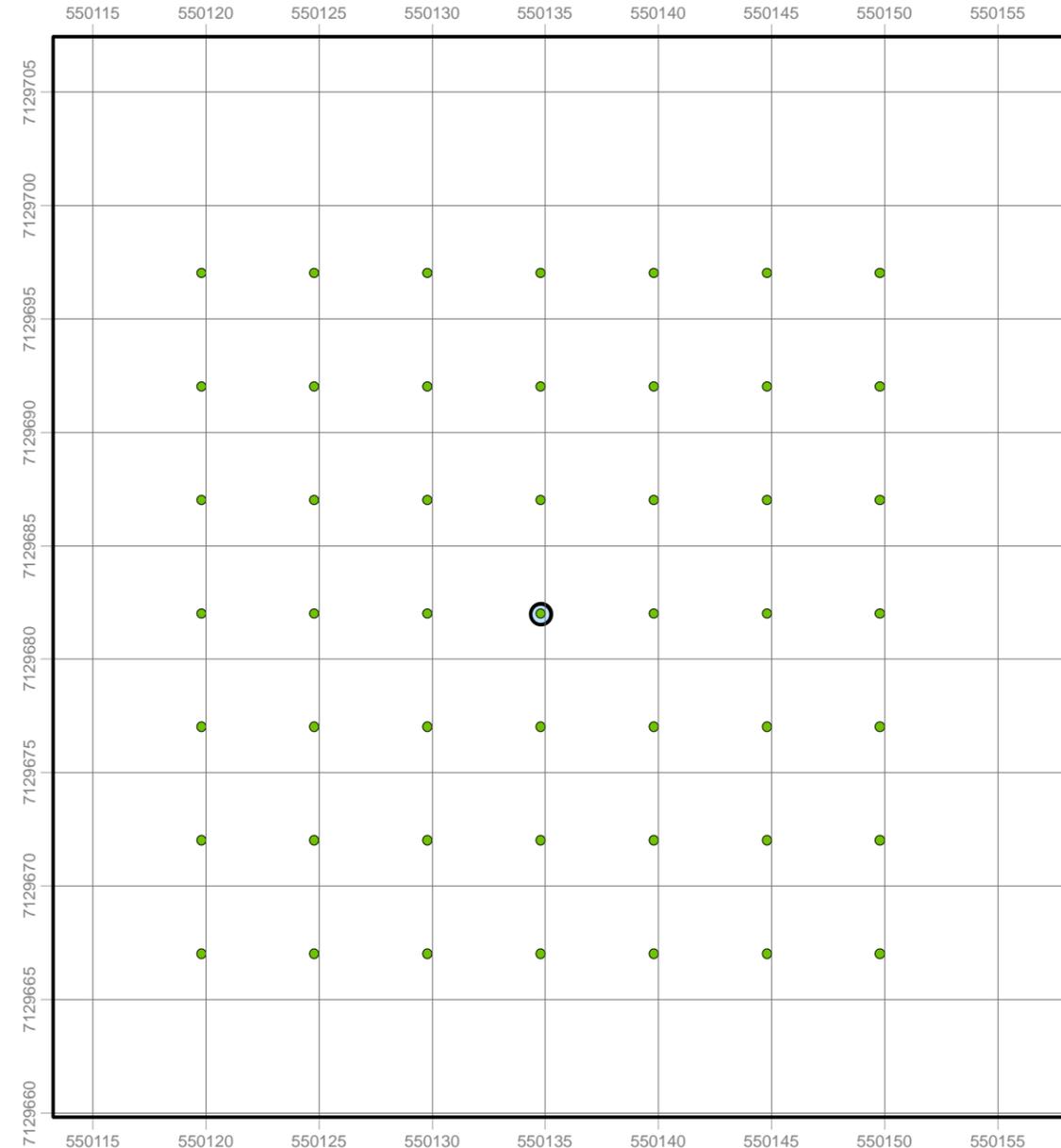


**Legend**

-  Drill Hole
-  0.0 - 0.3  $\mu\text{Sv}$
-  0.3 - 0.6  $\mu\text{Sv}$
-  0.6 - 1.0  $\mu\text{Sv}$
-  1.0 - 2.5  $\mu\text{Sv}$
-  > 2.5  $\mu\text{Sv}$



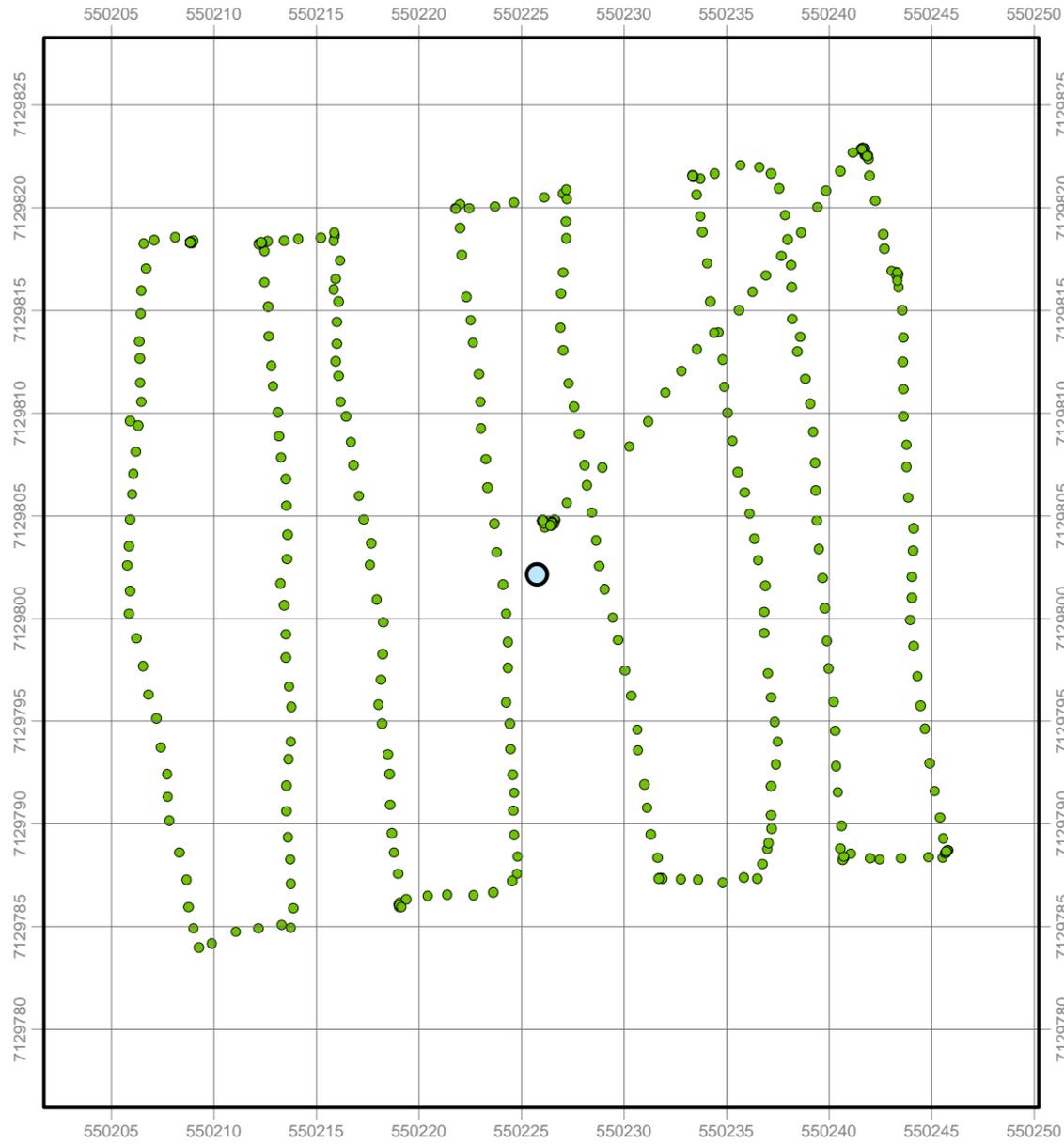
**CONT-016**  
**Pre Gamma Survey**  
 Point Count: 474  
 Min-Max: 0.053 - 0.090  $\mu\text{Sv}$



**CONT-016**  
**Post Gamma Survey**  
 Point Count: 49  
 Min-Max: 0.0 - 0.24  $\mu\text{Sv}$

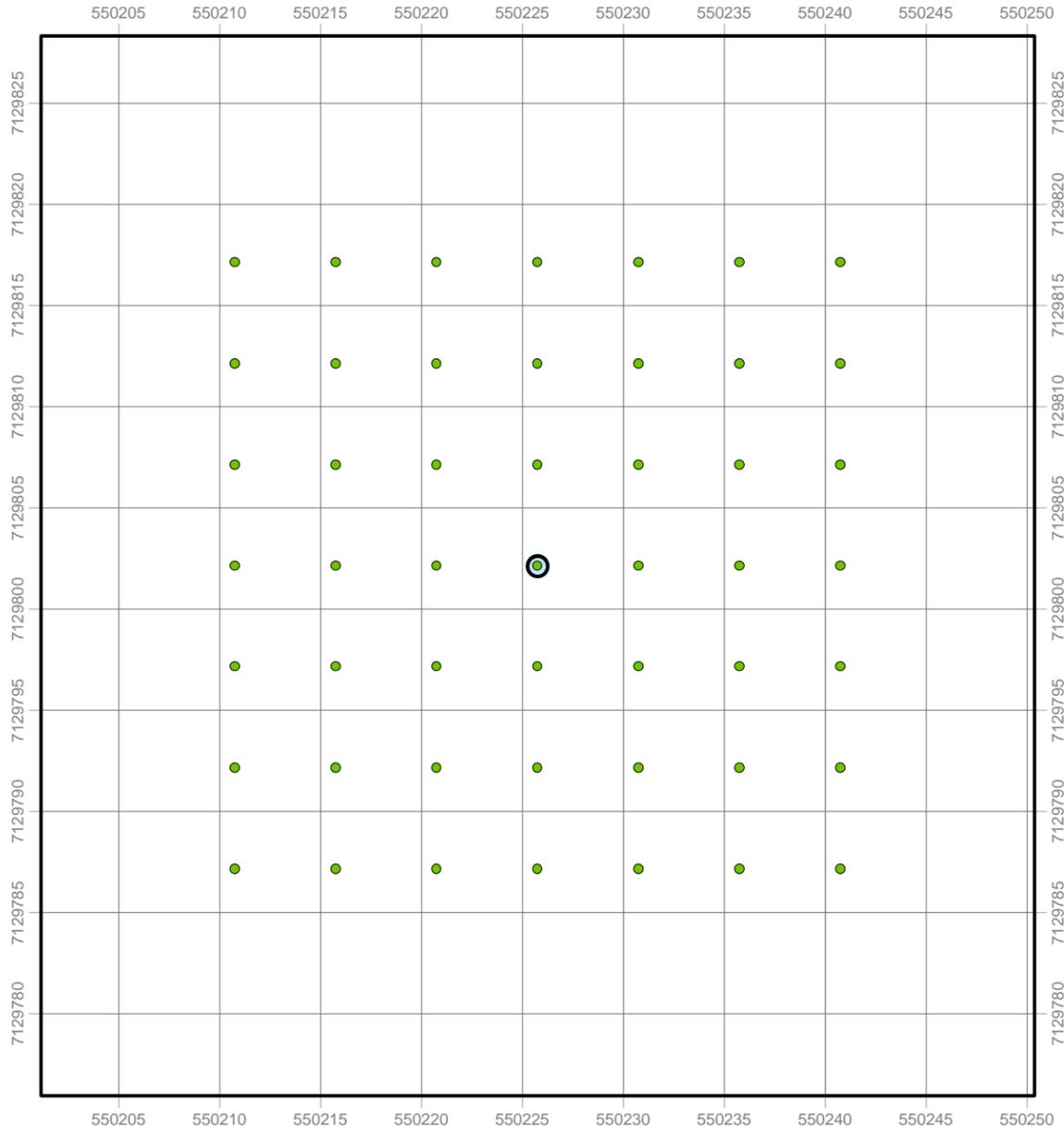


- Legend**
-  Drill Hole
  -  0.0 - 0.3  $\mu\text{Sv}$
  -  0.3 - 0.6  $\mu\text{Sv}$
  -  0.6 - 1.0  $\mu\text{Sv}$
  -  1.0 - 2.5  $\mu\text{Sv}$
  -  > 2.5  $\mu\text{Sv}$



**CONT-017/CONT-018  
Pre Gamma Survey**

**Point Count: 475**  
**Min-Max: 0.058 - 0.101  $\mu\text{Sv}$**



**CONT-017/CONT-018  
Post Gamma Survey**

**Point Count: 49**  
**Min-Max: 0.0 - 0.27  $\mu\text{Sv}$**



Projection: NAD 1983 UTM Zone 14N  
 Compiled: T. Lohman    Drawn: T. Lohman  
 Date: 11/23/2015      Scale: 5m x 5m Grid  
 File: KI08F180  
 Data Sources: Natural Resources Canada, Geobase®, Nation  
 Topographic Database, AREVA Resources Canada  
 Inc.

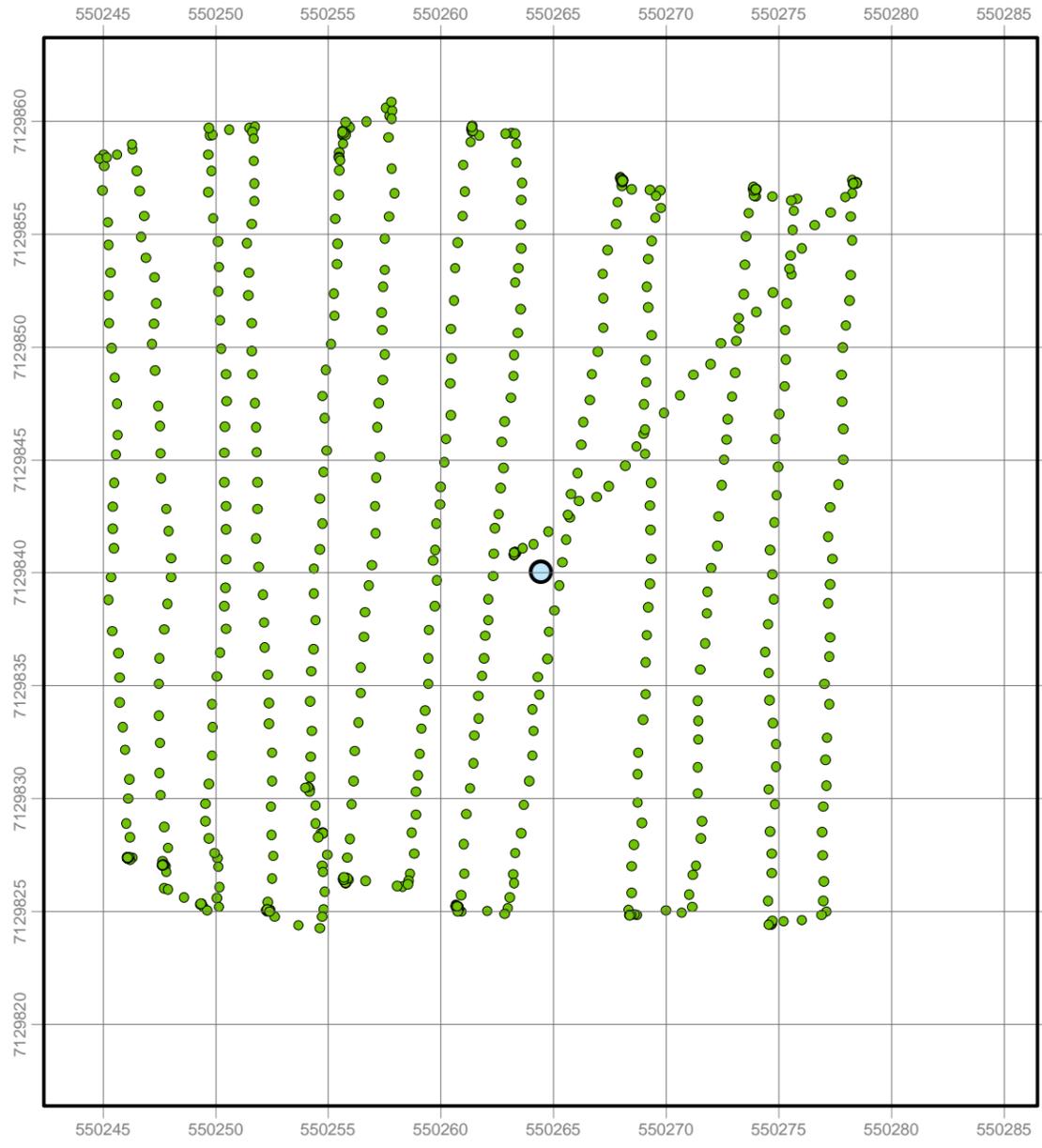
**PRE AND POST GAMMA SURVEY**  
**DRILL HOLE CONT-017/CONT-018**

Figure 3.7-11  
 2015 KIGGAVIK Annual Report

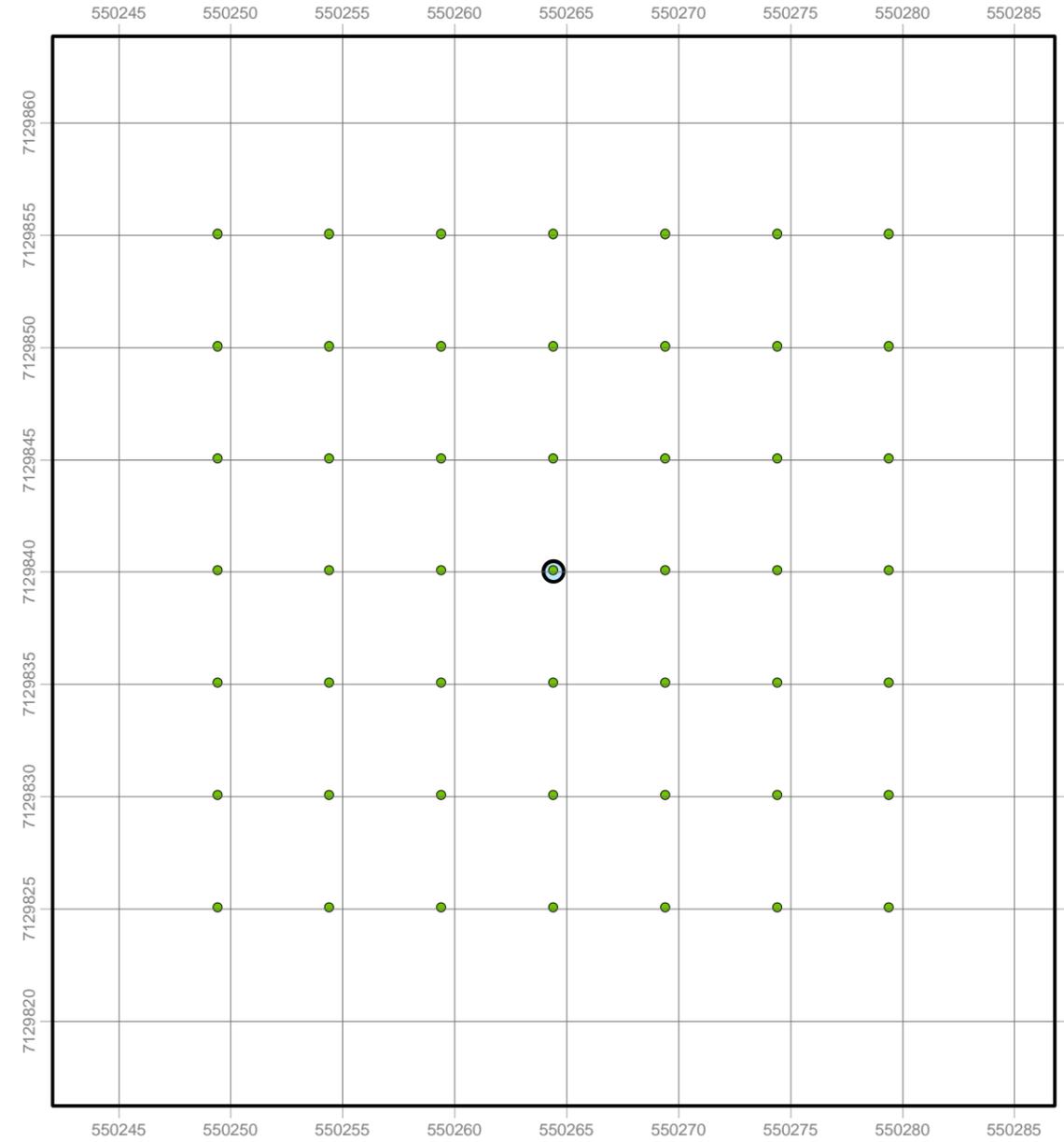


**Legend**

-  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



**CONT-019**  
**Pre Gamma Survey**  
 Point Count: 814  
 Min-Max: 0.057 - 0.102 µSv

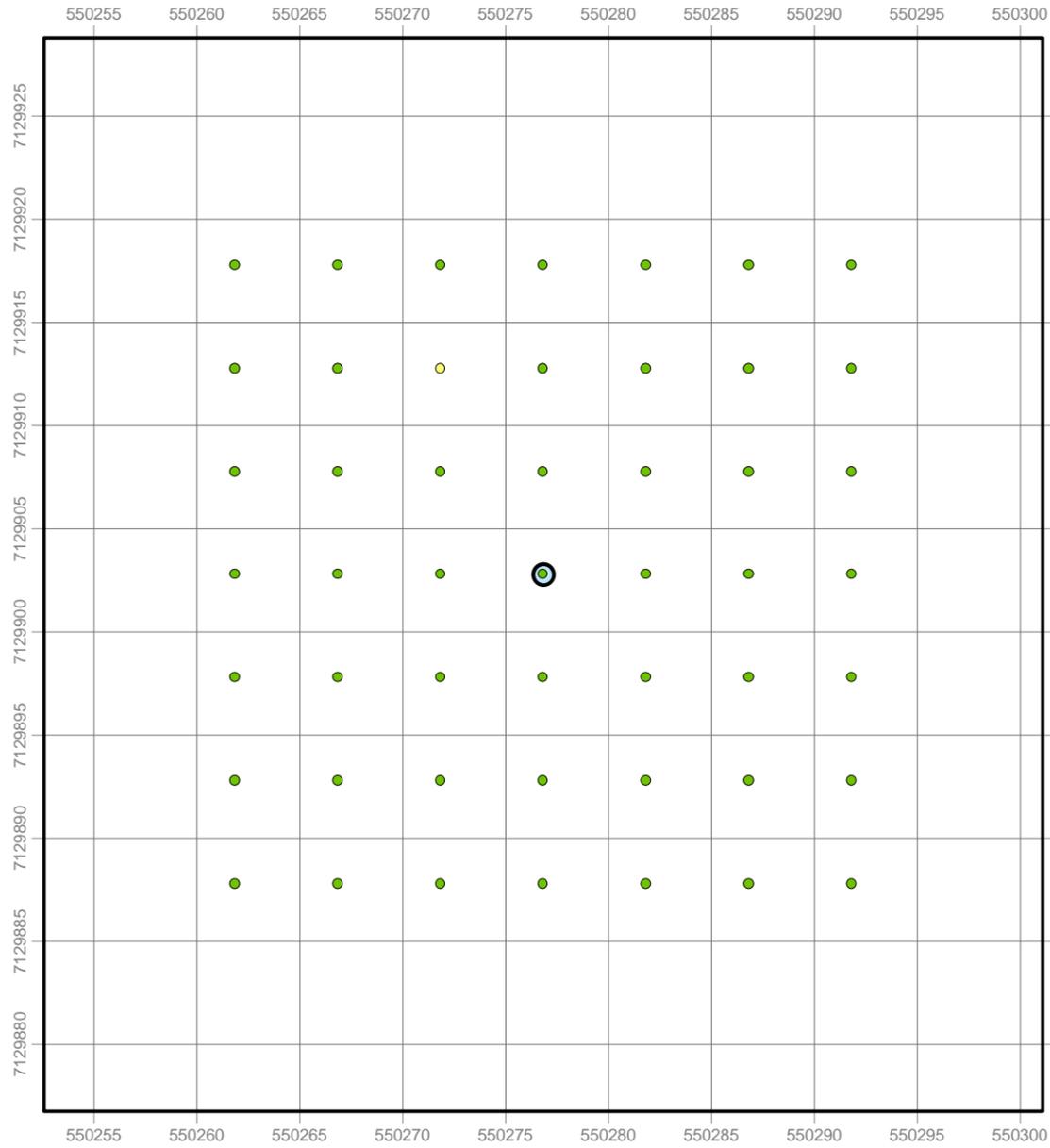


**CONT-019**  
**Post Gamma Survey**  
 Point Count: 49  
 Min-Max: 0.0 - 0.23 µSv



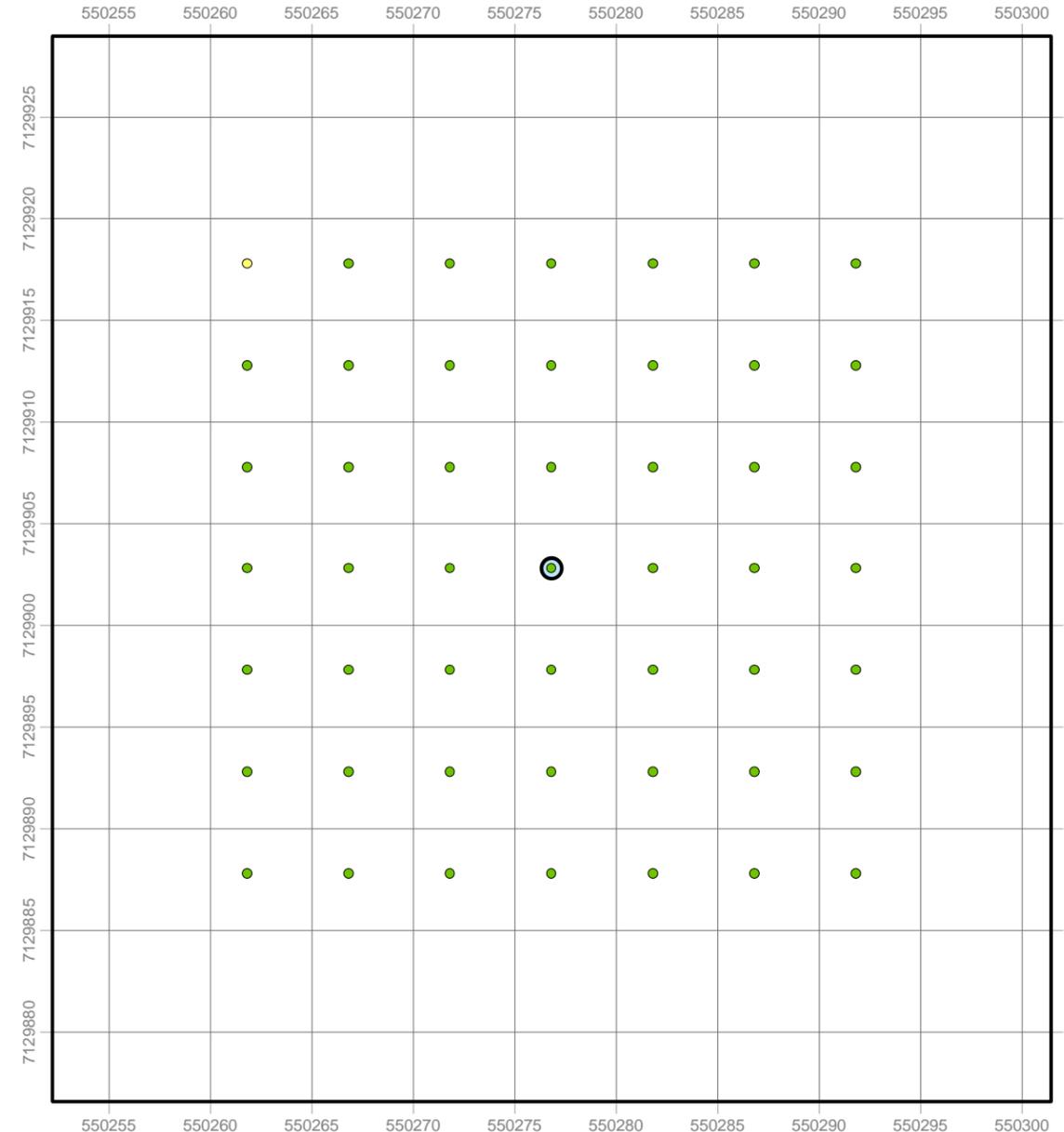
**Legend**

-  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



**CONT-020/CONT-021  
Pre Gamma Survey**

**Point Count: 49**  
**Min-Max: 0.01 - 0.32 µSv**



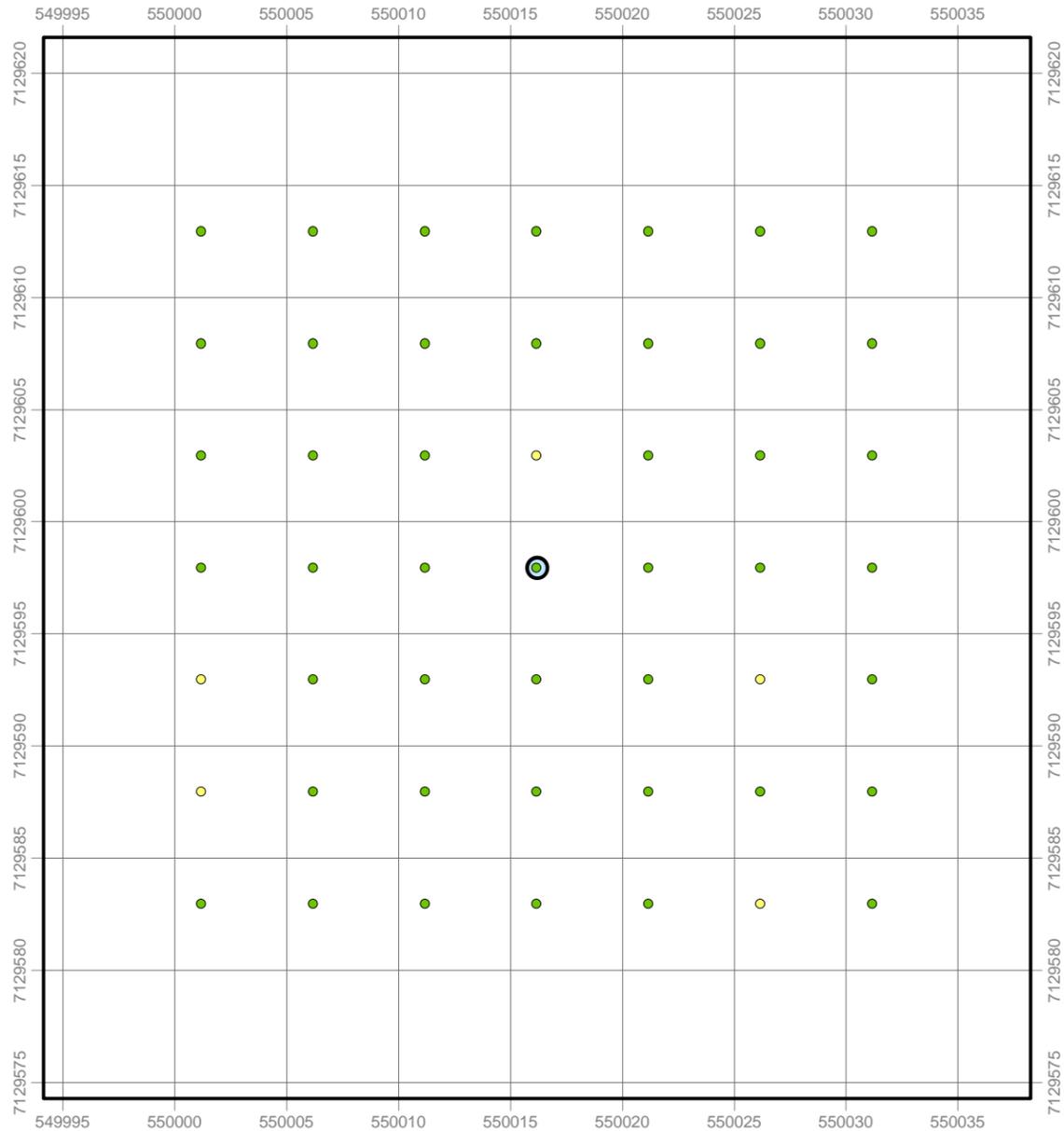
**CONT-020/CONT-021  
Post Gamma Survey**

**Point Count: 49**  
**Min-Max: 0.01 - 0.31 µSv**

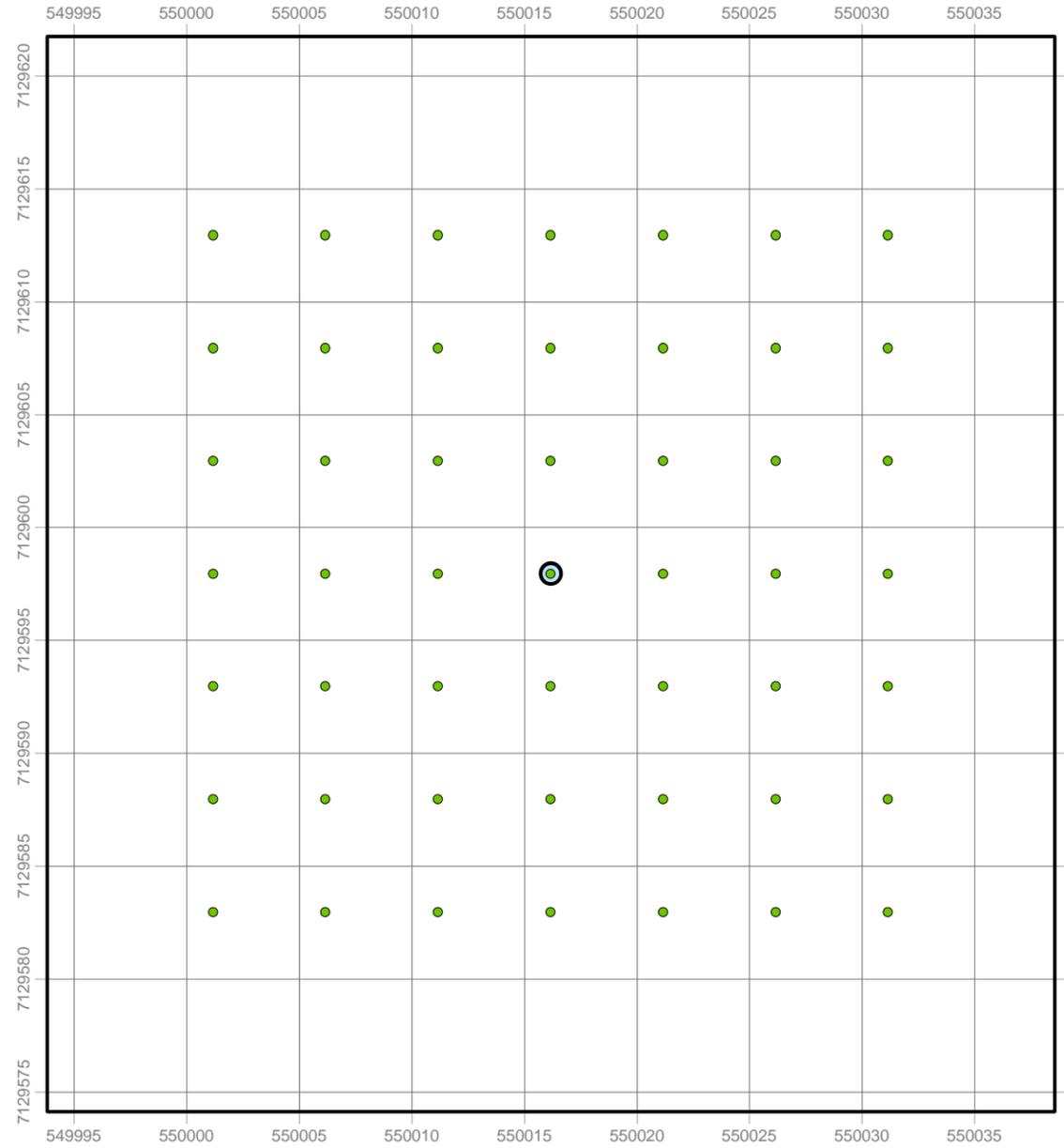


**Legend**

-  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



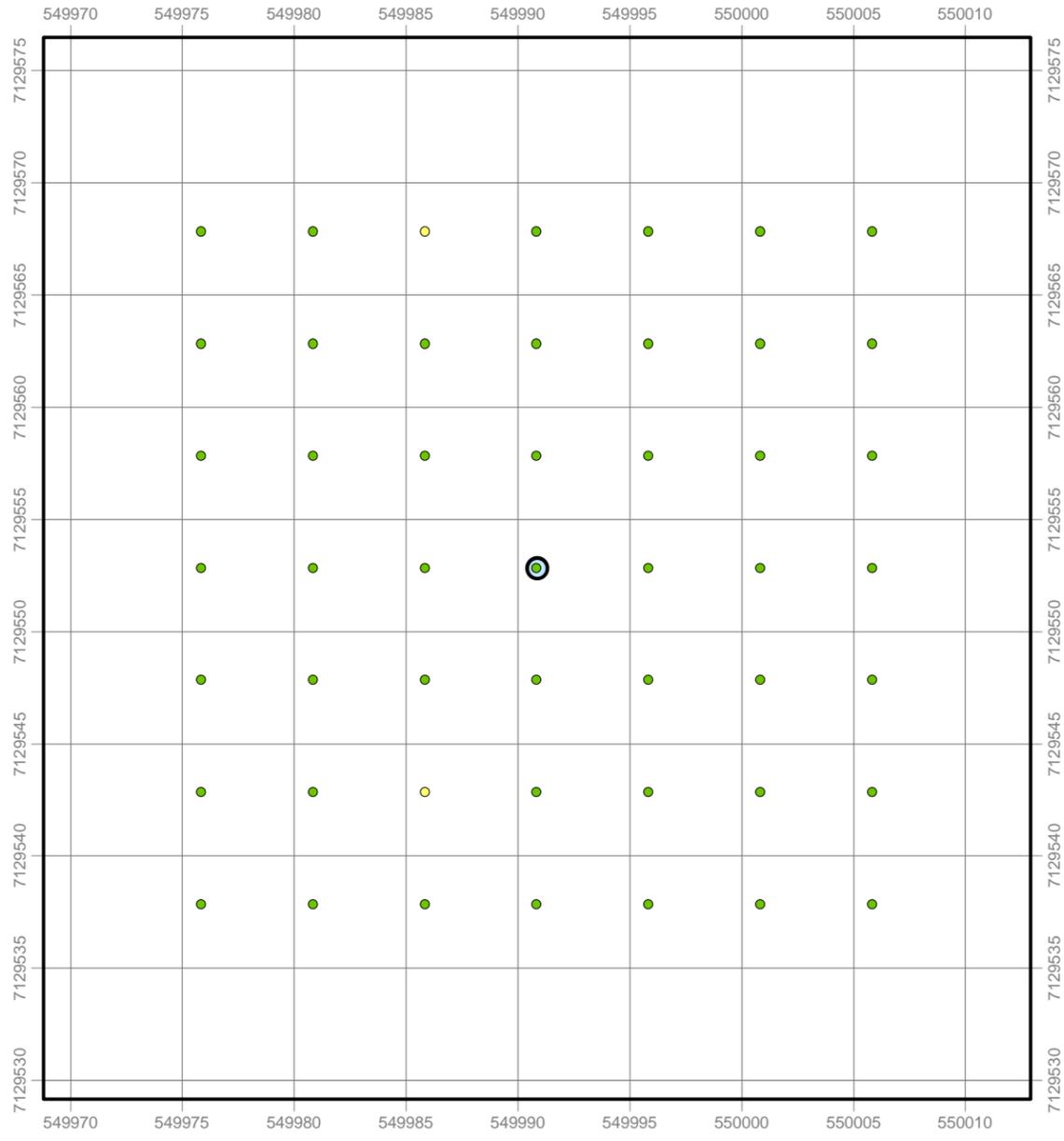
**CONT-022**  
**Pre Gamma Survey**  
 Point Count: 49  
 Min-Max: 0.02 - 0.43 µSv



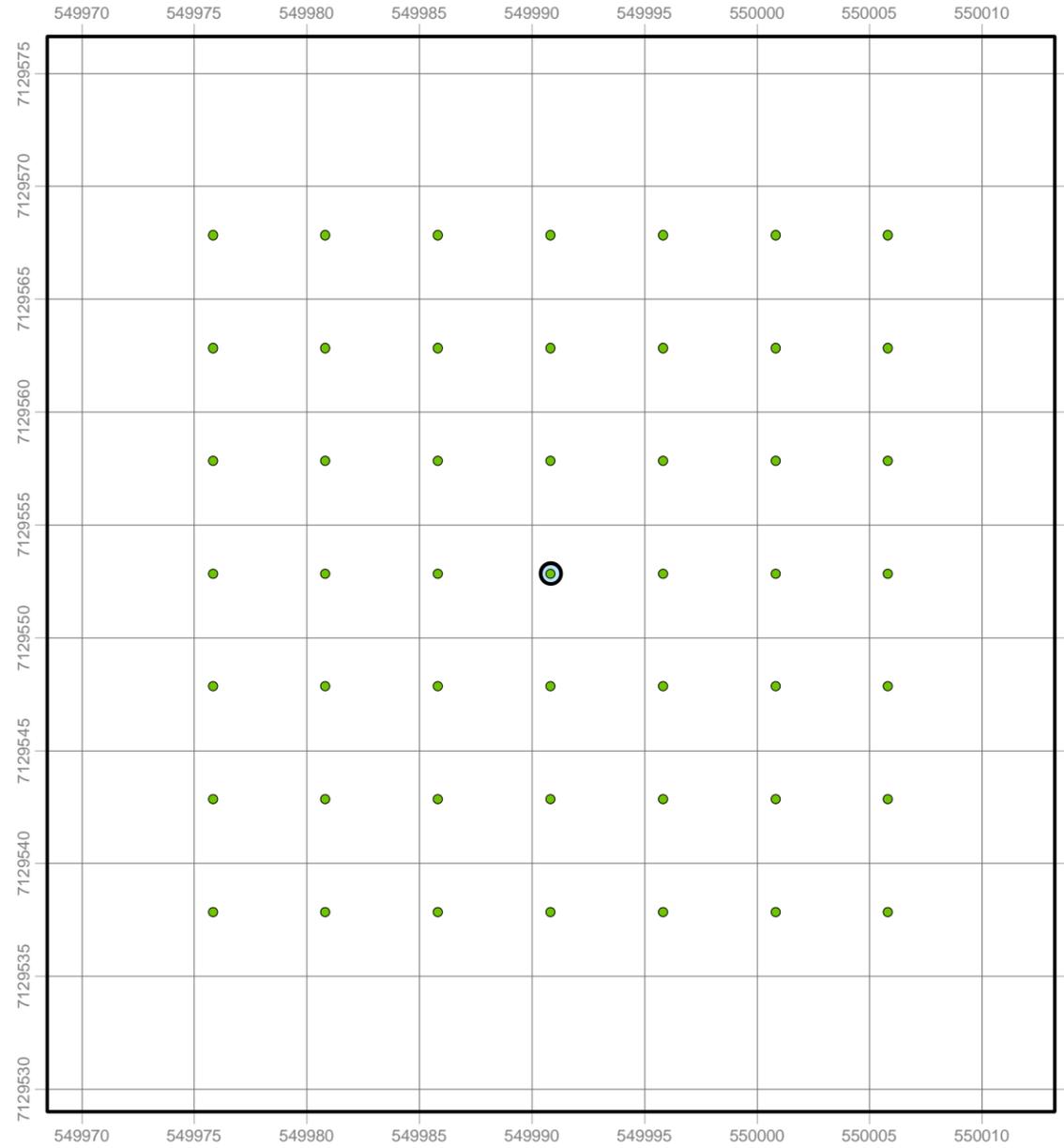
**CONT-022**  
**Post Gamma Survey**  
 Point Count: 49  
 Min-Max: 0.01 - 0.25 µSv



- Legend**
-  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



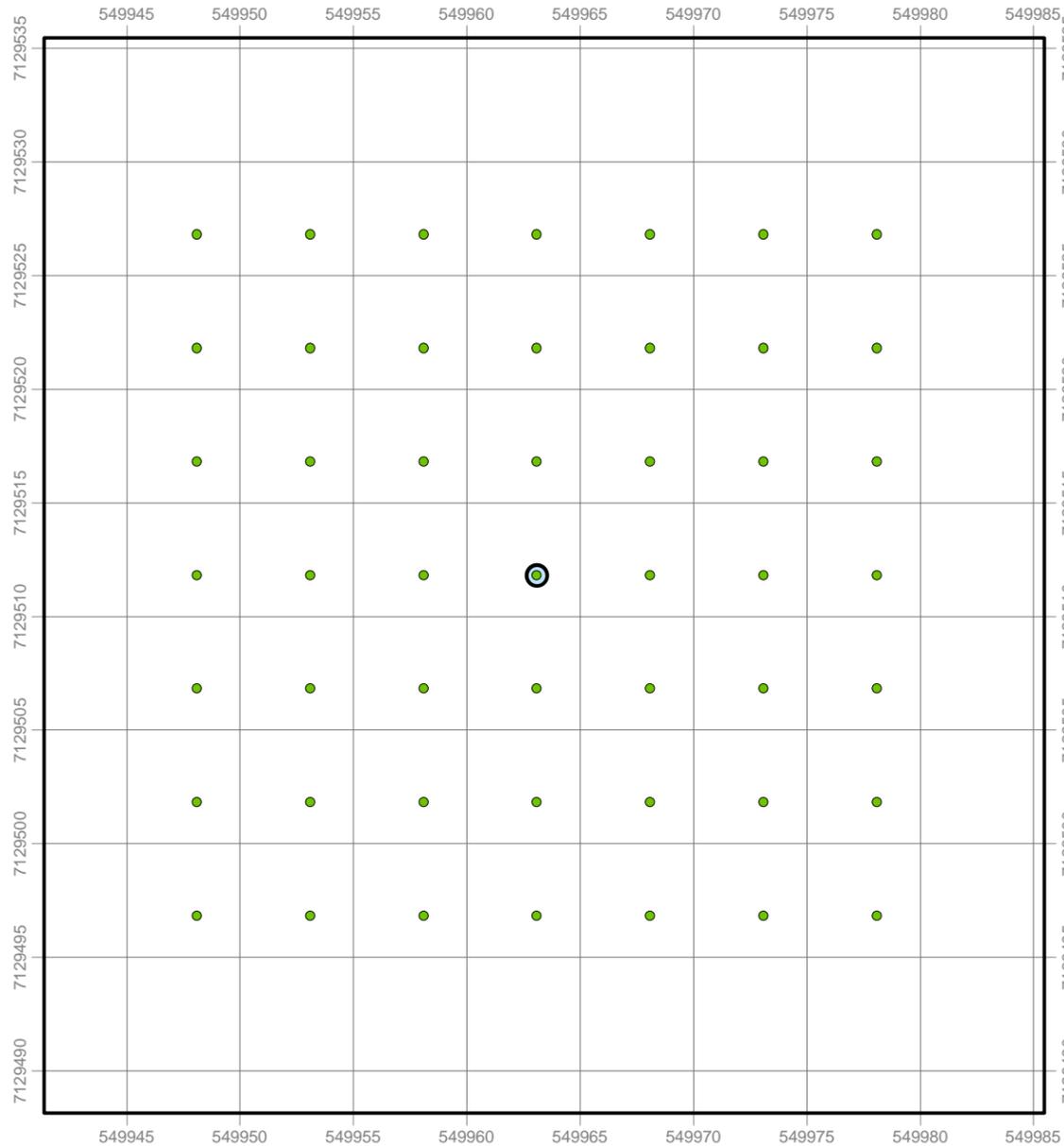
**CONT-023**  
**Pre Gamma Survey**  
 Point Count: 49  
 Min-Max: 0.01 - 0.38 µSv



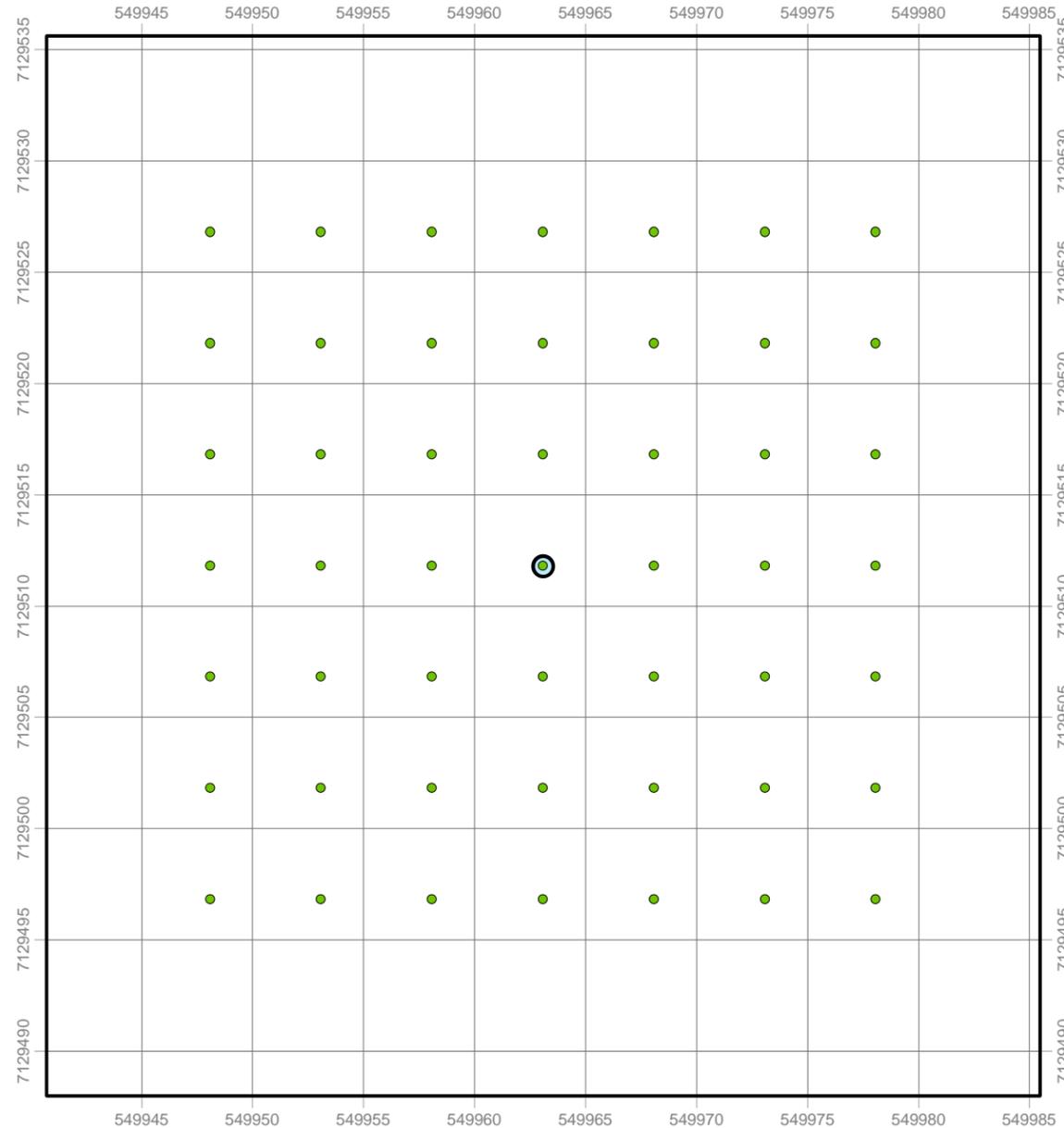
**CONT-023**  
**Post Gamma Survey**  
 Point Count: 49  
 Min-Max: 0.01 - 0.28 µSv



- Legend**
-  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



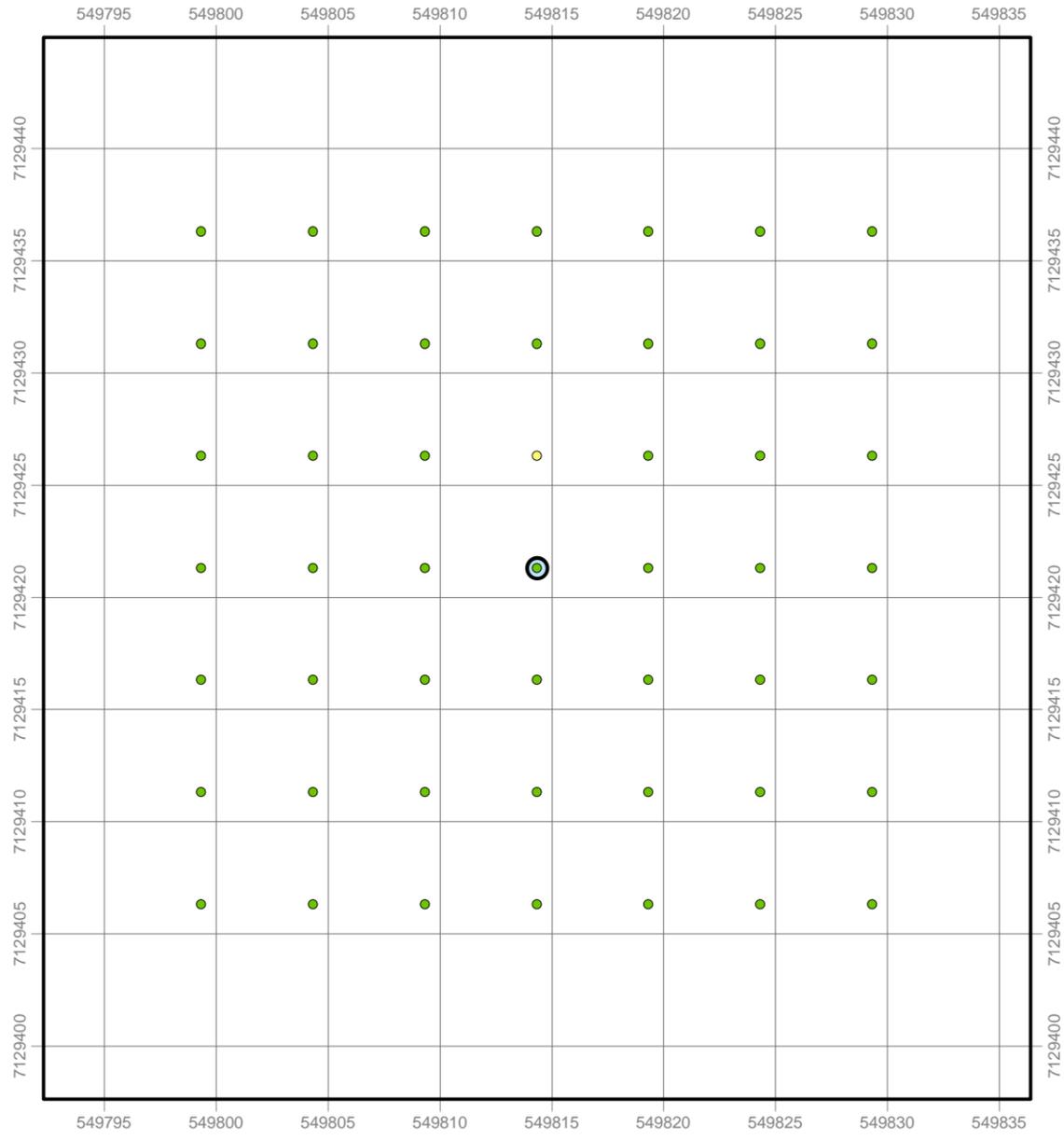
**CONT-024**  
**Pre Gamma Survey**  
 Point Count: 49  
 Min-Max: 0.12 - 0.28 µSv



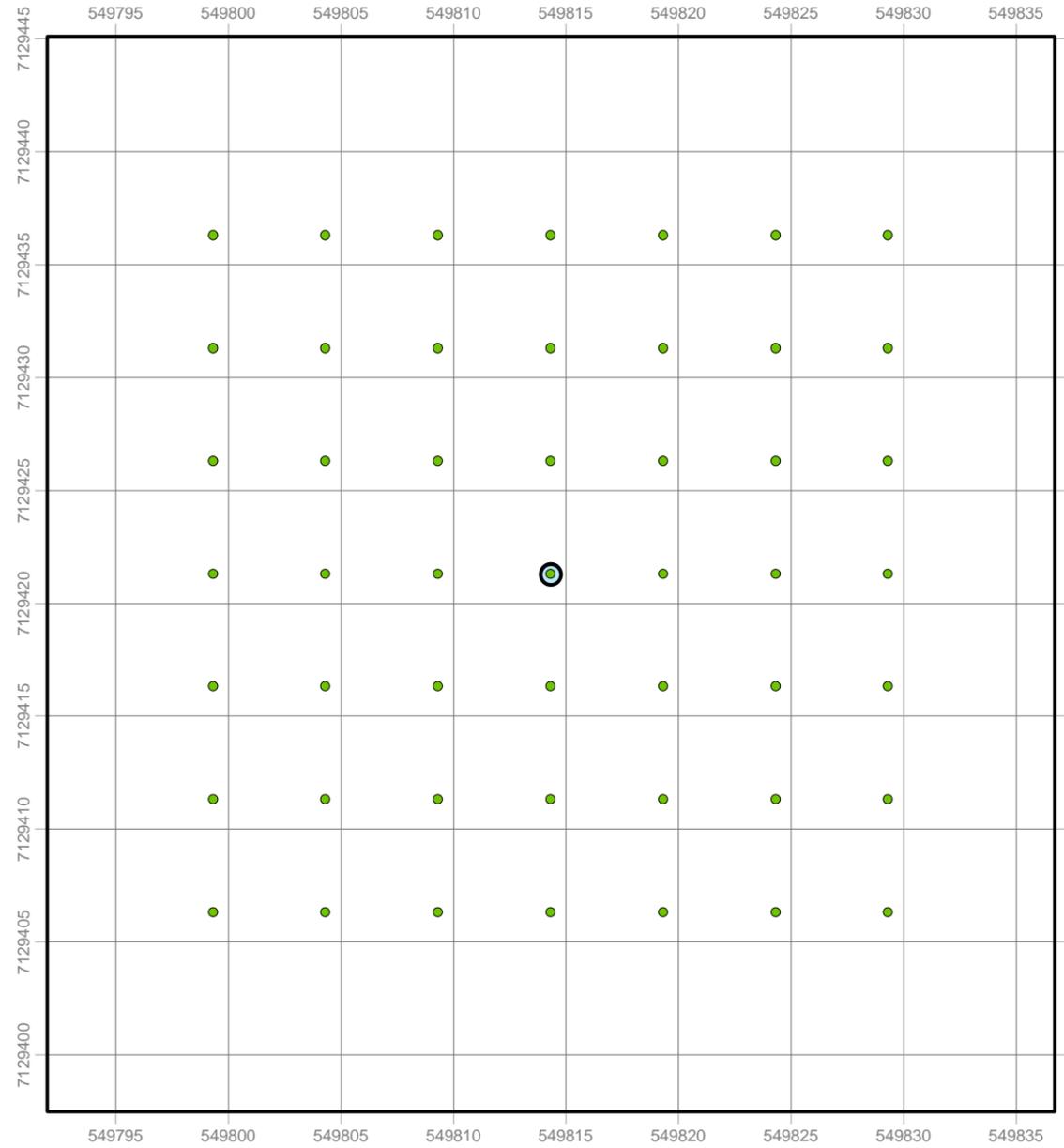
**CONT-024**  
**Post Gamma Survey**  
 Point Count: 49  
 Min-Max: 0.0 - 0.27 µSv



- Legend**
-  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



**CONT-025**  
**Pre Gamma Survey**  
 Point Count: 49  
 Min-Max: 0.02 - 0.31 µSv



**CONT-025**  
**Post Gamma Survey**  
 Point Count: 49  
 Min-Max: 0.01 - 0.25 µSv

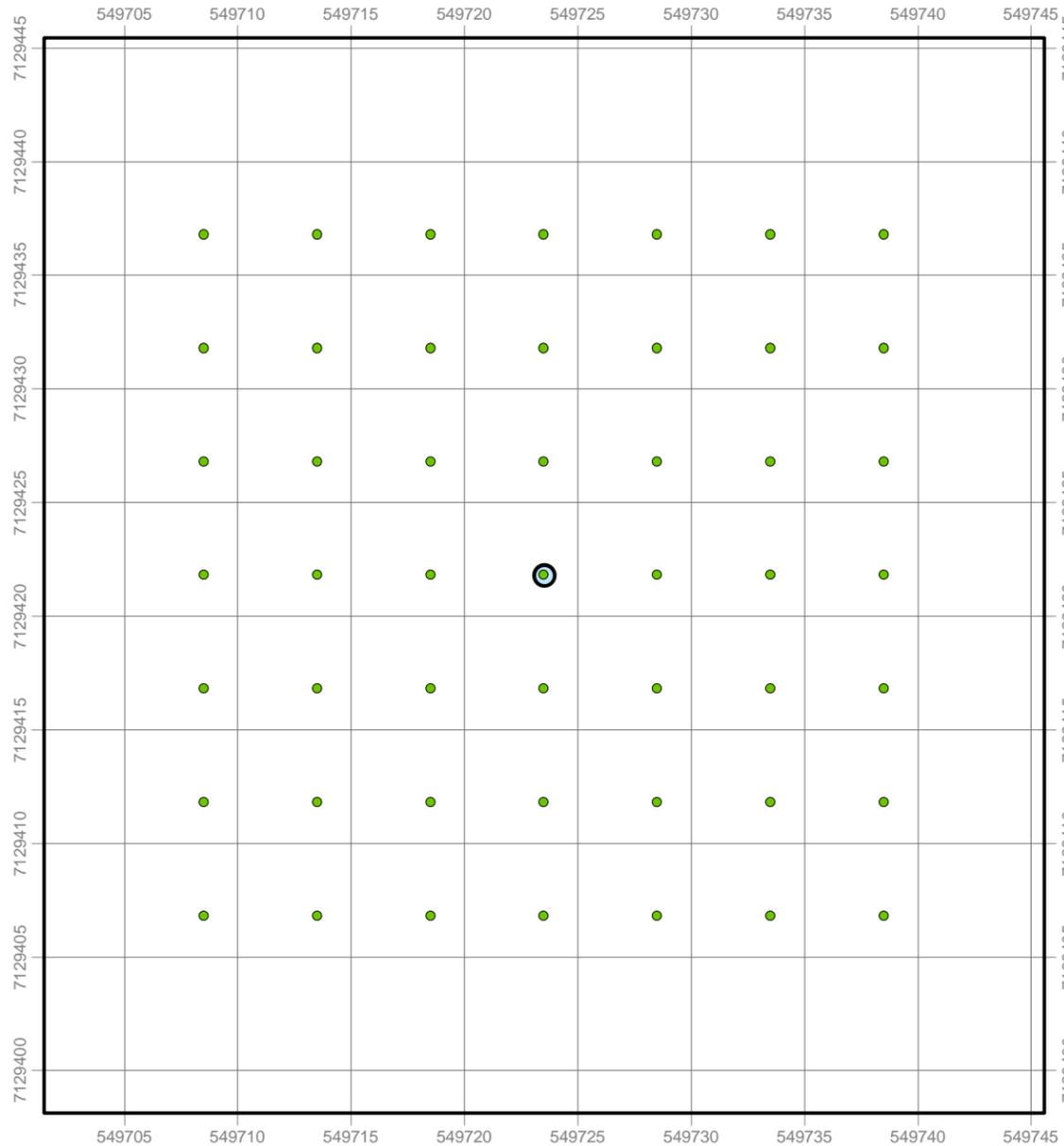


Projection: NAD 1983 UTM Zone 14N  
 Compiled: T. Lohman      Drawn: T. Lohman  
 Date: 11/23/2015      Scale: 5m x 5m Grid  
 File: K108F186  
 Data Sources: Natural Resources Canada, Geobase®, Nation  
 Topographic Database, AREVA Resources Canada  
 Inc.

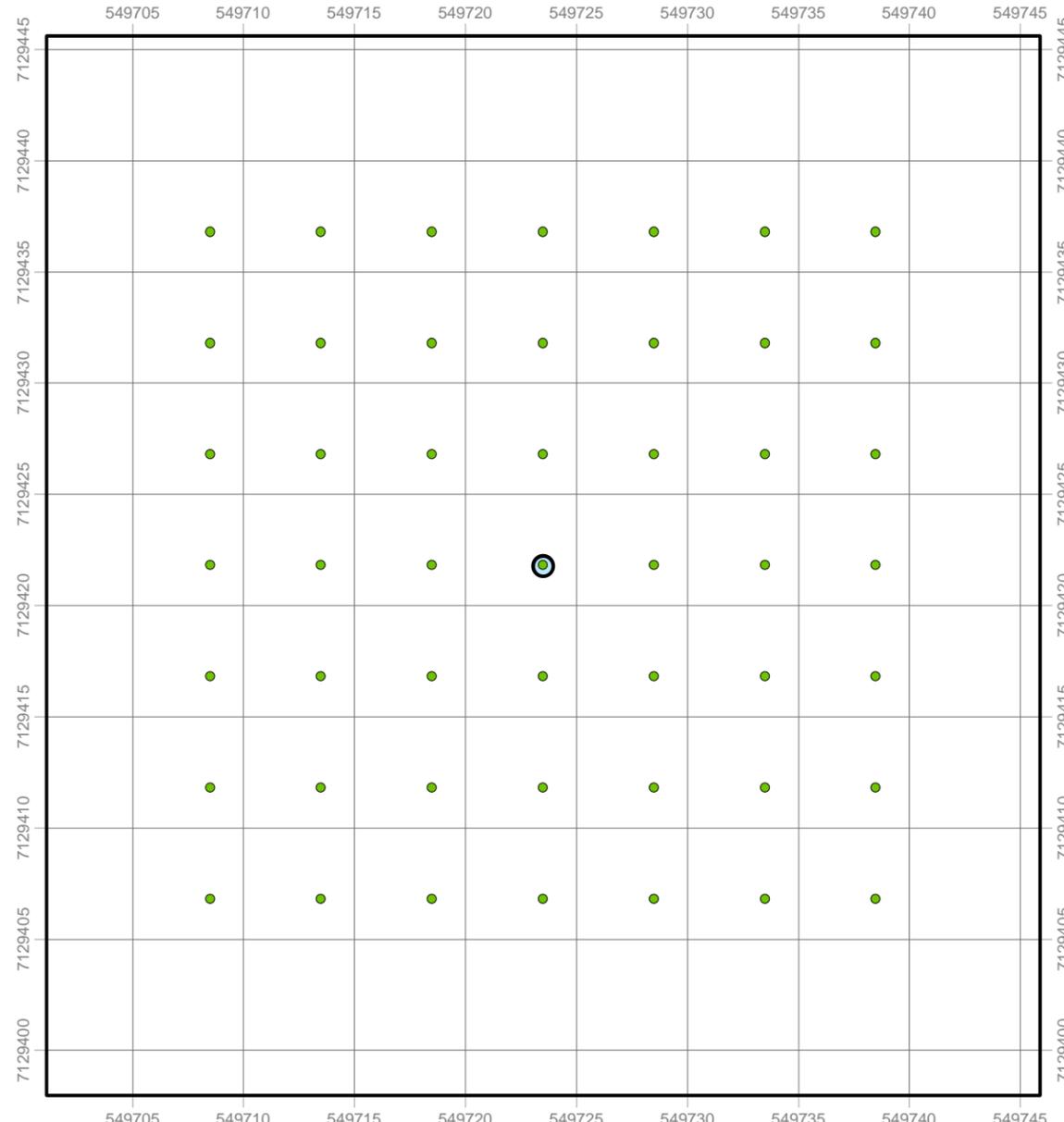
**PRE AND POST GAMMA SURVEY**  
**DRILL HOLE CONT-025**  
 Figure 3.7-17  
 2015 KIGGAVIK Annual Report



- Legend**
-  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



**CONT-026**  
**Pre Gamma Survey**  
 Point Count: 49  
 Min-Max: 0.0 - 0.23 µSv

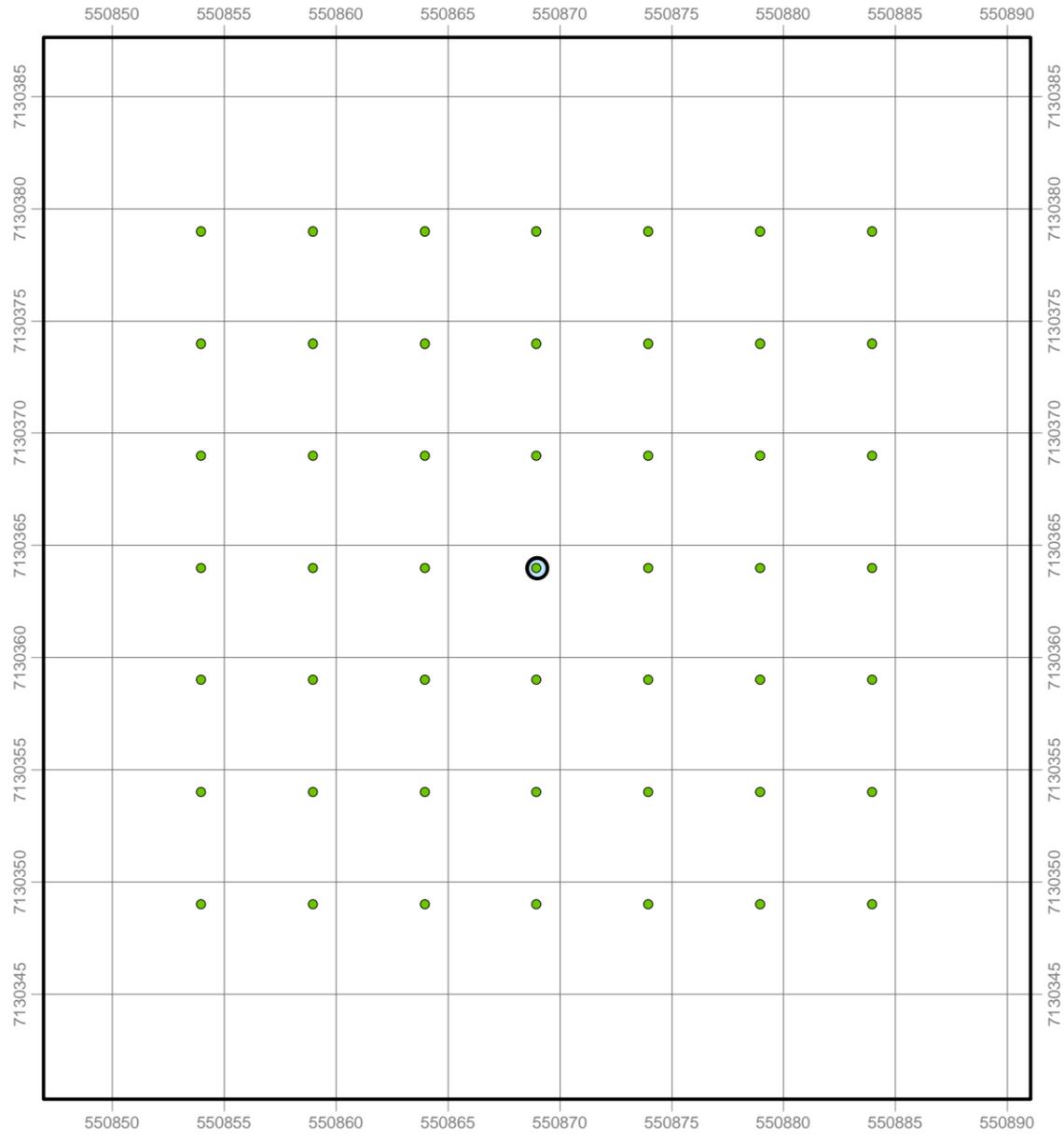


**CONT-026**  
**Post Gamma Survey**  
 Point Count: 49  
 Min-Max: 0.0 - 0.24 µSv

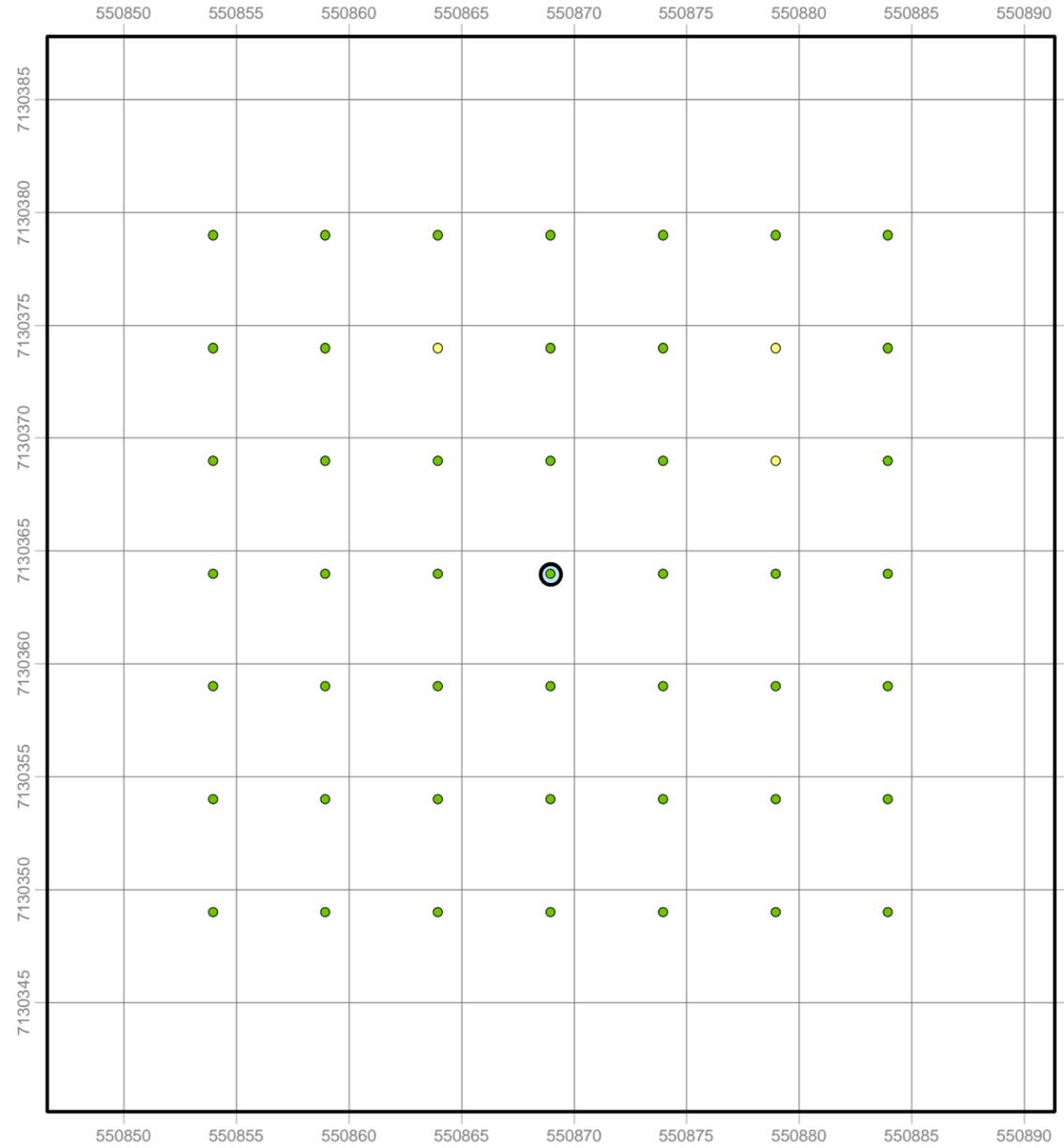


**Legend**

-  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



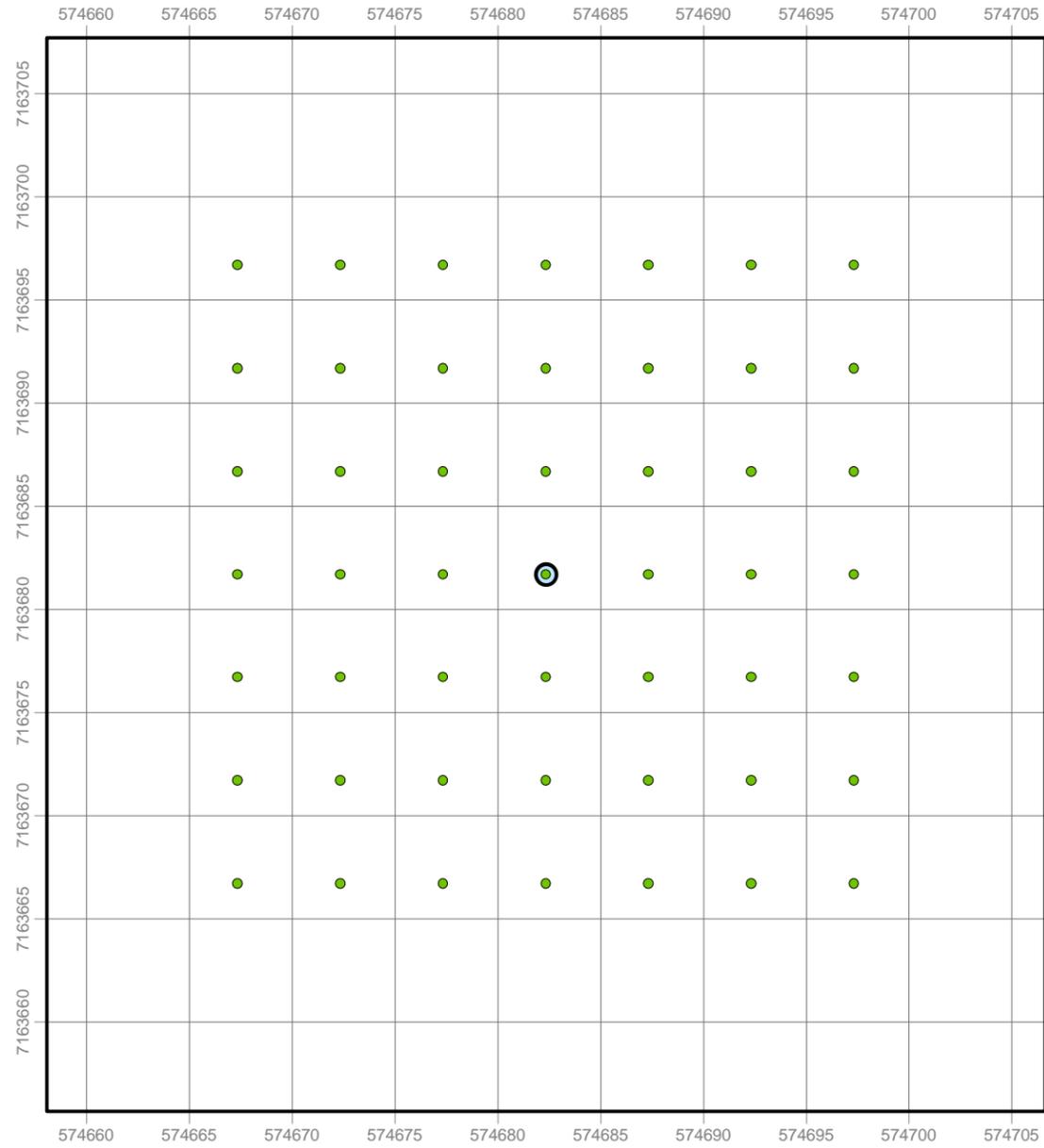
**CONT-027**  
**Pre Gamma Survey**  
 Point Count: 49  
 Min-Max: 0.0 - 0.23 µSv



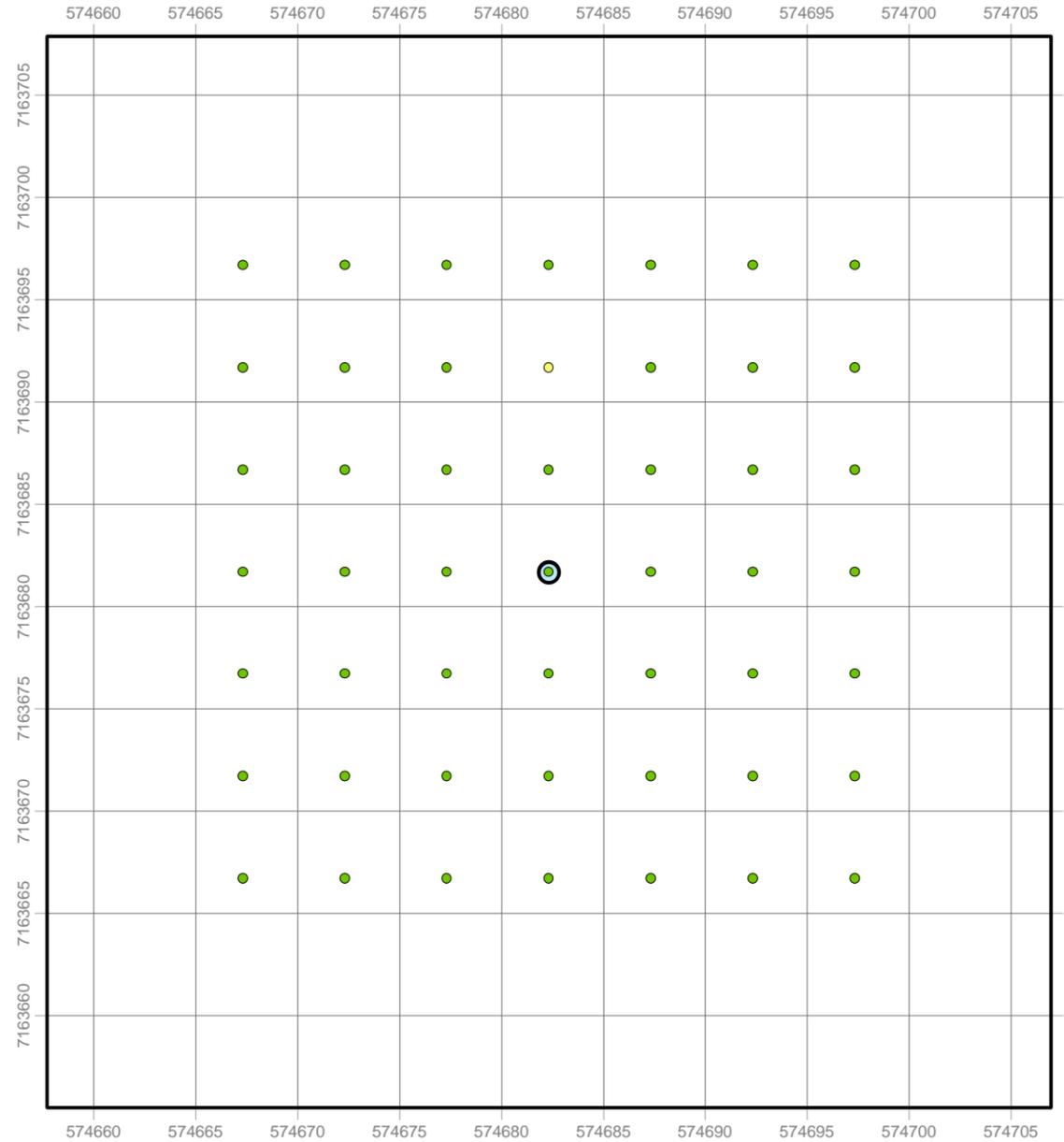
**CONT-027**  
**Post Gamma Survey**  
 Point Count: 49  
 Min-Max: 0.1 - 0.48 µSv

**Legend**

-  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



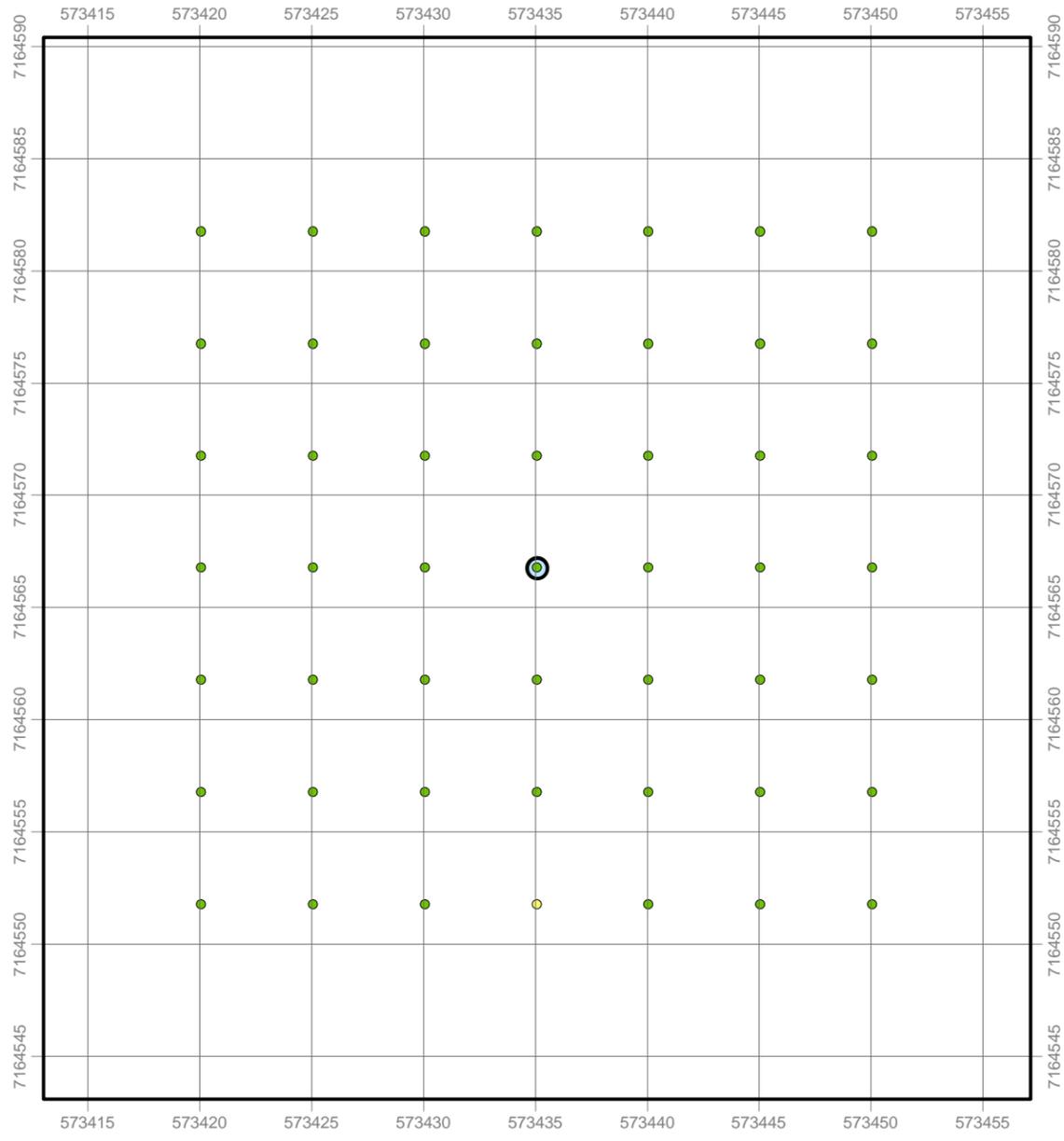
**ST-01  
Pre Gamma Survey**  
  
**Point Count: 49**  
**Min-Max: 0.01 - 0.28 µSv**



**ST-01  
Post Gamma Survey**  
  
**Point Count: 49**  
**Min-Max: 0.01 - 0.34 µSv**

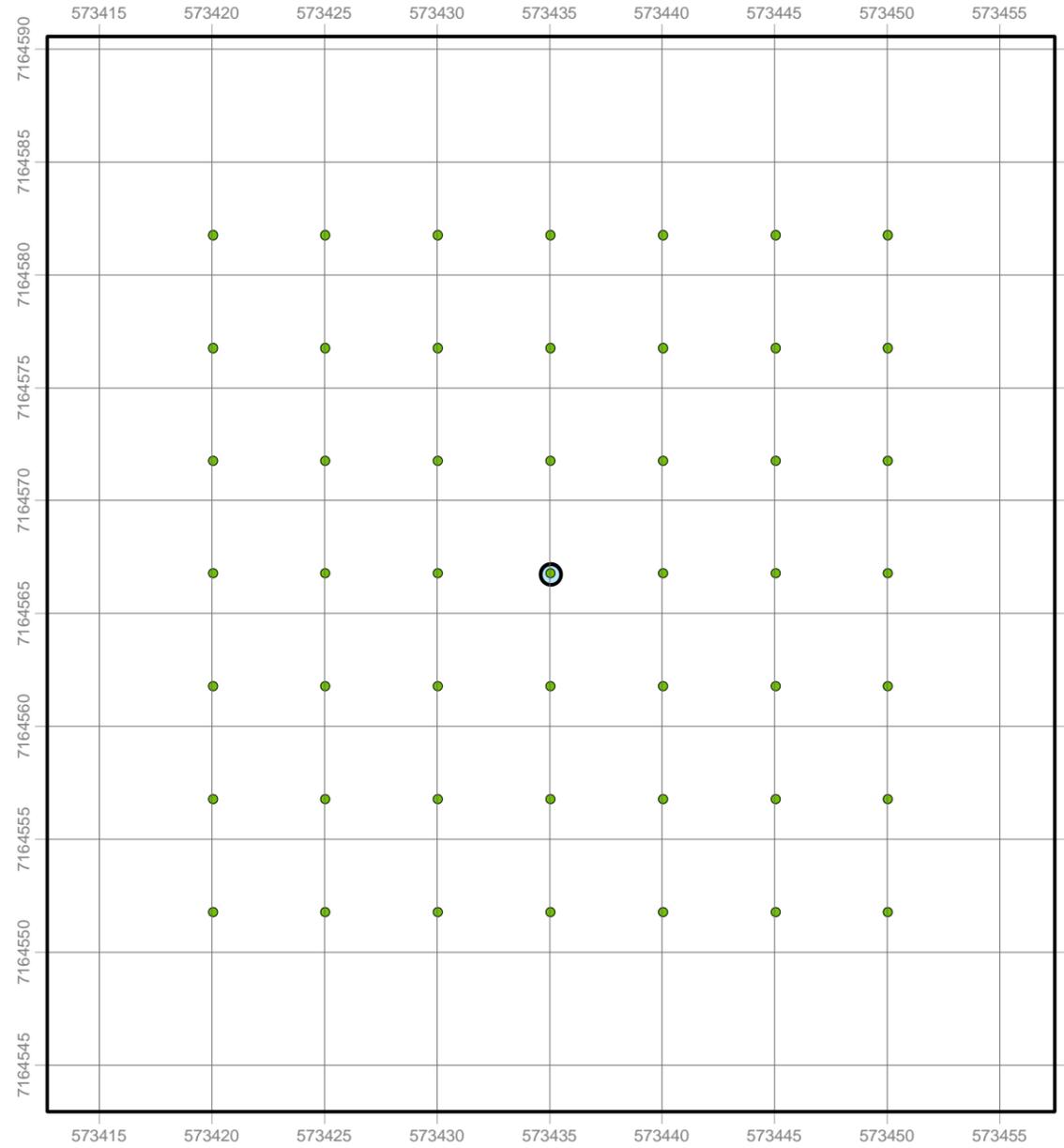


- Legend**
-  Drill Hole
  -  0.0 - 0.3 µSv
  -  0.3 - 0.6 µSv
  -  0.6 - 1.0 µSv
  -  1.0 - 2.5 µSv
  -  > 2.5 µSv



**ST-02  
Pre Gamma Survey**

**Point Count: 49  
Min-Max: 0.04 - 0.36 µSv**



**ST-02  
Post Gamma Survey**

**Point Count: 49  
Min-Max: 0.0 - 0.28 µSv**

Projection: NAD 1983 UTM Zone 14N  
 Compiled: T. Lohman      Drawn: T. Lohman  
 Date: 11/24/2015      Scale: 5m x 5m Grid  
 File: K108F190  
 Data Sources: Natural Resources Canada, Geobase®, Nation  
 Topographic Database, AREVA Resources Canada  
 Inc.

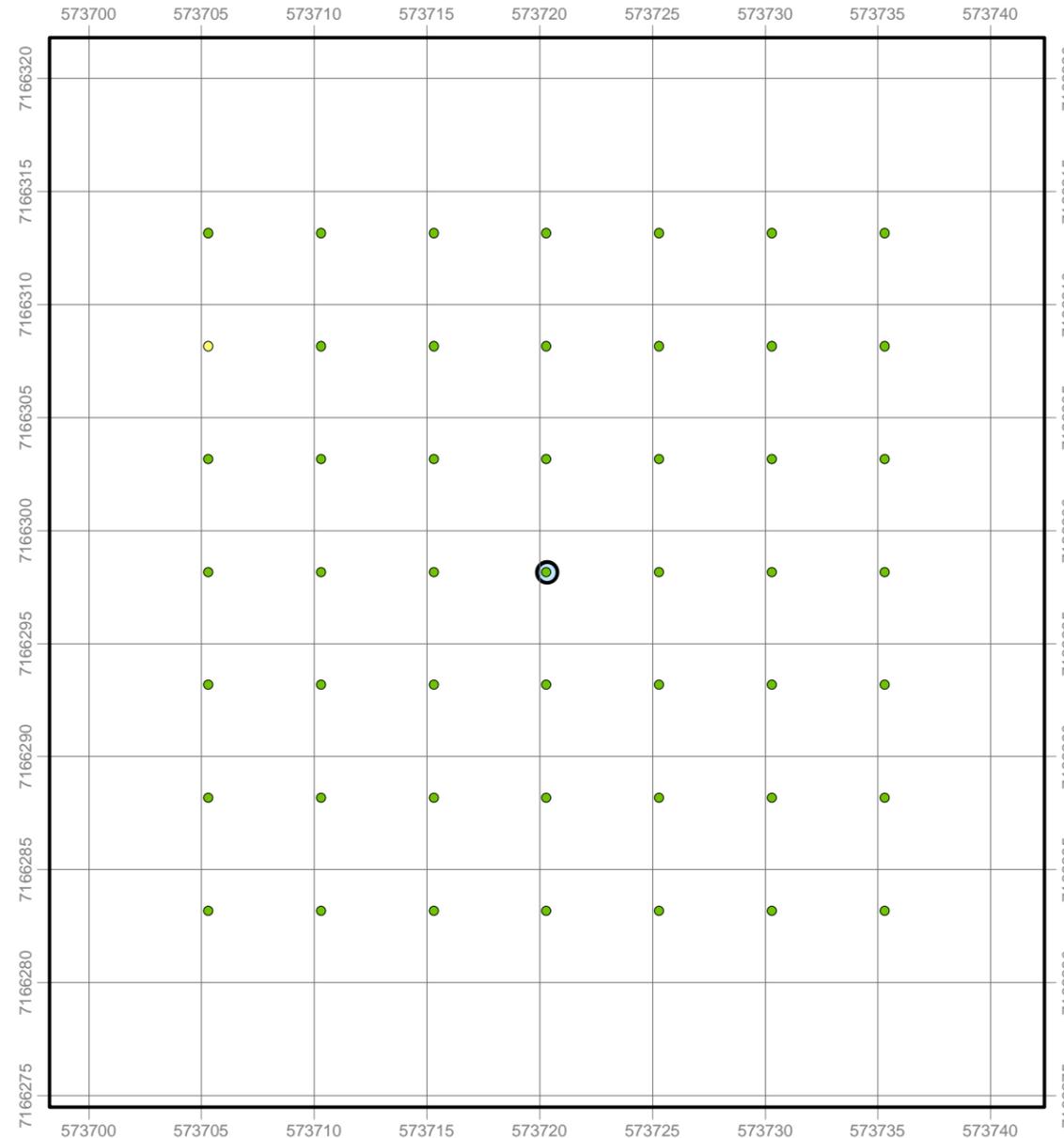
**PRE AND POST GAMMA SURVEY  
DRILL HOLE ST-02**

Figure 3.7-21  
 2015 KIGGAVIK Annual Report

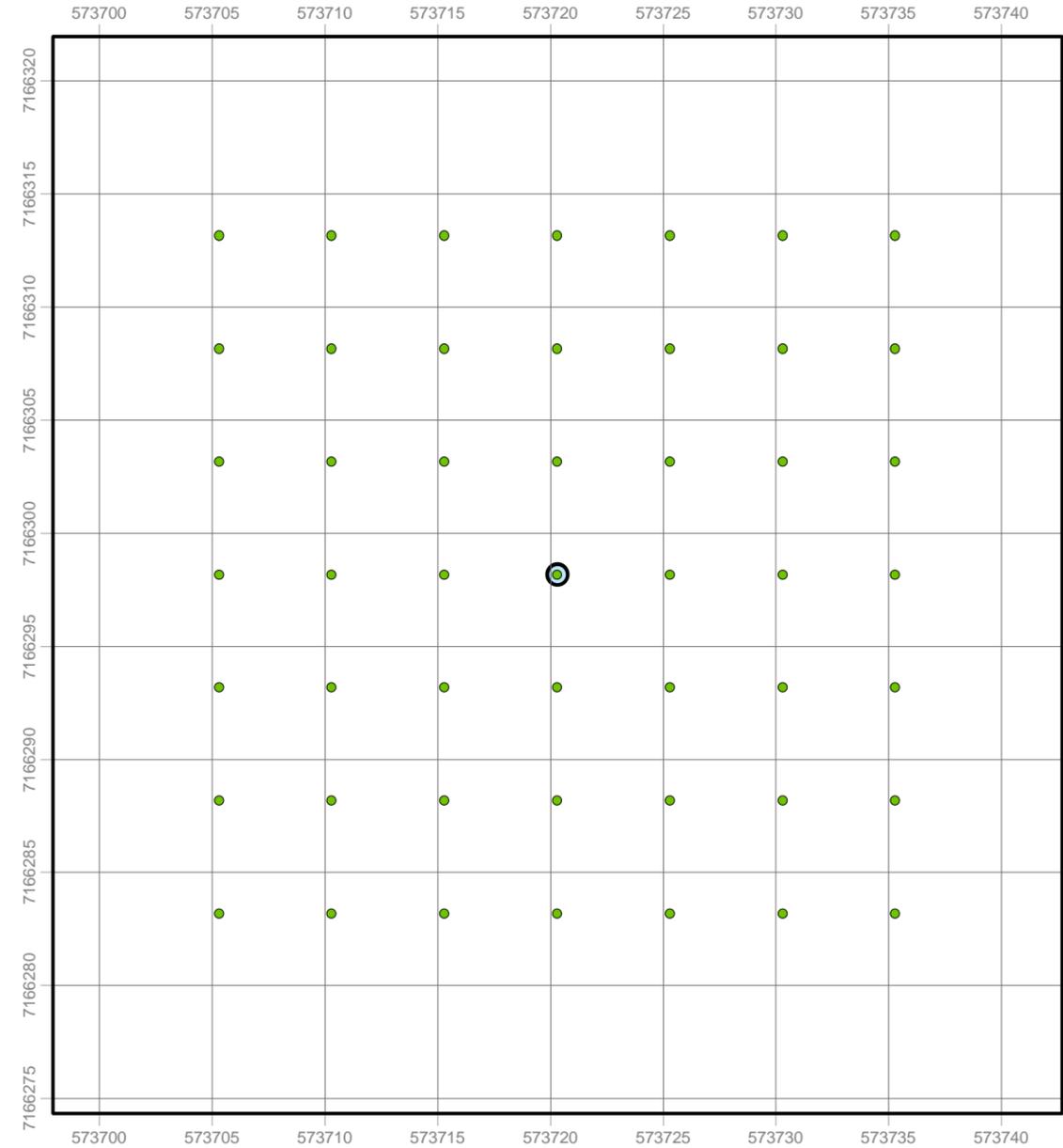


**Legend**

-  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



**ST-03  
Pre Gamma Survey**  
  
**Point Count: 49**  
**Min-Max: 0.02 - 0.32 µSv**



**ST-03  
Post Gamma Survey**  
  
**Point Count: 49**  
**Min-Max: 0.0 - 0.26 µSv**

