

## 8 PROGRESSIVE RECLAMATION

As discussed in the Abandonment and Restoration Plan, it is AREVA's intention to establish chemical and physical stability at all sites impacted by exploration activities, to the greatest extent practical. However, due to challenges surrounding physical reclamation of surface disturbance the primary focus is currently on chemical stability. All drill sites from the current year's field program are inspected for fuel stained soil and undergo a gamma survey for radioactive contamination. Radiologically or chemically contaminated soil or cuttings are collected in appropriate containers and stored in the long-term core storage area for future handling.

Drill sites must be remediated to the extent that gamma dose at a height of 1 m from surface is less than 1  $\mu\text{Sv/h}$  above background, however efforts are made to reduce gamma doses to the greatest extent possible. Radioactive material is collected, appropriately packaged and stored in the radioactive storage compound. Gamma radiation 1 m from the boundary of the core storage area is reduced as much as practicable with a target less than 1  $\mu\text{Sv/h}$  and in no instances exceeding 2.5  $\mu\text{Sv/h}$ .

### 8.1 CHEMICAL AND RADIOLOGICAL RESTORATION

All drill sites are subject to gamma surveys prior to conducting any drilling activities and following the completion of the drill hole. If elevated levels of gamma radiation are detected in the post-drilling survey, clean-up activities are conducted followed by another gamma survey to ensure levels have been reduced and are below 1  $\mu\text{Sv/h}$ .

Gamma radiation surveys were conducted around each borehole and along the discharge route of the drilling water. Readings with the Ludlum 2221 and Trimble GeoExplorer were made at one meter above ground with 1 second intervals. A summary of the 2011 gamma survey data by drilling location is presented in Table 8.1-1. Drill locations are presented in Figure 8.1-1 and the gamma survey results are shown in Figures 8.1-2 to 8.1-14.

**Table 8.1-1 Gamma Survey Data from 2011 Drill Locations**

Drill Hole	Pre Gamma	Post Gamma
	Date	Date
GW-11-01	02-Jun-11	19-Jun-11
GW-11-02	14-Jun-11	24-Jun-11
END-11-01	11-Jun-11	16-Jul-11
END-11-02/04	21-Jun-11	05-Aug-11
END-11-03	22-Jun-11	16-Jul-11
END-11-05	14-Jul-11	29-Jul-11
END-11-06	21-Jul-11	05-Aug-11
Bong050/051	16-Jun-11	26-Jul-11
Bong052	10-Jul-11	26-Jul-11
SLEK-010	14-Jul-11	07-Aug-11

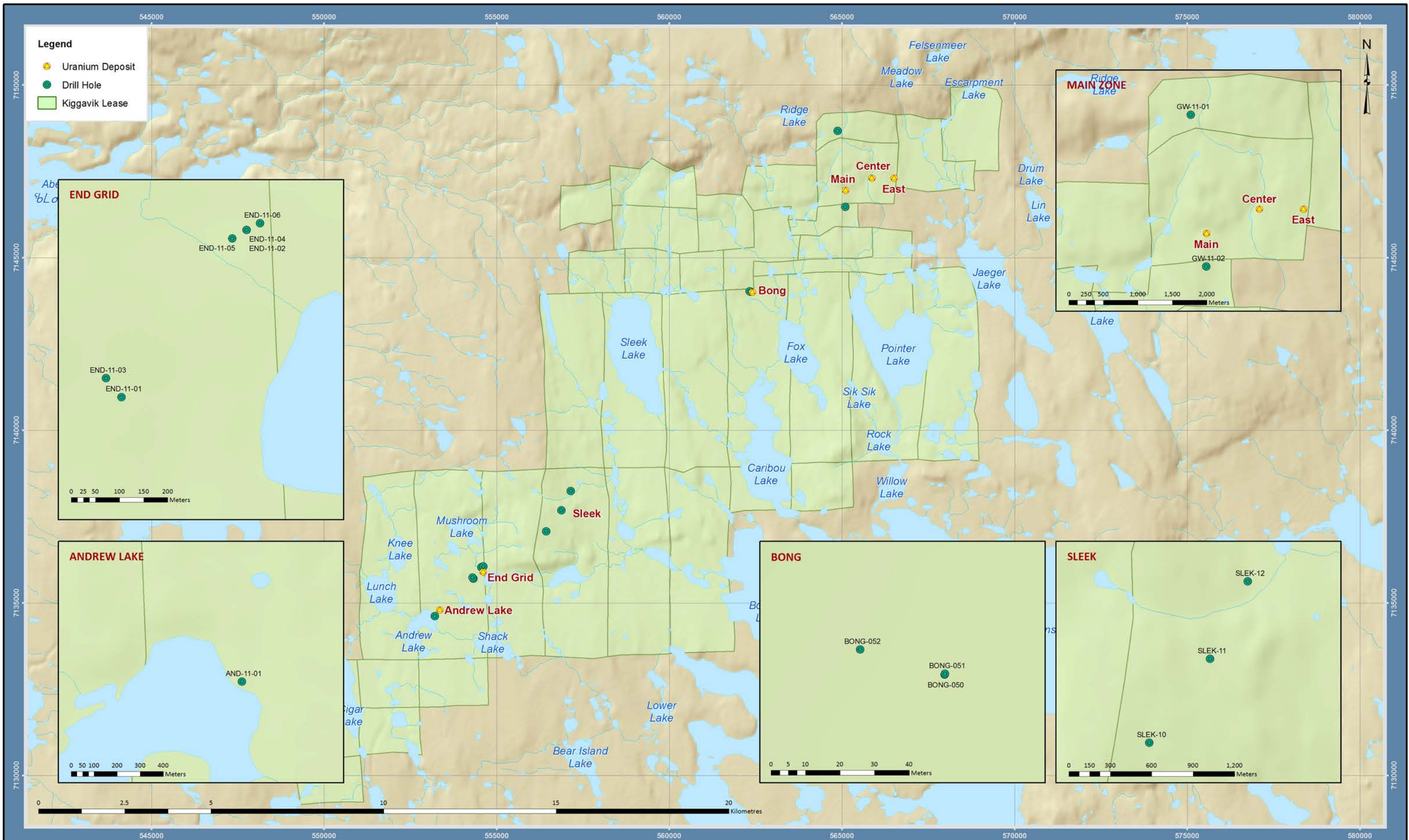
Drill Hole	Pre Gamma	Post Gamma
	Date	Date
SLEK-011	21-Jul-11	07-Aug-11
SLEK-012	27-Jul-11	07-Aug-11
AND-11-01	10-Jul-11	09-Aug-11

All measured dose rates during the 2011 field season were below 1  $\mu$ Sv/h.

## 8.2 PHYSICAL RECLAMATION

As discussed in the Abandonment and Restoration Plan, it is AREVA's intention to reclaim surface disturbed sites in an acceptable manner. Reclamation methods are currently being investigated and will be implemented under the direction and approval of experienced consultants, community members and regulatory agencies. Restoration work will be completed prior to the expiry of the Land Use Licence.





Projection: NAD 1983 UTM Zone 14N  
 Creator: CDC  
 Date: 01/01/2012 Scale: 1:100,000  
 File: KIO1A020  
 Data Sources: Natural Resources Canada, Geobase®, Nation  
 Topographic Database, AREVA Resources Canada Inc.

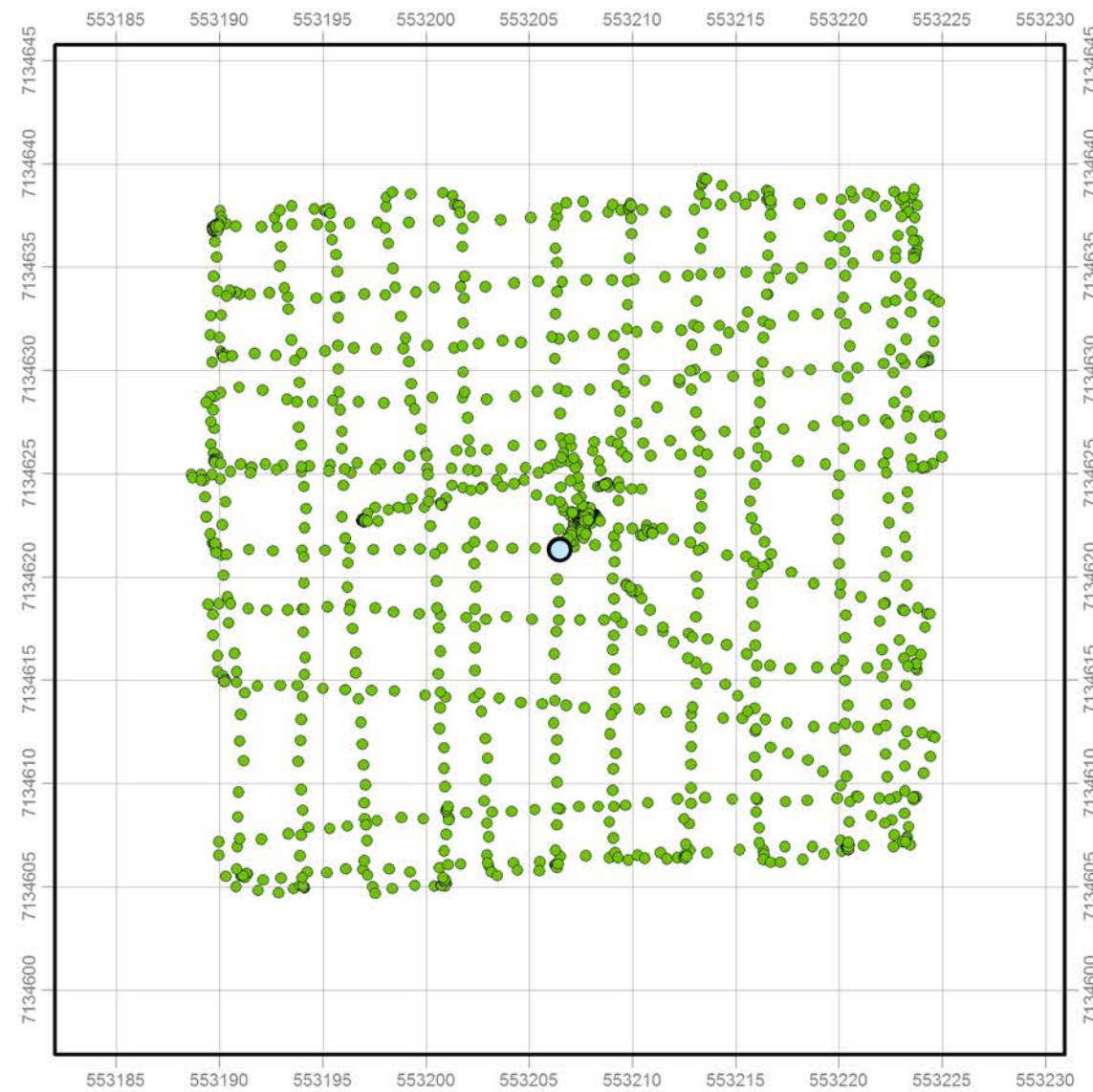
**FIGURE 8.1-1**  
 2011 DRILL HOLE LOCATIONS

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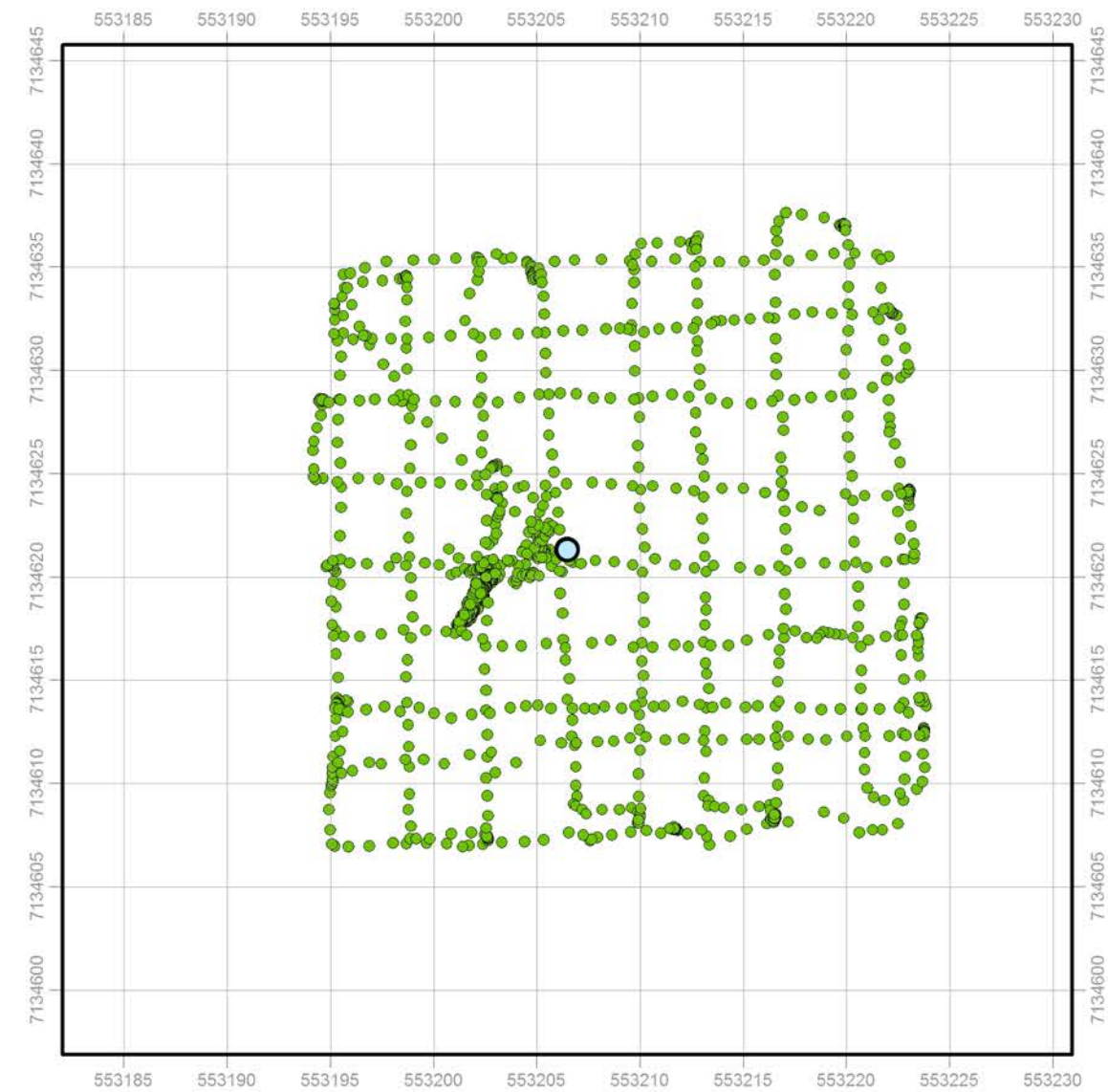


**Legend**

- 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  $\mu\text{Sv}$



**AND-11-01**  
**Pre Gamma Survey**  
**Point Count: 1516**  
**Min-Max: 0.048 - 0.093  $\mu\text{Sv}$**



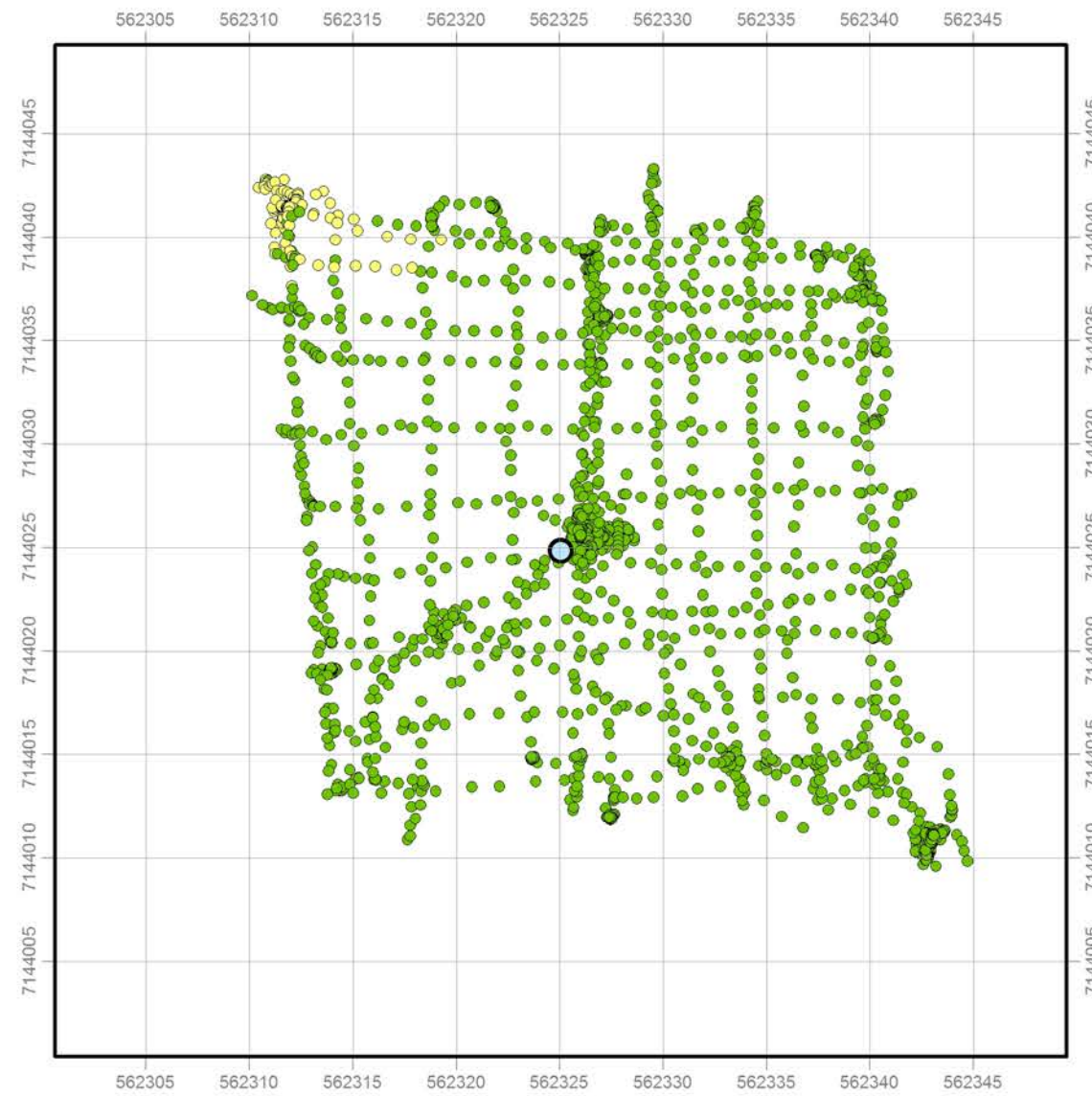
**AND-11-01**  
**Post Gamma Survey**  
**Point Count: 1515**  
**Min-Max: 0.051 - 0.094  $\mu\text{Sv}$**



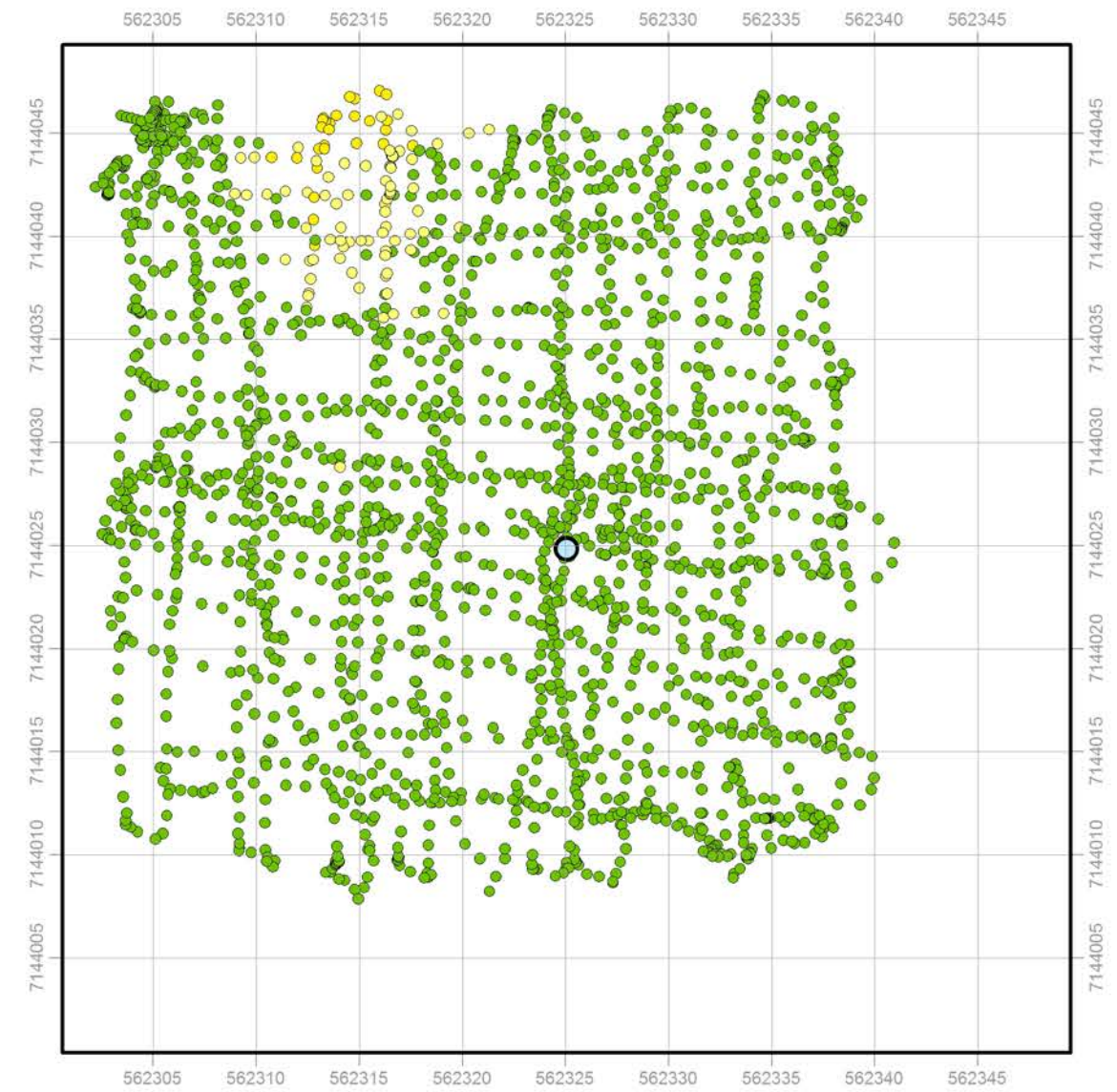


Legend

- 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  $\mu\text{Sv}$



**BONG-052**  
**Pre Gamma Survey**  
**Point Count: 2040**  
**Min-Max: 0.000 - 0.549  $\mu\text{Sv}$**



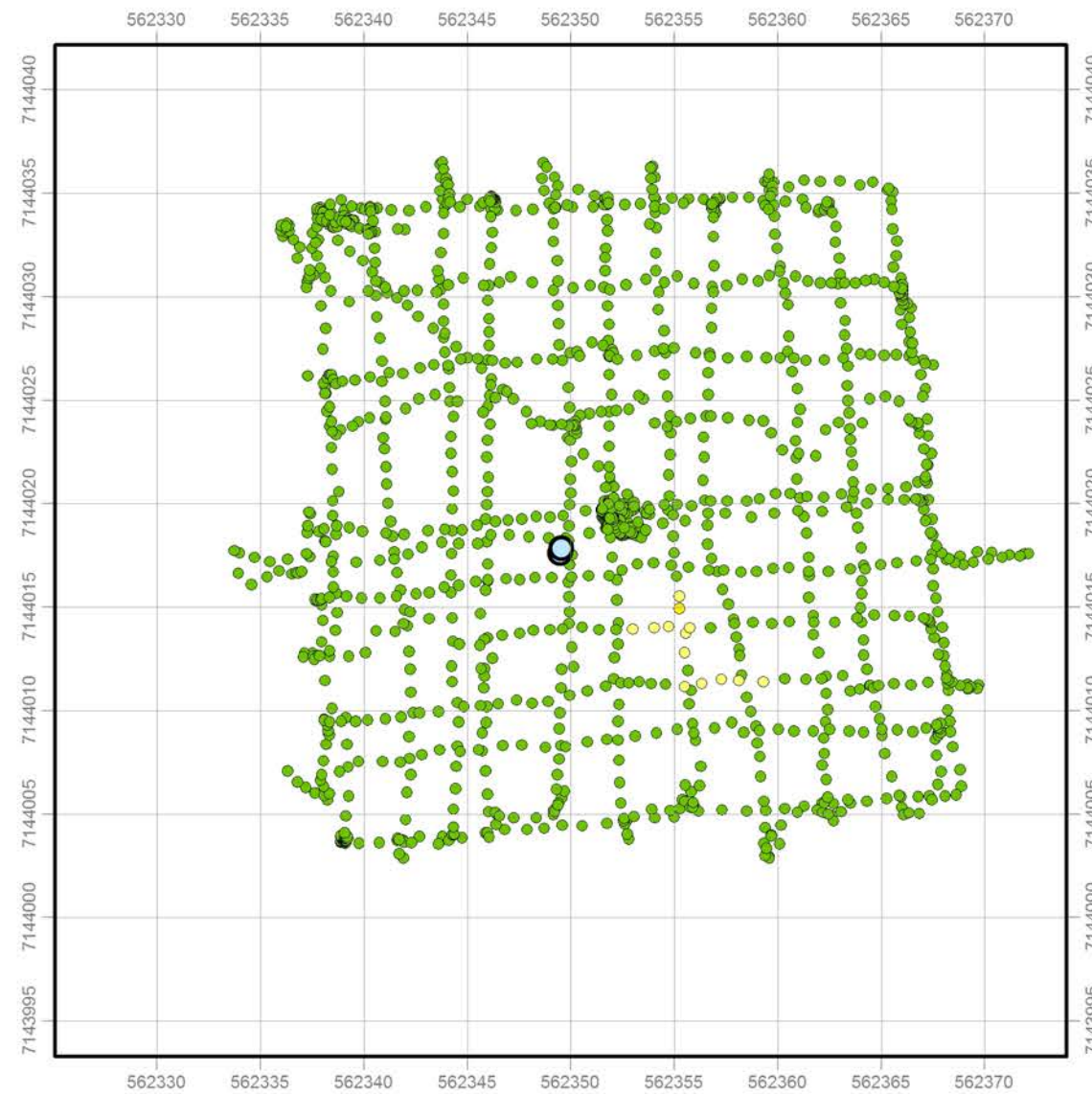
**BONG-052**  
**Post Gamma Survey**  
**Point Count: 2126**  
**Min-Max: 0.000 - 0.920  $\mu\text{Sv}$**





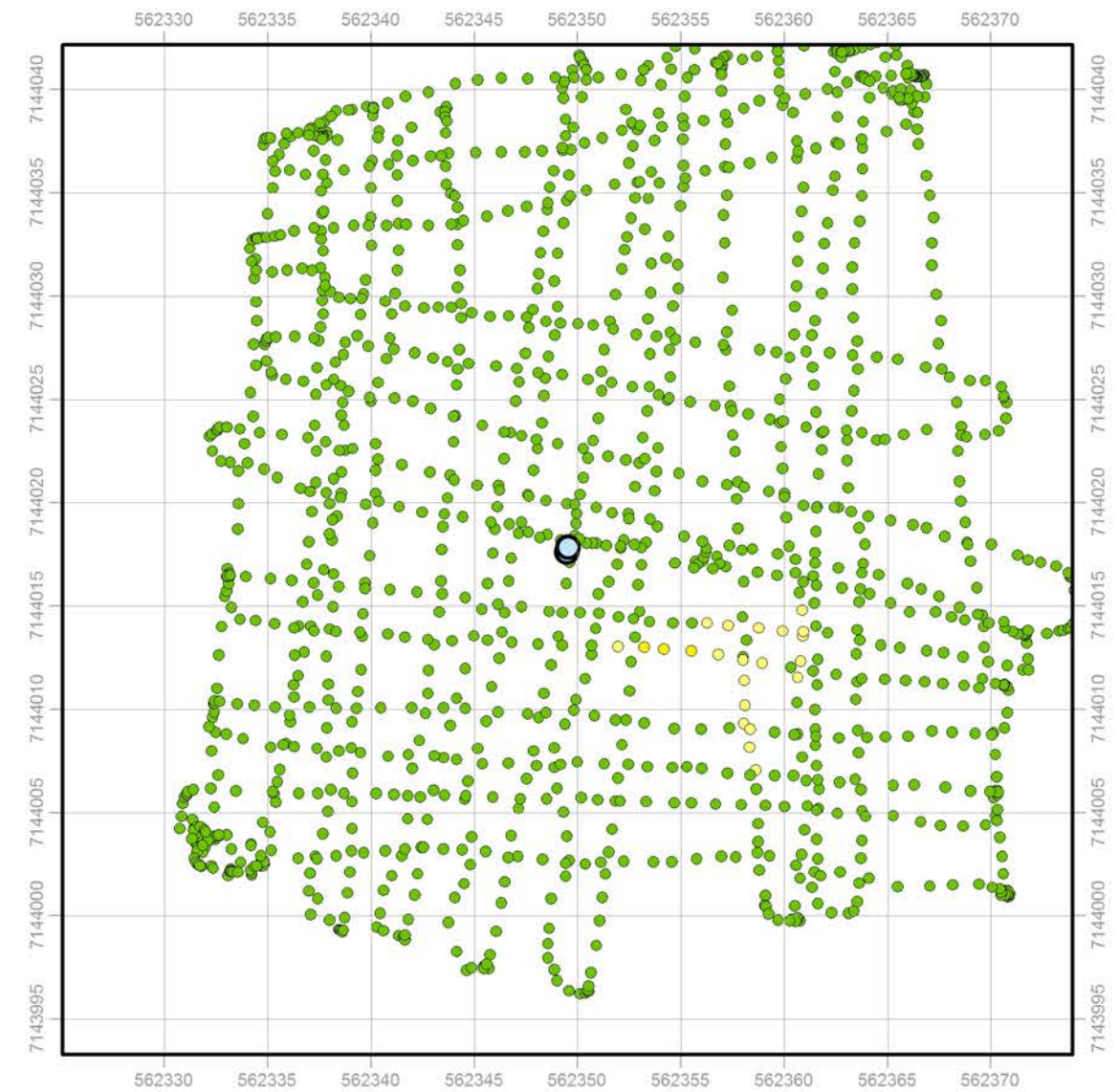
Legend

- 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  $\mu\text{Sv}$



**BONG-050 and BONG-051  
Pre Gamma Survey**

**Point Count: 1442**  
**Min-Max: 0.027 - 0.611  $\mu\text{Sv}$**





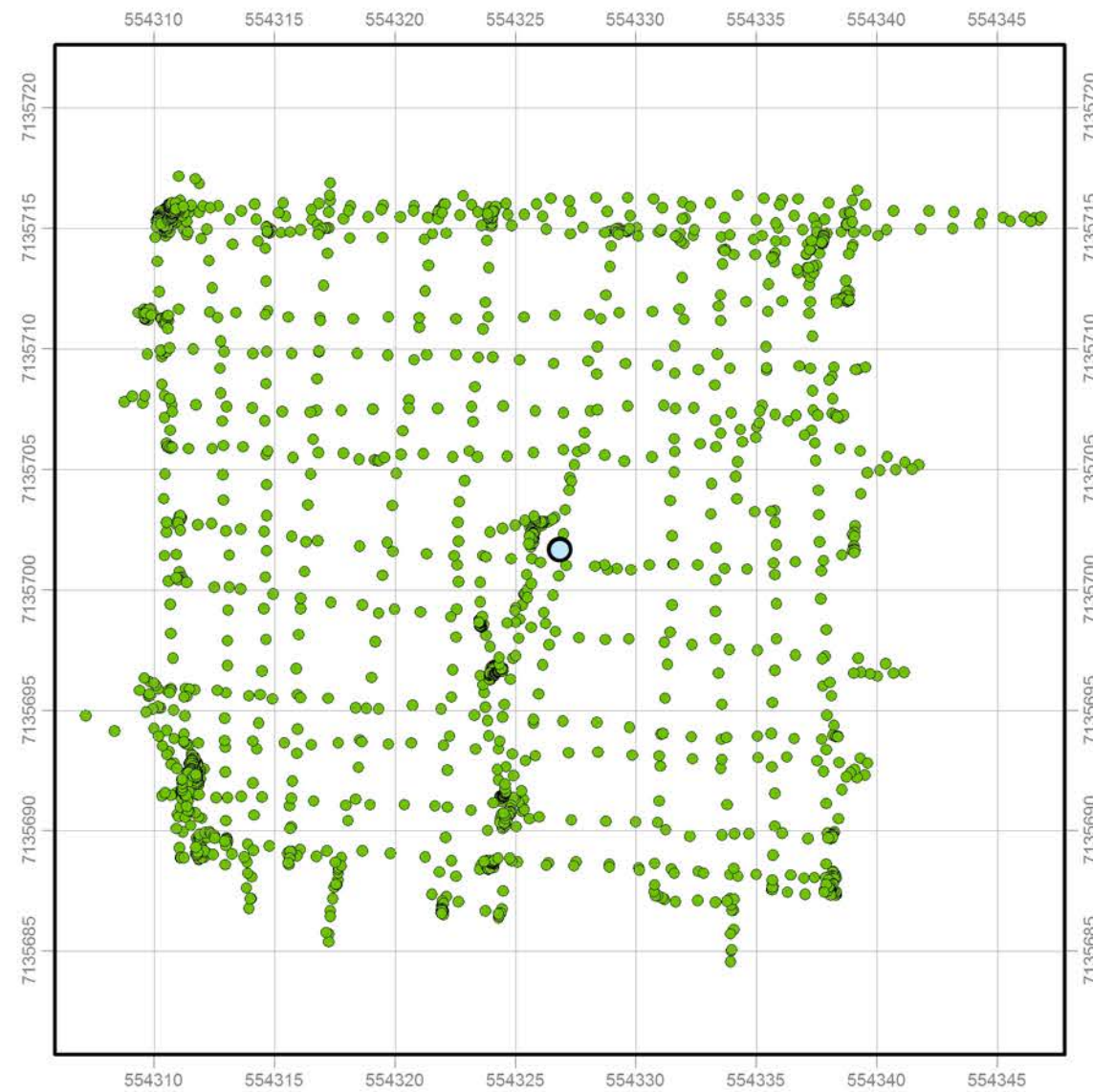
**BONG-050 and BONG-051  
Post Gamma Survey**

**Point Count: 1506**  
**Min-Max: 0.000 - 0.849  $\mu\text{Sv}$**

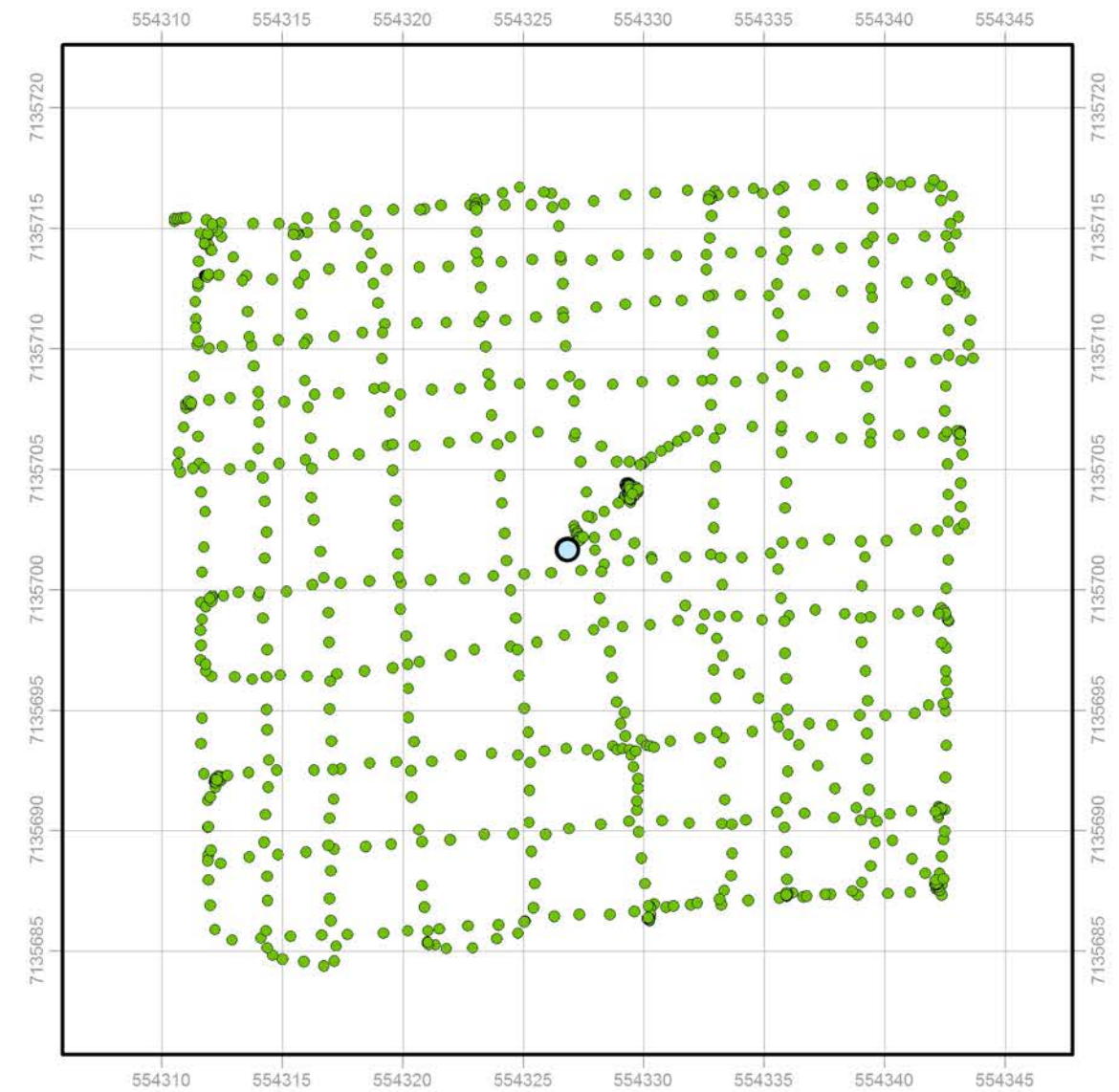


**Legend**

-  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



**END-11-01**  
**Pre Gamma Survey**  
**Point Count: 2097**  
**Min-Max: 0.000 - 0.072 µSv**



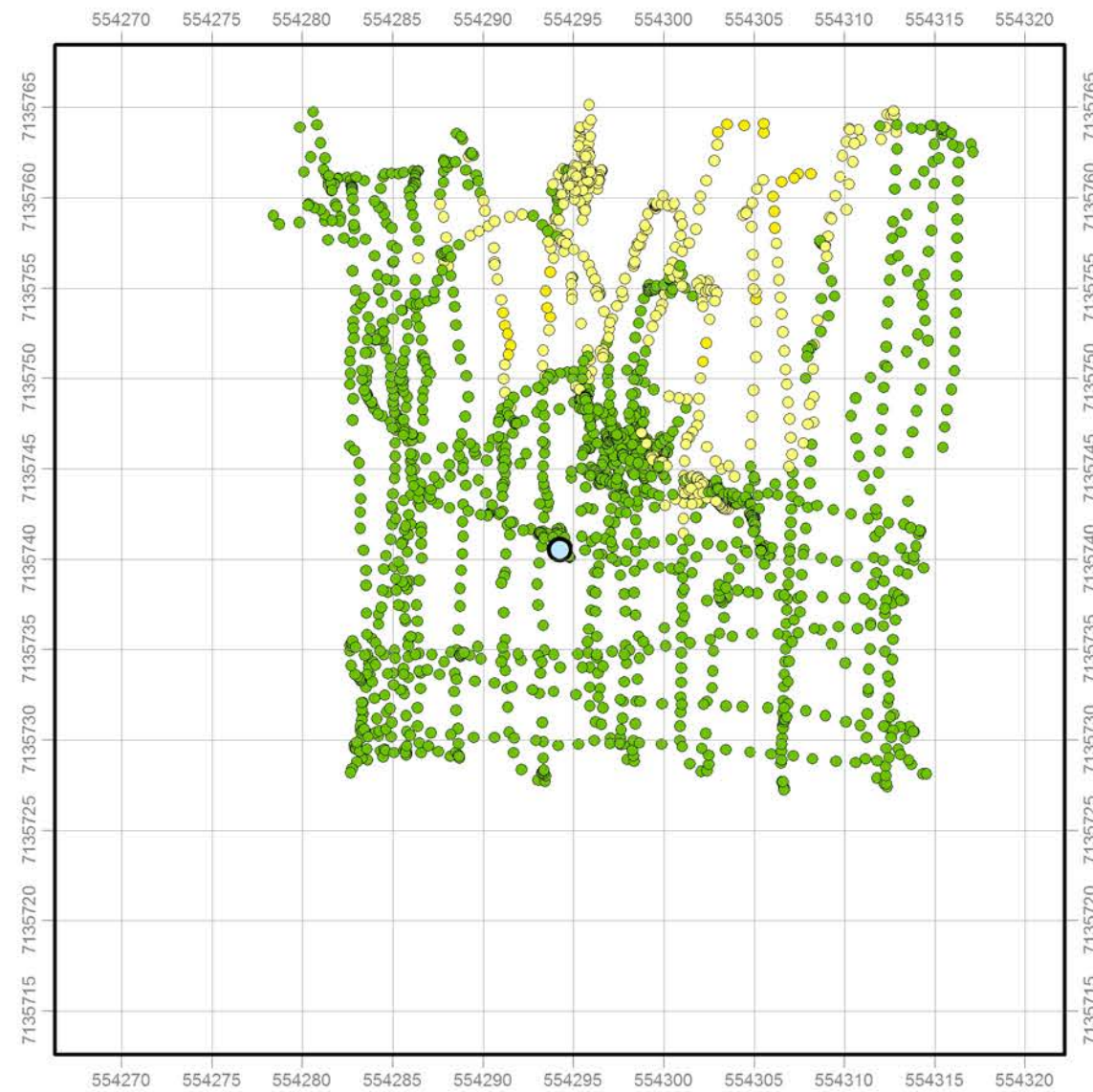
**END-11-01**  
**Post Gamma Survey**  
**Point Count: 894**  
**Min-Max: 0.023 - 0.138 µSv**



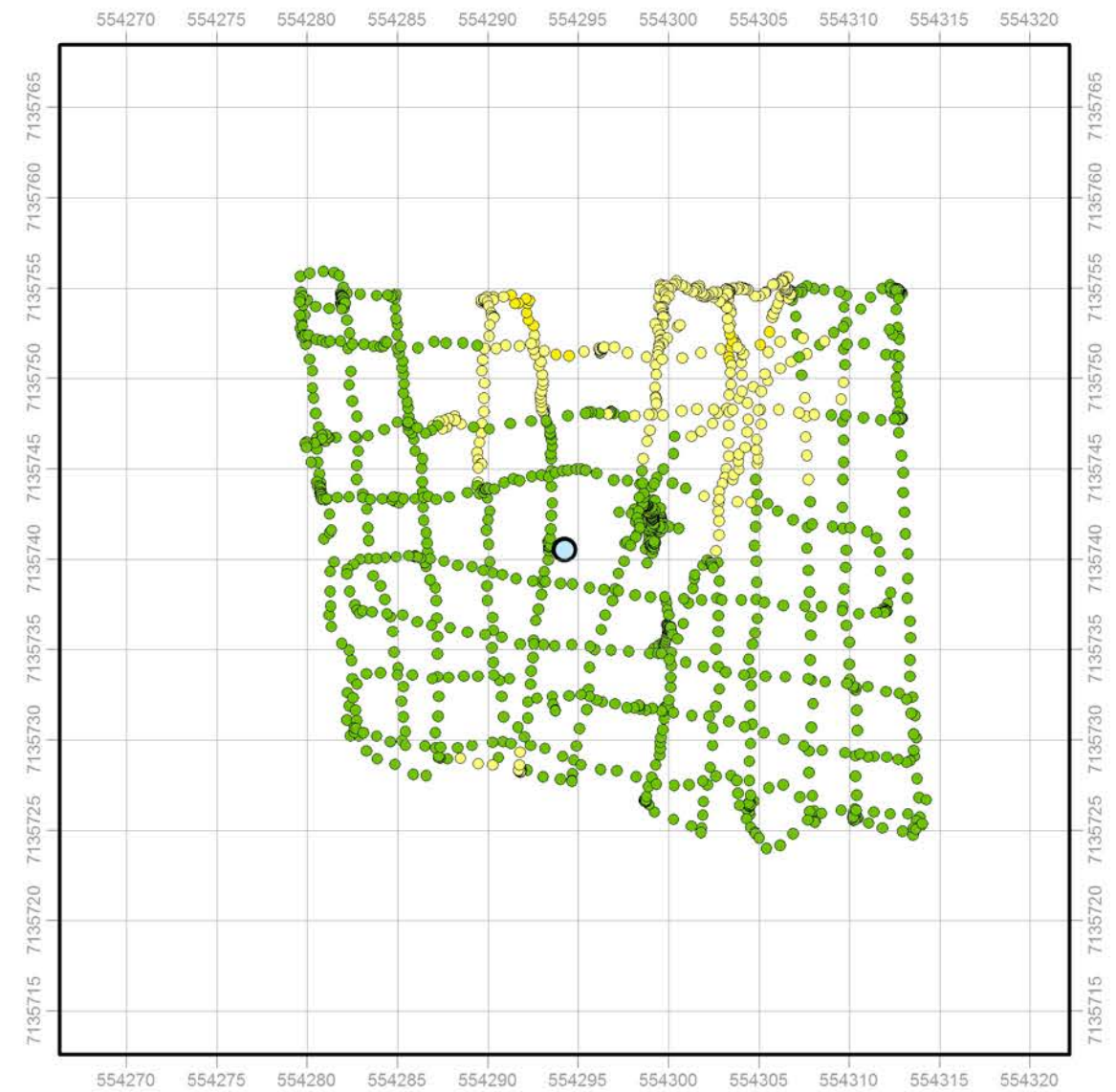


**Legend**

- 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  $\mu\text{Sv}$



**END-11-03**  
**Pre Gamma Survey**  
**Point Count: 2069**  
**Min-Max: 0.000 - 0.866  $\mu\text{Sv}$**



**END-11-03**  
**Post Gamma Survey**  
**Point Count: 1627**  
**Min-Max: 0.069 - 0.748  $\mu\text{Sv}$**

