



August 8, 2008

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To All:

**Re: Kiggavik – Follow-up Report to July 8<sup>th</sup>, 2008 spill of drill return water**

Please find the attached the 30-day follow-up report as required in accordance with Nunavut Water Board Licence No 2BE-KIG0812 and AREVA's Spill Contingency Plan Version 2, Revision 1. The report is submitted to Indian & Northern Affairs Canada (INAC), the Nunavut Water Board (NWB), the Kivalliq Inuit Association (KIA) and Environment Canada (EC).

The 30-day follow-up report is intended to provide a summary of the incident, a review of the impact assessment, and the status of remedial and preventative measures implemented prior to re-instating the drilling program. Since the commencement of drilling the site has been inspected by INAC on three (3) occasions, receiving an overall “acceptable” site rating.

This incident has been reported and handled as a spill; sample results demonstrate that impact was primarily confined to the wetland area, which supports the conclusion that there was no significant impact in the main body of Andrew Lake. In preparation of this report several points related to interpretation of definitions and to regulatory requirements and expectations have been identified as areas of interest for future discussions.

Yours truly,

Nicola Banton, M.Sc.E, P.Eng.  
Senior Project Engineer



**AREVA Resources Canada Inc.**

**Kiggavik Project, Nunavut**

**Final Incident Report for July 6, 2008 Spill**

**August 8, 2008**

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## INTRODUCTION

On July 6, 2008 an incident involving exploration drilling wastes occurred at the Areva Resources Canada Kiggavik Project exploration site (Figure 1), located 80 km west of the community of Baker Lake in Nunavut. Drill return water that was pooling near an active drill site entered the northwest part of Andrew Lake. The water had a strong reddish tinge due to the presence of extremely fine hematitic (iron mineral) clay in suspension. Upon entering the waterbody, the suspended hematite-clay particles began to settle, but the water along the shore retained a somewhat murky-red appearance for several days. Andrew Lake is a shallow water body, with a mean depth of approximately 20 cm. The wetland area affected by the reddish inflow is separated from the main water body by a sandbar. As shown in Figures 2, 3, 4, and 5 the red color progressively dissipated.

The incident was reported on July 7 and followed up as a spill. An interim report (Appendix 1) providing the information then available was submitted to the regulatory agencies on July 12. This 30-day follow-up report is required in accordance with Nunavut Water Board Licence No 2BE-KIG0812 and AREVA's Spill Contingency Plan Version 2, Revision 1. The report is to be submitted to Indian & Northern Affairs Canada (INAC), the Nunavut Water Board (NWB), the Kivalliq Inuit Association (KIA), and Environment Canada within 30 days of the incident. It is intended to provide a summary of the incident, a review of the impact assessment, and the status of remedial and preventative measures.

## INCIDENT SUMMARY

A summary of the events surrounding the incident is as follows:

### June 27

- HQ drilling starts on ANDW-08-03 (14W 553354E, 7134765N)

### From June 27 to July 5

- Drilling rate is slow due to clay horizons
- Daily inspections on the drilling sites are undertaken by the AREVA Environment, Health and Safety (EH&S) group

### July 6

- 3:55 pm - The Kiggavik Project EH&S Coordinator notes with concern that on the Andrew Lake site red water is flowing from the drill site in direction of the lake.

- 6:06 pm - The EH&S Coordinator sends pictures (Figure 2) to the Project General Manager, Facility Supervisor and Senior Project Geologist. The drill waste is pooling within a small wetland along the shoreline of Andrew Lake.
- 6:17 pm - Drill return water is diverted further from the rig using a sump pump. Inflow of water to the lake stops.

#### July 7

- The GN 24-hour spill report line is contacted by phone by the Facility Supervisor. NWB, INAC and EC are contacted by the EH&S Coordinator. These agencies are informed of the event, and discussions on possible preventative measures start.
- Drilling activities at Andrew Lake and End Grid are stopped pending a review of the incident.

#### July 8

- Water and sediment samples are taken along the drill waste drainage path, within the wetland and at Andrew Lake.

#### July 9

- A gamma survey of the discharge area is performed.

### **INCIDENT CAUSE**

The area where ANDW-08-03 was drilled is on a nearly flat-lying hummocky terrain, with large hummocks of grass in excess of 1 m wide separated by flat, gravely clay, low-lying areas. At the time of the incident, these low-lying areas contained several centimetres of melt-water due to the spring thaw. This water was not noticeably flowing into the nearby lake, suggesting that the hummocks were essentially acting as a barrier to water flow. The sand and gravel in these hummocks was a grey-red colour, possibly due to hematite from previous drilling, hematite leaching upwards from the underlying overburden, or more likely a combination of the two.

The 2008 diamond drilling contract between AREVA and Boart Longyear (Boart) requires that the contractor shall provide the equipment to circulate drill waters and filter the returns in order to collect radioactive cuttings which will be managed according to AREVA practices and permits. Prior to intersecting mineralization, a system is set up to ensure that radioactive cuttings are collected (drill cuttings are monitored for radioactivity, and those exceeding a specific criterion are segregated and collected). This collection system takes all the water from the drill and sends it to a series of settling tanks and a cyclone. The heavy cuttings are then extracted into large (1 m<sup>3</sup>) tote bags

through the cyclone underflow. Thus radioactive cuttings are bagged and only a small amount of water is released to the environment, and contained to within several feet of the settling tanks. This recycling and containment system is not used outside of the mineralized zones.

It should be noted that the fresh water pump is running on a continuous basis. Prior to the July 6 incident, when fresh water was not needed, the fresh water hose was normally disconnected and diverted usually resulting in pools of stagnant water in the vicinity of the drill. Similarly, the return water, when drilling outside of the ore zone, was normally freely discharged in the vicinity of the drill.

Daily inspections by the EH&S group were undertaken from June 27 to July 5 and showed that non-radioactive cuttings were pooling in inter-hummocks within 20m of the drill. On July 6 the daily inspection showed that water was flowing somewhat further and pooling up to 30 to 40 m from the lake. Cuttings were coming from the casing, as the settling tank was not being used for non-mineralized core. Though the heavier cuttings were dropping out within 20 m of the casing, the fine silt particles remained in suspension for a longer period of time. This condition remained stable for approximately 11 days, when the ground appears to have become over-saturated with water, and the water began to flow into the lake. There was no indication prior to that period that the hematite-rich water would over-saturate the sediments.

This over-saturation may have been the result of a number of factors, including an increase in the amount of reaming (i.e., making the hole wide enough to get the drill rods back down), which essentially limits the amount of water used in drilling and results in the water returning through the collar. This may have allowed more water to enter the above-surface system. A second possible reason is the presence of ice in the ground, in that the ground may have been more frozen within the last 30 - 40 m towards the lake, facilitating a quick flow once that "barrier" was breached. A third possibility may be simply that at that particular point, the soil reached its saturation point. In addition to drill water, during that time the weather was rainy, foggy and cool.

Observations made on July 6 suggest that ground surface conditions significantly changed from July 5 to July 6 and that on July 6 water and sediments flowed over the last 30 to 40 m towards the lake within a few hours. This observation seems consistent with topographic data (Figure 6), which shows the gradient increasing near the lake. Further details are provided in the interim report previously submitted (Appendix 1) and in the assessment conducted by Golder Associates (Appendix 2).

## IMPACT ASSESSMENT

Golder Associates (Golder) was contracted on July 9 to conduct an investigation to identify the potential effects of the release on the aquatic ecology in Andrew Lake. The potential impacts on water quality have been evaluated, including turbidity and TSS surveys. Golder was also contracted to develop and implement a plan to prevent further transport of released drilling fluid to Andrew Lake due to potential subsequent precipitation and run-off events. Silt barriers were placed along the discharge path on land and along the shoreline of Andrew Lake in order to contain the material and prevent any further impact to the lake. The final report from Golder is available in Appendix 2.

A summary of the impacts are presented as follows:

### Water and Sediment Quality

On July 8, water and sediment samples were taken from the interior of Andrew Lake, the northwest shoreline within the area bounded by the sandbar, and at two points along the drainage path (Figure 7). These samples were preserved and sent to the Saskatchewan Research Council (SRC) for analysis. Complete analytical results of the testing are presented in Appendix 3, along with a summary table comparing the results to Canadian Water Quality Guidelines (CWQG) and Saskatchewan Surface Water Quality Objectives (SSWQO). AREVA has made the commitment that where published guidelines or regulations related to uranium exploration in Nunavut are not available, to adhere to regulated or best management practices from their activities in Saskatchewan.

Most sample parameters were below the Saskatchewan Surface Water Quality Objectives (SSWQO), with the exception of those shown in Table 1. Concentrations of aluminum, lead, iron, silver, uranium, and radium show a consistent pattern along the flow path with aluminum, lead, iron, silver and radium concentrations temporarily exceeding Saskatchewan Surface Water Quality Objectives (SSWQO) at the shoreline location. The lake sample results are much lower for most elements, with levels at or near baseline concentrations. Copper and cadmium concentrations were elevated at the lake location; however, these do not show a consistent trend from the drill to the interior of the lake. In fact, the cadmium results are lower along the flowpath than the lake result, and for copper, the range of results along the flowpath span the lake result. Therefore it is difficult to identify this incident as the direct cause for all elevated parameters.

Sediment samples were also collected from the suspended particles deposition area in the wetland and from a location in the interior of the lake. The pattern of elevated concentrations in the sediment samples (when compared to baseline) is similar to that in



the water samples; however, all parameters were within regulatory guidelines for sediments. Refer to Appendix 3 for results.

Although a water sample was not collected from the main body of Andrew Lake immediately adjacent to the wetland, AREVA believes that Figure 2 shows the impact was primarily confined to the wetland area, which supports the conclusion that there was no significant impact on Andrew Lake.

**Table 1 Summary of Water Quality Results**

Parameter	Units	SSWQO PAL <sup>1</sup>	2007 Baseline Sample	July 8, 2008 Lake Sample	July 8, 2008 Shoreline Sample <sup>2</sup>	July 8, 2008 Drainage Sample <sup>3</sup>	July 8, 2008 Drainage Sample (near drill) <sup>3</sup>
Aluminum	mg/L	0.1	0.03	0.036	1.7	2.2	2.2
Cadmium	mg/L	0.000017	<0.0001	0.0004	<0.0001	0.0002	0.0002
Copper	mg/L	0.002	0.0009	0.0027	0.0057	0.0095	0.0019
Lead	mg/L	0.001	0.0001	<0.0001	0.0022	0.002	0.0034
Iron	mg/L	0.30	0.11	0.18	1.3	3.3	7.6
Silver	mg/L	0.0001	<0.0001	0.0001	0.0005	0.0013	0.004
Uranium	µg/L	15	<0.1	0.1	4.4	13	49
Radium 226	Bq/L	0.11	-	<0.005	0.15	0.53	1.4

1. Shaded values exceed Saskatchewan Surface Water Quality Objectives for the Protection of Aquatic Life (SSWQO PAL)
2. In the wetland area separated from the main body of the lake (See Figure 7)
3. At an intermediate location and a location close to the drilling (See Figure 7)

### Turbidity and Total Suspended Solids

Golder Associates performed a series of turbidity and total suspended solids (TSS) measurements within Andrew Lake on July 13, 2008. These results by waypoint (see Figure 8 for a map of locations) are shown in Table 2. The turbidity results are plotted spatially in Figure 8. The turbidity within the central part of the lake was approximately 0.27 NTU, while turbidity directly within the shoreline discharge reached 6.3 NTU. A baseline turbidity measurement taken at Andrew Lake during the 2007 season was 1.8 NTU, therefore with the exception of two locations, all measurements were within natural variability. Golder has concluded that these results indicate no residual impact on Andrew Lake.

**Table 2 Turbidity and Total Suspended Solids Measurements for Andrew Lake**

Location (Waypoint No.)	Turbidity (NTU)	TSS (mg/L)
202	1.05	2
203	6.30	5
205	0.70	7
206	0.40	1
207	0.37	1
208	0.38	1
209	0.45	1
210	0.40	1
211	0.35	2
212	0.27	1
213	0.35	1
222	0.25	1

### Aquatic Life

Andrew Lake has recently been surveyed by Golder Associates as part of the aquatics baseline studies. These studies have identified three species of fish within Andrew Lake: lake trout, round whitefish and arctic grayling. Potential effects on fish due to high turbidity include impacts on eggs during spawning season (spring for arctic grayling, fall for lake trout and round whitefish). In addition, turbidity may affect fish by disturbing the exchange of oxygen through the gills and reducing vision. The NTU survey, in addition to the aerial photos in Figures 2 through 5, indicates that elevation of suspended solids was confined to the wetland margin.

### Gamma Radiation

A post-incident gamma radiation survey was conducted to measure the radioactivity levels along the discharge path. Radioactivity measurements were collected using an Automech gamma survey instrument. The readings recorded 1 m above the water sample locations and along the north shoreline of Andrew Lake read below 0.1  $\mu\text{Sv/h}$ . Along the discharge path leading to the lake, the survey measured an average of 0.07  $\mu\text{Sv/h}$ , with all points below 0.3  $\mu\text{Sv/h}$ . The pre-gamma survey, conducted prior to commencement of drilling at AND-08-03, showed an average dose rate of 0.12  $\mu\text{Sv/h}$ . Comparison of the pre- and post-gamma surveys indicates that gamma levels in the vicinity of the spill remain similar to pre-spill conditions. Raw survey data is available in Appendix 4.

In accordance with permit conditions, AREVA's Uranium Exploration Plan, and the Abandonment and Restoration Plan, drill sites do not require remedial action (radiologically) when the measured gamma dose rate at a height of 1 m is less than 1  $\mu\text{Sv/h}$  above background.

## **CORRECTIVE AND PREVENTATIVE MEASURES**

A series of measures to mitigate impact at Andrew Lake and to prevent future re-occurrence have been implemented. These are outlined in the following sections.

### Discharge Containment

The released drill wastes were contained by berms (on land) and silt curtains (shoreline) to prevent further movement of the material.

### Drilling Practice

The drilling contractor (Boart) has modified the drill system to reduce the potential for incident. In the revised system (Figures 9 to 11):

- A collection pan/casing box is placed around the casing under the drill,
- The return water is collected in the pan and pumped rather than being allowed to flow directly from the casing,
- Non-radioactive cuttings are pumped to a designated low-lying area,
- A manifold system is installed in order to better manage the water supply, with the objective of routing the supply water (fresh water) back to the lake and reducing the amount of fresh water pooling around the drill site,
- The separator set-up has not been modified and continues to be used to collect radioactive cuttings within the mineralized zones.

### Non-Radioactive Cuttings Containment

Non-radioactive drill cuttings are now deposited within bermed areas. The bermed area is constructed of sandbags and additional poly layers (where applicable) to stop and/or slow the spread of drill cuttings. Silt socks are to be located outside of the bermed cuttings deposit area to provide additional containment. Wherever possible, non-radioactive drill cuttings from several drill holes will be deposited at the same bermed site to reduce the project footprint.

When determining the disposal site of non-radioactive drill cuttings, AREVA considers a number of options, including the use of previous disposal sites. Topographic data is

used to determine the slopes of the drill and deposit sites and to help determine the appropriate location for the cuttings deposit site.

### Daily Observations

The drills, cutting deposit site and water release site are inspected daily to observe cutting movements. This helps to ensure that any containment measures are implemented proactively at each drill site to reduce the risk of environmental impact and to meet all regulatory requirements. The efficiency of the revised water and cuttings management system will be closely monitored by both Boart and AREVA.

### Remedial Measures Performance

The remedial measures put in place (silt curtains and berms) were successful in preventing the spread of the released materials to the interior of Andrew Lake and prevented any residual impacts. To date, the corrective and preventative measures implemented have been successful in controlling and containing cuttings and drainage from all drill rigs. Performance of the preventative measures during the remainder of the season will be addressed in the AREVA Kiggavik Project 2008 Annual Report (to be submitted in January 2009).

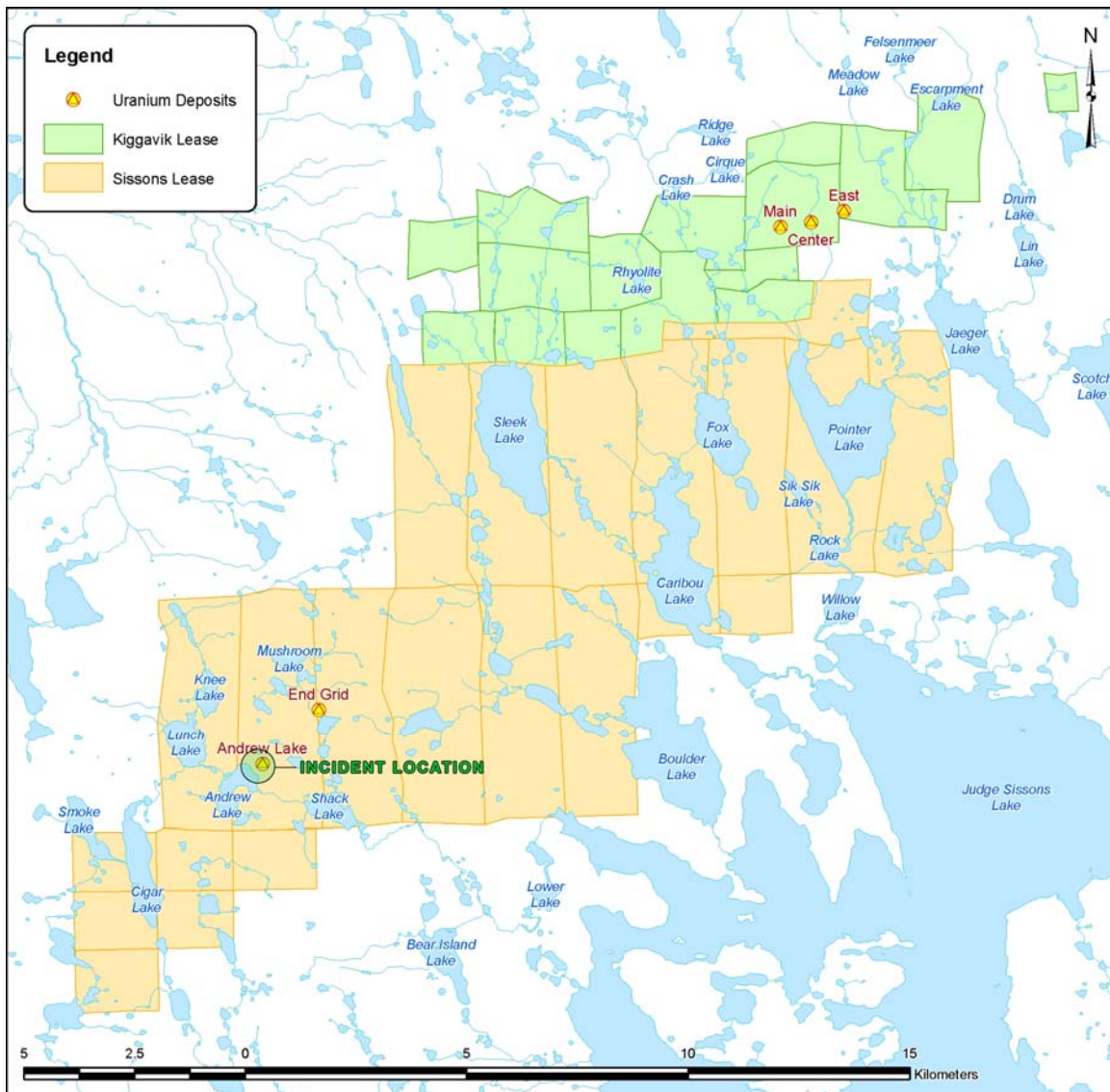
## **CONCLUSIONS**

On July 6, 2008, an unplanned release of drill wastes occurred at the Kiggavik Project and was reported as a spill. The follow-up investigations concluded that:

- All gamma radiation readings along the flow path are below the criterion established through the permits issued by INAC and KIA for collecting drill cuttings
- In the wetland area on the edge of Andrew Lake, a reddish tint in the water was visible for several days, slightly elevated turbidity and TSS results were measured, and concentrations of aluminum, copper, lead, iron, silver, and radium in the water at the shoreline temporarily exceeded SSWQO for protection of aquatic life.
- No significant impact occurred in Andrew Lake, beyond the wetland at the edge of the lake.

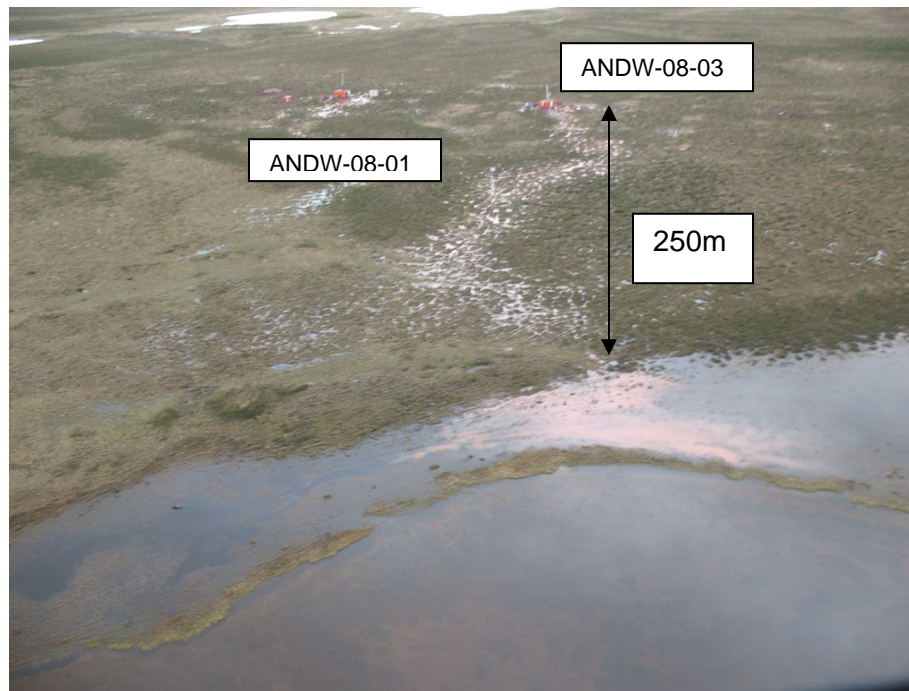
Remedial actions for this incident include both specific actions such as the flowpath sediment barriers, and general procedural changes to improve the containment of drilling water and cuttings. Although the precise wording in the various permits varies, the broad requirement is for satisfactory containment. Areva plans to have further discussions with

the regulatory agencies on this topic, to ensure both that regulatory requirements and expectations are clearly understood, and that our performance is satisfactory. With the implementation of the corrective and preventative measures described in this report, drilling has resumed. The site has been inspected by INAC on July 20, July 22, and July 29, 2008, receiving an overall “acceptable” site rating.



**Figure 1 Kiggavik Project Lease Locations and Incident Location**





**Figure 2**      **North Shore of Andrew Lake July 6, 2008 – Looking North West**



**Figure 3**      **North Shore of Andrew Lake July 7, 2008 - Looking West**

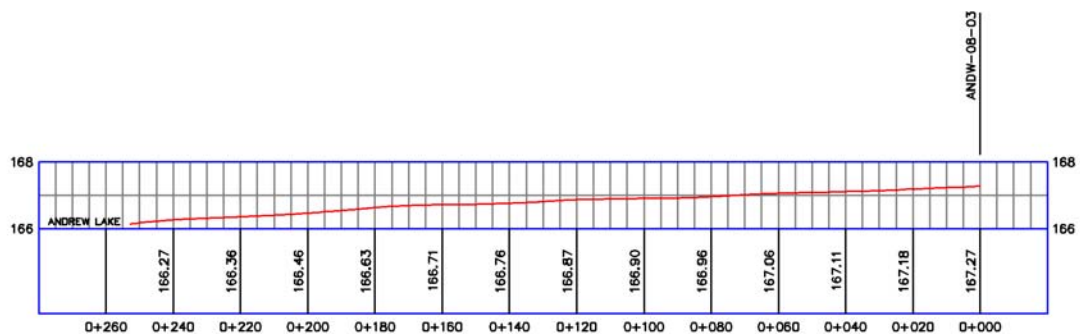
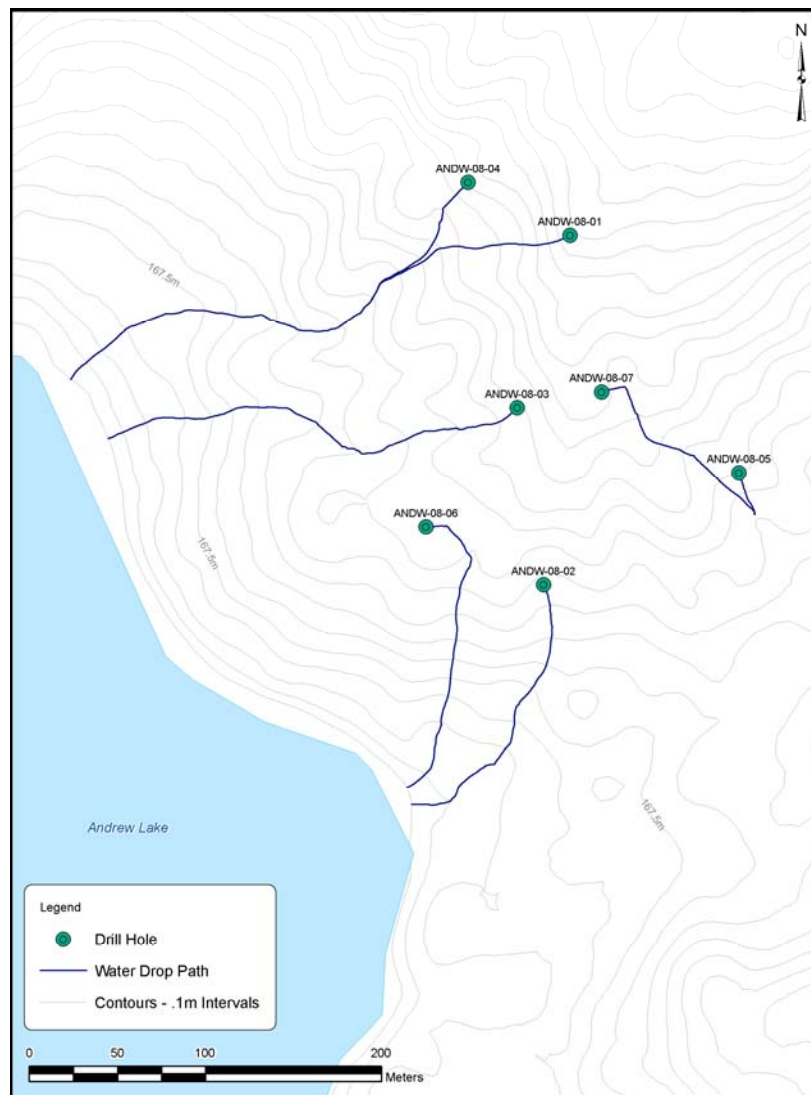


**Figure 4      North Shore of Andrew Lake July 8, 2008 - Looking East**

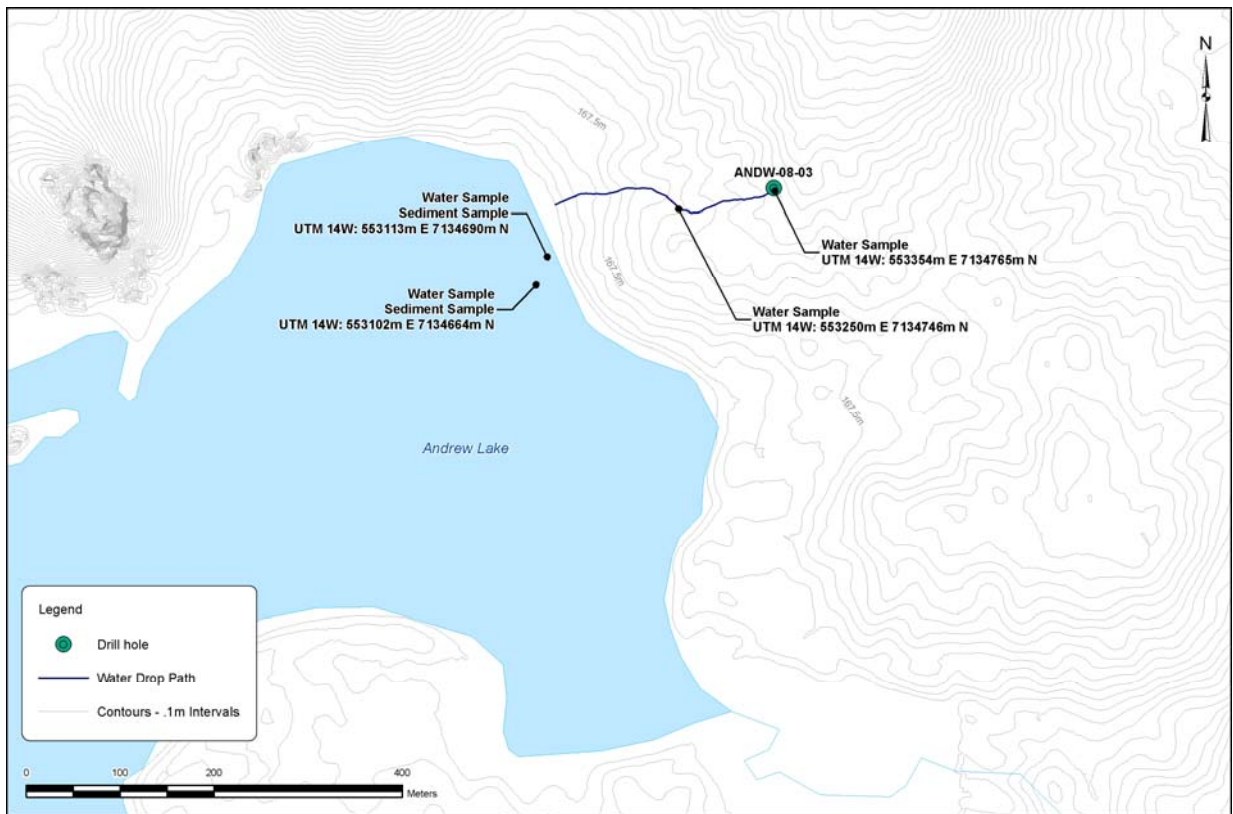


**Figure 5      North Shore of Andrew Lake July 12, 2008 - Looking North West**

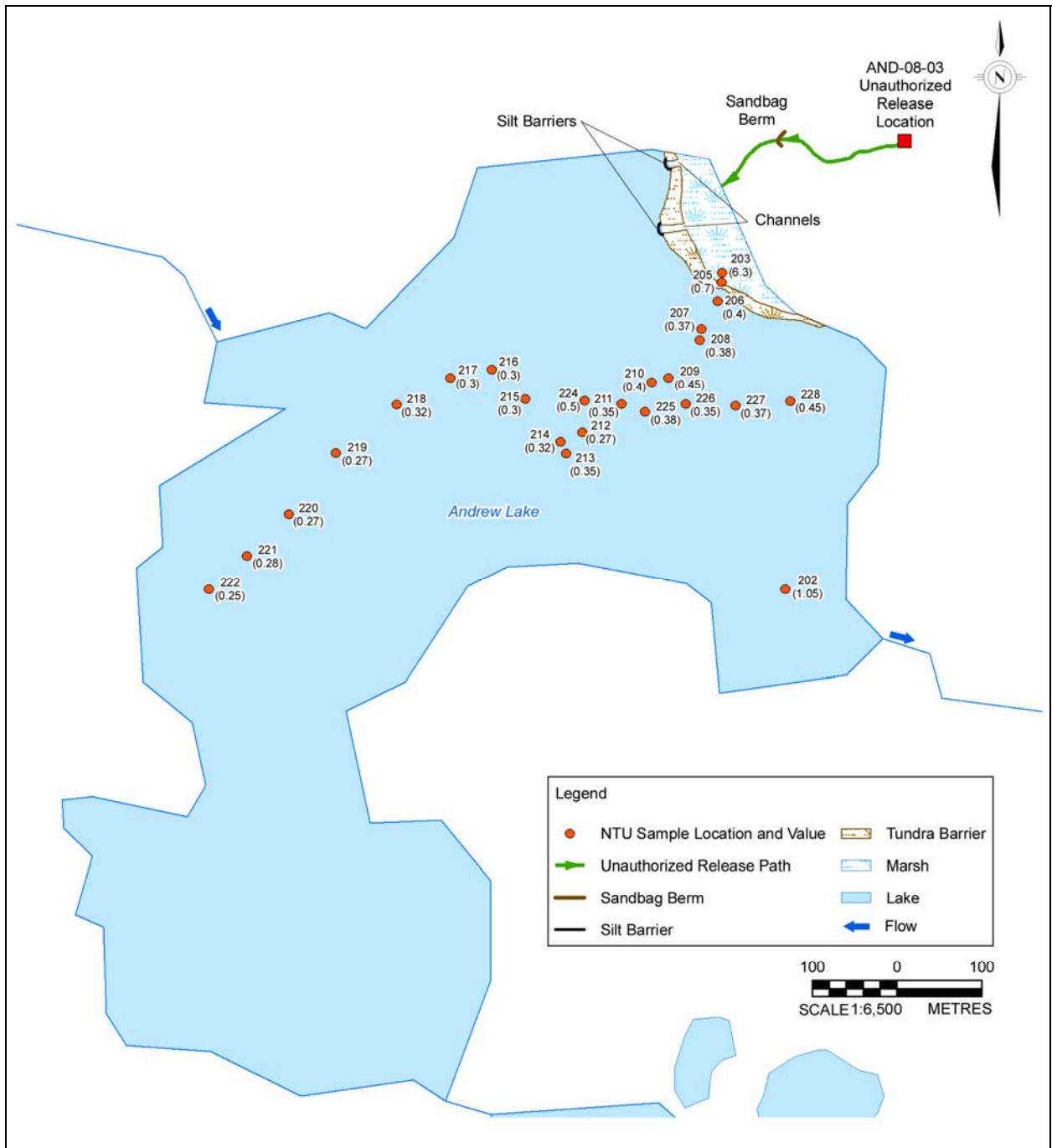




**Figure 6 Theoretical Flowpaths from ANDW-03-03 to Andrew Lake (based on LIDAR Data)**



**Figure 7 Water Sample Locations**



**Figure 8 Turbidity Survey**



**Figure 9 – Set-Up END-08-03 showing the containment box**



**Figure 10 – Set-Up END-08-03 showing the containment and cuttings pump**



**Figure 11 – Set-Up at END-08-03 showing the non-radioactive cuttings discharge hose**



# APPENDIX 1

## INTERIM REPORT

**Areva Resources Canada Inc.**  
**Kiggavik Project**  
**Andrew Lake Incident Report**  
**July 11, 2008**

**Incident**

On July 6, 2008 water that was pooling from drill #2 on hole ANDW-08-03 at the Andrew Lake site entered the Northwest part of Andrew Lake. The water had a strong reddish tinge due to the presence of extremely fine hematitic (iron mineral) clay in suspension. Upon entering the shallow, stagnant and non-flowing water body, agitated hematite-clay particles began to settle to the surface, but gave the water a somewhat murky-red appearance. Andrew Lake is a shallow water body, with a mean depth of approximately 20 cm. The area affected by the reddish inflow is separated from the main water body by a sand bar (Figure 1). Figure 2 and 3 show that the red color progressively dissipated.

**Series of events**

Friday, June 27

- HQ drilling starts on ANDW-08-03 (553354, 7134765)

From June 27 to July 5

- Drilling run on two daily 12-hour shifts
- Drilling rate is slow due to clay horizons
- Drilling crew change
- Daily inspections on the drilling sites are undertaken by the AREVA EH&S group

Sunday, July 6

- 3:55 pm - The Kiggavik Project EH&S Coordinator issues by email a note of concern to the Kiggavik Project GM and Facility Supervisor. The first concern is that on the End Grid site (where drilling is planned in the near future) water is flowing on surface and that "this could be a serious issue if the water would start collecting drill muds and possibly changing color due to the non-mineralized cuttings". The second concern is that on the Andrew Lake site red water is flowing from the drill site in direction of the lake. The EH&S coordinator suggests a shut down of the drill. He indicates that he plans to go with the crew change to take aerial pictures.
- 4:37 pm - The GM asks the EH&S Coordinator to see the pictures before making a decision.
- 6:06 pm - The EH&S Coordinator send pictures (i.e., Figure 1) to the GM, Facility Supervisor and Project Geologist.
- 6:17 pm – The Project Geologist asks the EH&S Coordinator to tell the drillers to pump the water another direction in order to stop it from immediately going into the water body. The return water is diverted further from the drill using a sump pump. Inflow of water to the Lake is stopped.
- 7:40 pm – The GM asks the EH&S Coordinator to take samples of the reddish water. The drill is not shut down.

Monday, July 7

- The GN 24-hour spill report line is contacted by phone by the Facility Supervisor. NWB, INAC and EC are contacted by the EH&S Coordinator. These agencies are informed of the event, and discussions on possible preventative measures start. During this period a gamma survey of the area is conducted which suggests the material is not-contaminated. Water and sediment samples are collected.
- Drilling activities at Andrew Lake are stopped at the request of Senior Management.

### **Estimated Incident Cause**

The area where ANDW-08-03 was drilled is on a nearly flat-lying hummocky terrain, with large hummocks of grass in excess of 1m wide separated by flat, gravelly clay, low-lying areas. These low-lying areas contained several centimetres of melt-water due to the spring thaw. This water was not noticeably flowing into the nearby lake, suggesting that the hummocks were essentially acting as a barrier to water flow. The sand and gravel in these hummocks was a grey-red colour, possibly due to hematite from previous drilling, hematite leaching upwards from the underlying overburden, or more likely a combination of the two.

The 2008 diamond drilling contract between AREVA and Boart Longyear indicates that the contractor shall provide the equipment to circulate drill waters and filter the returns in order to collect radioactive cuttings which will be disposed according to AREVA Best Practices and permits. Prior to intersecting mineralization, a system is set up to ensure that mineralized cuttings are collected. This collection system takes all the water from the drill string and sent it to a series of settling tanks and centrifuges. The heavy cuttings are then extracted into large bags by the use of an auger. Thus mineralized cuttings are bagged and only a small amount of water is released to the environment, and contained to within several feet of the settling tanks. This recycling and containment system is not used outside of the mineralized zones. It should be noted also that the fresh water pump is running on a continuous basis. When fresh water is not needed, the fresh water hose is disconnected and diverted usually resulting in pools of stagnant water in the vicinity of the drill. Similarly, the return water, when drilling outside of the ore zone, is freely discharged in the vicinity of the drill.

Daily inspections by the EH&S group were undertaken from June 27 to July 5 and showed that non-radioactive cuttings were pooling in inter-hummocks within 20m of the drill. On July 6 the daily inspection showed that water was flowing somewhat further and pooling up to 30-40m from the lake. Cuttings were coming from the casing, as the settling tank was not being used for non-mineralized core. Though the heavier cuttings were dropping out within 20m of the casing, the fine silt particles remained in suspension for a longer period of time. This condition remained stable for approximately 11 days, when the ground appears to have become over-saturated with water, and the water began to flow into the lake. There was no indication prior to that period that the hematite-rich water would over-saturate the sediments.

This over-saturation may have been the result of a number of factors, including an increase in the amount of reaming (i.e., making the hole wide enough to get the drill rods back down), which



essentially limits the amount of water used in drilling and results in the water returning through the collar. This may have allowed more water to enter the above-surface system. A second possible reason is the presence of ice in the ground, in that the ground may have been more frozen within the last 30-40m towards the lake, facilitating a quick flow once that “barrier” was breached. A third possibility may be simply that at that particular point, the soil reached its saturation point. In addition to drill water, during that time the weather was rainy, foggy and cool.

Observations made on July 6 suggest that ground surface conditions significantly changed from July 5 to July 6 and that on July 6 water and sediments flowed over the last 30-40 m towards the lake within a few hours. This observation seems consistent with topographic data (Figure 4).

### **Proposed Corrective Measures**

The drilling contractor (Boart) was asked to modify its system to reduce the potential for incident. In the proposed system (Figures 5 to 7):

- A collection pan/casing box is placed around the casing under the drill,
- The return water is collected in the pan and pumped rather than being allowed to flow directly from the casing,
- A manifold system is installed in order to better manage the water supply, with the objective of routing the supply water (fresh water) back to the lake and reducing the amount of fresh water pooling around the drill site.
- The separator set-up is not modified and will continue to be used within the mineralized zones.

In addition, Golder was contracted to install land berms and lake barriers/silt screens with the objective of limiting the amount of silt in water that could potentially enter a water body. Golder is scheduled to arrive on site with this equipment on Saturday July 12.

### **Impact Assessment**

Golder was contracted on July 9 to conduct an investigation to identify the cause, extent and potential effect of the release on the aquatic ecology in Andrew Lake. The results of the potential effects to fish and fish habitat will be detailed, including TSS concentration surveys. Golder was also asked to develop a plan to mitigate further transport of released drilling fluid to Andrew Lake due to potential subsequent precipitation and run-off event.

### **Conclusion**

Drilling at Andrew Lake/ANDW-08-04 is scheduled to resume on July 11 using the revised water and sludge management system. This hole is located at approximately 250m from the lake (Figure 4). The efficiency of the revised water and sludge management system will be closely monitored by both Boart and AREVA.

Monitoring results at ANDW-08-04 will be used to make the decision to start drilling at End Grid/END-08-03. Land berms and lake barriers will be in place prior to drilling on this site.

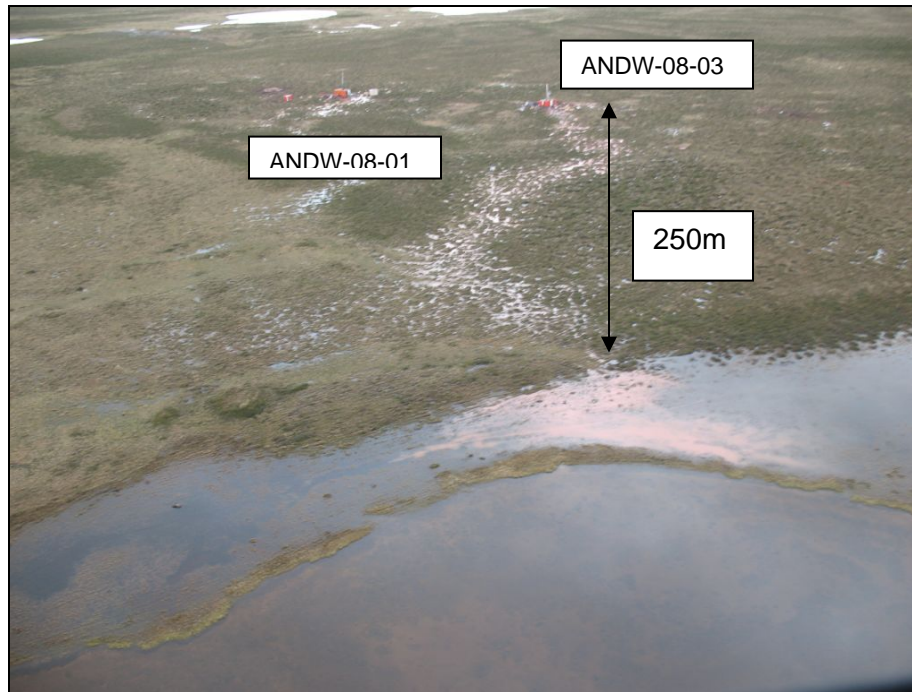


Figure 1 - July 6, 2008 – 6 pm – Looking North West



Figure 2 - July 7, 2008 - Looking West



Figure 3 - July 8, 2008 - Looking East

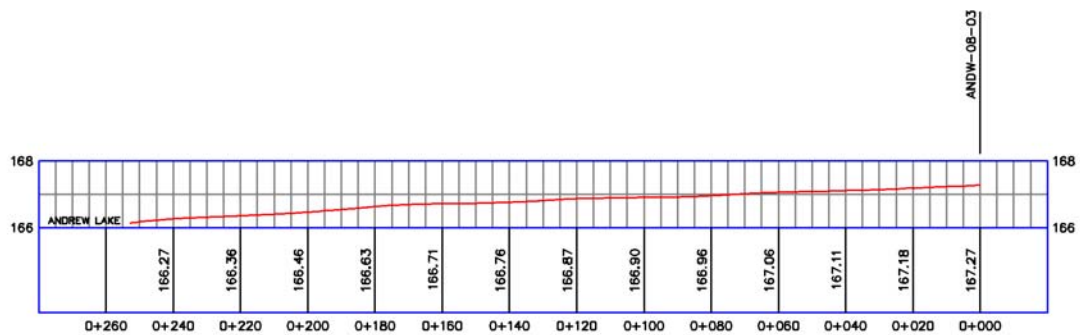
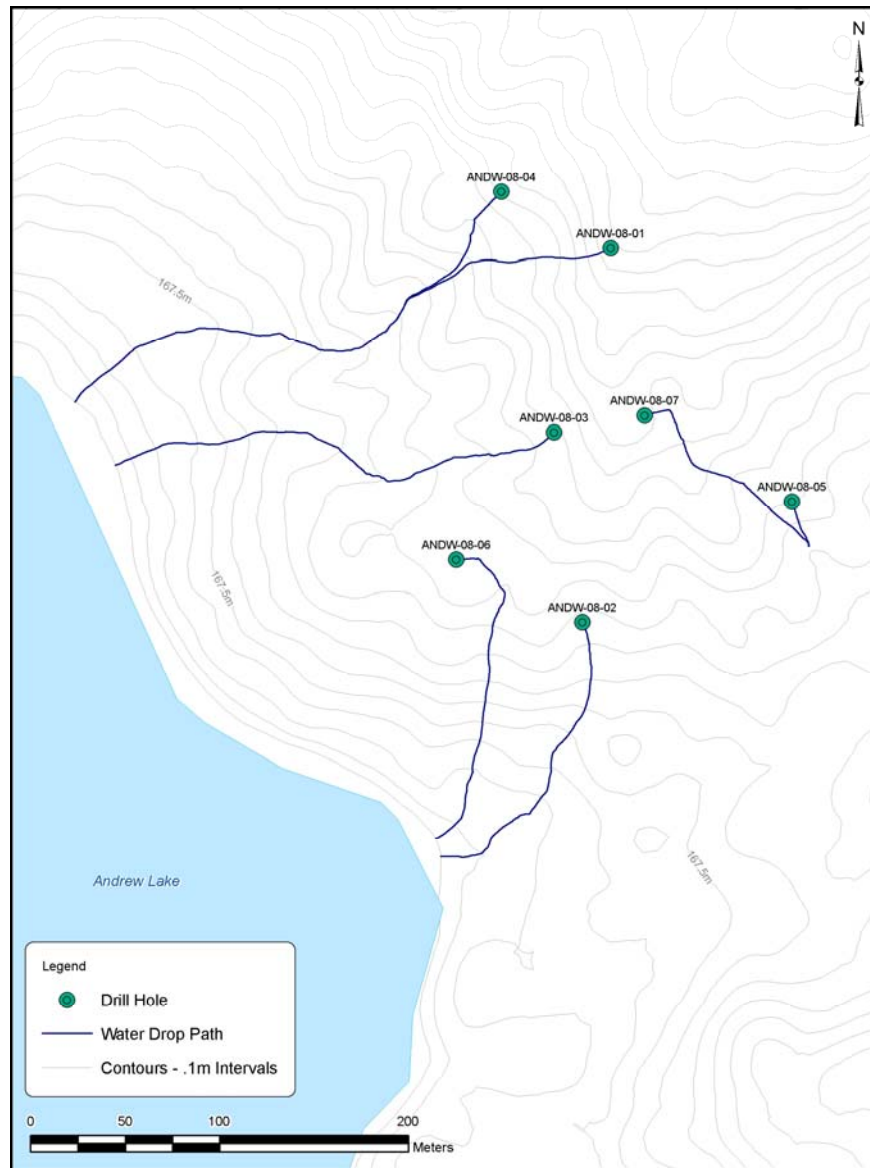


Figure 4 – Theoretical flowpaths from ANDW-03-03 to the Lake (based on LIDAR Data)





Figure 5 – Set-Up END-08-03 showing the containment box



Figure 6 – Set-Up END-08-03 showing the containment and sludge pump



Figure 7 – Set-Up END-08-03 showing the discharge hose that runs 600 feet away from the drill

# APPENDIX 2

ASSESSMENT OF UNAUTHORIZED RELEASE, KIGGAVIK PROJECT

GOLDER ASSOCIATES

# APPENDIX 3

## ANALYTICAL RESULTS – WATER AND SEDIMENT SAMPLES



# Water Quality Results

Parameter		Units	Guidelines		Andrew Lake S-1 WQ7 Baseline	July 8, 2008 Samples			
			SSWQO <sup>(1)</sup>	CWQG <sup>(2)</sup>		Lake Sample	Shoreline Sample	Drainage Sample	Drainage Sample (near drill)
Total Metals									
Aluminum	mg/L	0.1	0.1	0.03	0.036	1.7	2.2	2.2	
Antimony	mg/L	-	-	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	
Arsenic	µg/L	5	5	<0.1	0.1	0.2	0.4	1.4	
Barium	mg/L	-	-	0.05	0.06	0.2	0.18	0.2	
Beryllium	mg/L	-	-	<0.0001	<0.0001	0.0002	0.0004	0.0008	
Boron	mg/L	-	-	<0.01	<0.01	0.02	0.04	0.04	
Cadmium	mg/L	0.000017	0.000017	<0.0001	0.0004	<0.0001	0.0002	0.0002	
Chromium	mg/L	0.001		<0.0005	0.0008	0.0092	0.18	0.03	
Cobalt	mg/L	-	-	<0.0001	0.0001	0.0007	0.003	0.01	
Copper	mg/L	0.002	0.002	0.0009	0.0027	0.0057	0.0095	0.0019	
Iron	mg/L	0.3	0.3	0.11	0.18	1.3	3.3	7.6	
Lead	mg/L	0.001	0.001	0.0001	<0.0001	0.0022	0.002	0.0034	
Manganese	mg/L	-	-	0.0031	0.0045	0.014	0.023	0.47	
Mercury	µg/L	0.026	0.026	<0.05(n) <0.05	<.05	<.05	<.05	<.05	
Molybdenum	mg/L	-	0.073	0.0001	<0.0001	0.0002	0.0029	0.0079	
Nickel	mg/L	0.025	0.025	0.0004	0.0061	0.0072	0.01	0.02	
Selenium	mg/L	0.001	0.001	0.0001	<0.0001	<0.0001	0.0003	0.0006	
Silver	mg/L	0.0001	0.0001	<0.0001	0.0001	0.0005	0.0013	0.004	
Strontium	mg/L	-	-	0.056	0.036	0.07	0.089	0.16	
Thallium	mg/L	-	0.0008	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	
Tin	mg/L	-	-	<0.0001	0.0029	<0.0001	<0.0001	<0.0001	
Titanium	mg/L	-	-	0.0004	0.0002	0.0039	0.0045	0.0033	
Uranium	µg/L	15	-	<0.1	0.1	4.4	13	49	
Vanadium	mg/L	-	-	0.0001	0.0001	0.0006	0.0008	0.0021	
Zinc	mg/L	0.03	0.03	0.0087	0.0053	0.025	0.046	0.046	
Lead 210	Bq/L				<0.04	0.15	0.25	0.52	
Polonium 210	Bq/L				<0.01	0.13	0.34	0.76	
Radium 226	Bq/L	0.11			<0.005	0.15	0.53	1.4	
Thorium 230	Bq/L				<0.01	0.13	0.41	0.94	

1. Saskatchewan Surface Water Quality Guidelines

2. Canadian Water Quality Guidelines

# Sediment Sampling Results

Sediment Sampling Results							
		Sediment Quality Guidelines		2007 Baseline		July 8, 2008 Samples	
Parameter	Units	ISQG	PEL	ANL-SD1	ANL-SD2	Lake	Shoreline
<b>Metals</b>							
Aluminium	µg/g	-	-	4,100	4,100	4200	4800
Arsenic	µg/g	5.9	17	1.3	2.4	1.7	2.8
Barium	µg/g	-	-	54	58	79	440
Beryllium	µg/g	-	-	0.3	0.3	0.4	0.7
Boron	µg/g	-	-	<1	<1	<1	80
Cadmium	µg/g	0.6	3.5	<0.1	<0.1	<0.1	0.3
Chromium	µg/g	37.3	90	6.2	6.6	7.4	10
Cobalt	µg/g	-	-	1.8	1.5	1.8	5.8
Copper	µg/g	35.7	197	21	130	3.3	15
Iron	µg/g	-	-	5,700	5,200	8600	55800
Lead	µg/g	35	91.3	4	13	3.1	6.9
Manganese	µg/g	-	-	43	51	68	360
Mercury	µg/g	0.17	0.486	<0.05	<0.05	<0.05	0.16
Molybdenum	µg/g	-	-	<0.1	0.2	0.2	1.6
Nickel	µg/g	-	-	7.1	11	6.8	19
Selenium	µg/g	-	-	0.3	1.2	<0.1	0.4
Silver	µg/g	-	-	<0.1	<0.1	<0.1	0.1
Strontium	µg/g	-	-	38	37	38	80
Titanium	µg/g	-	-	150	170	160	66
Uranium	µg/g	-	-	0.8	0.7	0.9	4.7
Vanadium	µg/g	-	-	8.2	8.4	9.2	9.4
Zinc	µg/g	123	315	74	440	23	56
<b>Radionuclides</b>							
Radium-226	Bq/g	-	-	0.02	0.02	0.02	0.08
Lead-210	Bq/g	-	-	<0.02	0.02	0.08	0.65
Polonium-210	Bq/g	-	-	0.02	0.02	0.06	0.71
Thorium-230	Bq/g	-	-	0.03	0.02	0.03	0.08

1. ISQG: Interim Sediment Quality Guidelines (CCME 2002)

2. PEL: Probable Effect Levels (CCME 2002)

**SRC ANALYTICAL**

Jul 11, 2008

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Fax: (306) 933-7922

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Environment, Health Safety Department  
P.O. Box 9204  
817-45th Street West  
Saskatoon, Saskatchewan S7K 3X5  
Attn: Mark Warbanski

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Sample # **25593**  
Date Sampled: **Jul 08, 2008**  
Sample Matrix: **SEDIMENT**  
Description: **ANDREW SED-01 CLEAN AREA**

Client PO #: **KIGGAVIK**  
Date Received: **Jul 09, 2008**

Analyte	Units	Result	DL	Date Entered
<b>Inorganic Chemistry</b>				
Mercury	ug/g	<0.05	0.05	Jul 11, 2008
Aluminum	ug/g	4200	20	Jul 11, 2008
Antimony	ug/g	<0.2	0.2	Jul 11, 2008
Arsenic	ug/g	1.7	0.1	Jul 11, 2008
Barium	ug/g	79	0.5	Jul 11, 2008
Beryllium	ug/g	0.4	0.1	Jul 11, 2008
Boron	ug/g	<1	1	Jul 11, 2008
Cadmium	ug/g	<0.1	0.1	Jul 11, 2008
Chromium	ug/g	7.4	0.5	Jul 11, 2008
Cobalt	ug/g	1.8	0.2	Jul 11, 2008
Copper	ug/g	3.3	0.5	Jul 11, 2008
Iron	ug/g	8600	20	Jul 11, 2008
Lead	ug/g	3.1	0.1	Jul 11, 2008
Manganese	ug/g	68	0.5	Jul 11, 2008
Molybdenum	ug/g	0.2	0.1	Jul 11, 2008
Nickel	ug/g	6.8	0.1	Jul 11, 2008
Selenium	ug/g	<0.1	0.1	Jul 11, 2008
Silver	ug/g	<0.1	0.1	Jul 11, 2008
Strontium	ug/g	38	0.5	Jul 11, 2008
Thallium	ug/g	<0.2	0.2	Jul 11, 2008
Tin	ug/g	<0.1	0.1	Jul 11, 2008
Titanium	ug/g	160	20	Jul 11, 2008
Uranium	ug/g	0.9	0.1	Jul 11, 2008
Vanadium	ug/g	9.2	0.1	Jul 11, 2008
Zinc	ug/g	23	0.5	Jul 11, 2008
<b>Radio Chemistry</b>				
Lead-210	Bq/g	0.08	0.04	Jul 11, 2008
Polonium-210	Bq/g	0.06	0.01	Jul 11, 2008
Radium-226	Bq/g	0.02	0.01	Jul 11, 2008
Thorium-230	Bq/g	0.03	0.02	Jul 11, 2008

"<": not detected at level stated above.

## SRC ANALYTICAL

Jul 11, 2008

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Sample # **25592**  
Date Sampled: **Jul 08, 2008**  
Sample Matrix: **WATER**  
Description: **ANDREW - 04 WATER TRAIL FROM DRILL**

Client PO #: **KIGGAVIK**  
Date Received: **Jul 09, 2008**

Analyte	Units	Result	DL	Date Entered
<b>Inorganic Chemistry</b>				
Mercury	ug/L	<0.05*	0.05	Jul 10, 2008
Aluminum	mg/L	2.2	0.05	Jul 10, 2008
Antimony	mg/L	<0.0002	0.0002	Jul 10, 2008
Arsenic	ug/L	1.4	0.1	Jul 10, 2008
Barium	mg/L	0.20	0.01	Jul 10, 2008
Beryllium	mg/L	0.0008	0.0001	Jul 10, 2008
Boron	mg/L	0.04	0.01	Jul 10, 2008
Cadmium	mg/L	0.0002	0.0001	Jul 10, 2008
Chromium	mg/L	0.030	0.0005	Jul 10, 2008
Cobalt	mg/L	0.010	0.0001	Jul 10, 2008
Copper	mg/L	0.019	0.0002	Jul 10, 2008
Iron	mg/L	7.6	0.01	Jul 10, 2008
Lead	mg/L	0.0034	0.0001	Jul 10, 2008
Manganese	mg/L	0.47	0.05	Jul 10, 2008
Molybdenum	mg/L	0.0079	0.0001	Jul 10, 2008
Nickel	mg/L	0.020	0.0001	Jul 10, 2008
Selenium	mg/L	0.0006	0.0001	Jul 10, 2008
Silver	mg/L	0.0040	0.0001	Jul 10, 2008
Strontium	mg/L	0.16	0.01	Jul 10, 2008
Thallium	mg/L	<0.0002	0.0002	Jul 10, 2008
Tin	mg/L	<0.0001	0.0001	Jul 10, 2008
Titanium	mg/L	0.0033	0.0002	Jul 10, 2008
Uranium	ug/L	49	0.1	Jul 10, 2008
Vanadium	mg/L	0.0021	0.0001	Jul 10, 2008
Zinc	mg/L	0.046	0.0005	Jul 10, 2008

**Radio Chemistry**

Lead-210	Bq/L	0.52	0.04	Jul 10, 2008
Polonium-210	Bq/L	0.76	0.01	Jul 11, 2008
Radium-226	Bq/L	1.4	0.01	Jul 10, 2008
Thorium-230	Bq/L	0.94	0.01	Jul 10, 2008

"<": not detected at level stated above.

\* mercury was determined on a nitric-acid preserved sample as a potassium dichromate/nitric-acid preserved sample was not supplied.

## SRC ANALYTICAL

Jul 11, 2008

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Sample # **25591** Client PO #: **KIGGAVIK**  
 Date Sampled: **Jul 08, 2008** Date Received: **Jul 09, 2008**  
 Sample Matrix: **WATER**  
 Description: **ANDREW - 03 WATERTRAIL FROM DRILL RIG TO LK**

Analyte	Units	Result	DL	Date Entered
<b>Inorganic Chemistry</b>				
Mercury	ug/L	<0.05*	0.05	Jul 10, 2008
Aluminum	mg/L	2.2	0.05	Jul 10, 2008
Antimony	mg/L	<0.0002	0.0002	Jul 10, 2008
Arsenic	ug/L	0.4	0.1	Jul 10, 2008
Barium	mg/L	0.18	0.01	Jul 10, 2008
Beryllium	mg/L	0.0004	0.0001	Jul 10, 2008
Boron	mg/L	0.04	0.01	Jul 10, 2008
Cadmium	mg/L	0.0002	0.0001	Jul 10, 2008
Chromium	mg/L	0.018	0.0005	Jul 10, 2008
Cobalt	mg/L	0.0030	0.0001	Jul 10, 2008
Copper	mg/L	0.0095	0.0002	Jul 10, 2008
Iron	mg/L	3.3	0.01	Jul 10, 2008
Lead	mg/L	0.0020	0.0001	Jul 10, 2008
Manganese	mg/L	0.023	0.0005	Jul 10, 2008
Molybdenum	mg/L	0.0029	0.0001	Jul 10, 2008
Nickel	mg/L	0.010	0.0001	Jul 10, 2008
Selenium	mg/L	0.0003	0.0001	Jul 10, 2008
Silver	mg/L	0.0013	0.0001	Jul 10, 2008
Strontium	mg/L	0.089	0.0005	Jul 10, 2008
Thallium	mg/L	<0.0002	0.0002	Jul 10, 2008
Tin	mg/L	<0.0001	0.0001	Jul 10, 2008
Titanium	mg/L	0.0045	0.0002	Jul 10, 2008
Uranium	ug/L	13	0.1	Jul 10, 2008
Vanadium	mg/L	0.0008	0.0001	Jul 10, 2008
Zinc	mg/L	0.046	0.0005	Jul 10, 2008

**Radio Chemistry**

Lead-210	Bq/L	0.25	0.04	Jul 10, 2008
Polonium-210	Bq/L	0.34	0.01	Jul 11, 2008
Radium-226	Bq/L	0.53	0.01	Jul 10, 2008
Thorium-230	Bq/L	0.41	0.01	Jul 10, 2008

"<": not detected at level stated above.

\* mercury was determined on a nitric-acid preserved sample as a potassium dichromate/nitric-acid preserved sample was not supplied.

## SRC ANALYTICAL

Jul 11, 2008

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Sample # **25590**  
 Date Sampled: **Jul 08, 2008**  
 Sample Matrix: **WATER**  
 Description: **ANDREW - 02 OUTSIDE THE RED AREA IN LK**

Client PO #: **KIGGAVIK**  
 Date Received: **Jul 09, 2008**

Analyte	Units	Result	DL	Date Entered
<b>Inorganic Chemistry</b>				
Mercury	ug/L	<0.05*	0.05	Jul 10, 2008
Aluminum	mg/L	0.036	0.0005	Jul 10, 2008
Antimony	mg/L	<0.0002	0.0002	Jul 10, 2008
Arsenic	ug/L	0.1	0.1	Jul 10, 2008
Barium	mg/L	0.060	0.0005	Jul 10, 2008
Beryllium	mg/L	<0.0001	0.0001	Jul 10, 2008
Boron	mg/L	<0.01	0.01	Jul 10, 2008
Cadmium	mg/L	0.0004	0.0001	Jul 10, 2008
Chromium	mg/L	0.0008	0.0005	Jul 10, 2008
Cobalt	mg/L	0.0001	0.0001	Jul 10, 2008
Copper	mg/L	0.0027	0.0002	Jul 10, 2008
Iron	mg/L	0.18	0.05	Jul 10, 2008
Lead	mg/L	<0.0001	0.0001	Jul 10, 2008
Manganese	mg/L	0.0045	0.0005	Jul 10, 2008
Molybdenum	mg/L	<0.0001	0.0001	Jul 10, 2008
Nickel	mg/L	0.0061	0.0001	Jul 10, 2008
Selenium	mg/L	<0.0001	0.0001	Jul 10, 2008
Silver	mg/L	0.0001	0.0001	Jul 10, 2008
Strontium	mg/L	0.036	0.0005	Jul 10, 2008
Thallium	mg/L	<0.0002	0.0002	Jul 10, 2008
Tin	mg/L	0.0029	0.0001	Jul 10, 2008
Titanium	mg/L	0.0002	0.0002	Jul 10, 2008
Uranium	ug/L	0.1	0.1	Jul 10, 2008
Vanadium	mg/L	0.0001	0.0001	Jul 10, 2008
Zinc	mg/L	0.0053	0.0005	Jul 10, 2008

**Radio Chemistry**

Lead-210	Bq/L	<0.04	0.04	Jul 10, 2008
Polonium-210	Bq/L	<0.01	0.01	Jul 11, 2008
Radium-226	Bq/L	<0.005	0.005	Jul 10, 2008
Thorium-230	Bq/L	<0.01	0.01	Jul 10, 2008

"<": not detected at level stated above.

\* mercury was determined on a nitric-acid preserved sample as a potassium dichromate/nitric-acid preserved sample was not supplied.

**SRC ANALYTICAL**

Jul 11, 2008

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Environment, Health Safety Department  
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817-45th Street West  
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Attn: Mark Warbanski

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Sample # **25589** Client PO #: **KIGGAVIK**  
Date Sampled: **Jul 08, 2008** Date Received: **Jul 09, 2008**  
Sample Matrix: **WATER**  
Description: **ANDREW - 01 IN THE RED AREA SHORELINE**

Analyte	Units	Result	DL	Date Entered
<b>Inorganic Chemistry</b>				
Mercury	ug/L	<0.05*	0.05	Jul 10, 2008
Aluminum	mg/L	1.7	0.05	Jul 10, 2008
Antimony	mg/L	<0.0002	0.0002	Jul 10, 2008
Arsenic	ug/L	0.2	0.1	Jul 10, 2008
Barium	mg/L	0.20	0.0005	Jul 10, 2008
Beryllium	mg/L	0.0002	0.0001	Jul 10, 2008
Boron	mg/L	0.02	0.01	Jul 10, 2008
Cadmium	mg/L	<0.0001	0.0001	Jul 10, 2008
Chromium	mg/L	0.0092	0.0005	Jul 10, 2008
Cobalt	mg/L	0.0007	0.0001	Jul 10, 2008
Copper	mg/L	0.0057	0.0002	Jul 10, 2008
Iron	mg/L	1.3	0.01	Jul 10, 2008
Lead	mg/L	0.0022	0.0001	Jul 10, 2008
Manganese	mg/L	0.014	0.0005	Jul 10, 2008
Molybdenum	mg/L	0.0002	0.0001	Jul 10, 2008
Nickel	mg/L	0.0072	0.0001	Jul 10, 2008
Selenium	mg/L	<0.0001	0.0001	Jul 10, 2008
Silver	mg/L	0.0005	0.0001	Jul 10, 2008
Strontium	mg/L	0.070	0.0005	Jul 10, 2008
Thallium	mg/L	<0.0002	0.0002	Jul 10, 2008
Tin	mg/L	<0.0001	0.0001	Jul 10, 2008
Titanium	mg/L	0.0039	0.0002	Jul 10, 2008
Uranium	ug/L	4.4	0.1	Jul 10, 2008
Vanadium	mg/L	0.0006	0.0001	Jul 10, 2008
Zinc	mg/L	0.025	0.0005	Jul 10, 2008
<b>Radio Chemistry</b>				
Lead-210	Bq/L	0.15	0.04	Jul 10, 2008
Polonium-210	Bq/L	0.13	0.01	Jul 11, 2008
Radium-226	Bq/L	0.15	0.005	Jul 10, 2008
Thorium-230	Bq/L	0.13	0.01	Jul 10, 2008

"<": not detected at level stated above.

\* mercury was determined on a nitric-acid preserved sample as a potassium dichromate/nitric-acid preserved sample was not supplied.

## SRC ANALYTICAL

Jul 11, 2008

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Page 2 of 3

Sample # 25594  
Date Sampled: Jul 08, 2008  
Sample Matrix: SEDIMENT  
Description: ANDREW SED-02 DIRTY

Client PO #: KIGGAVIK  
Date Received: Jul 09, 2008

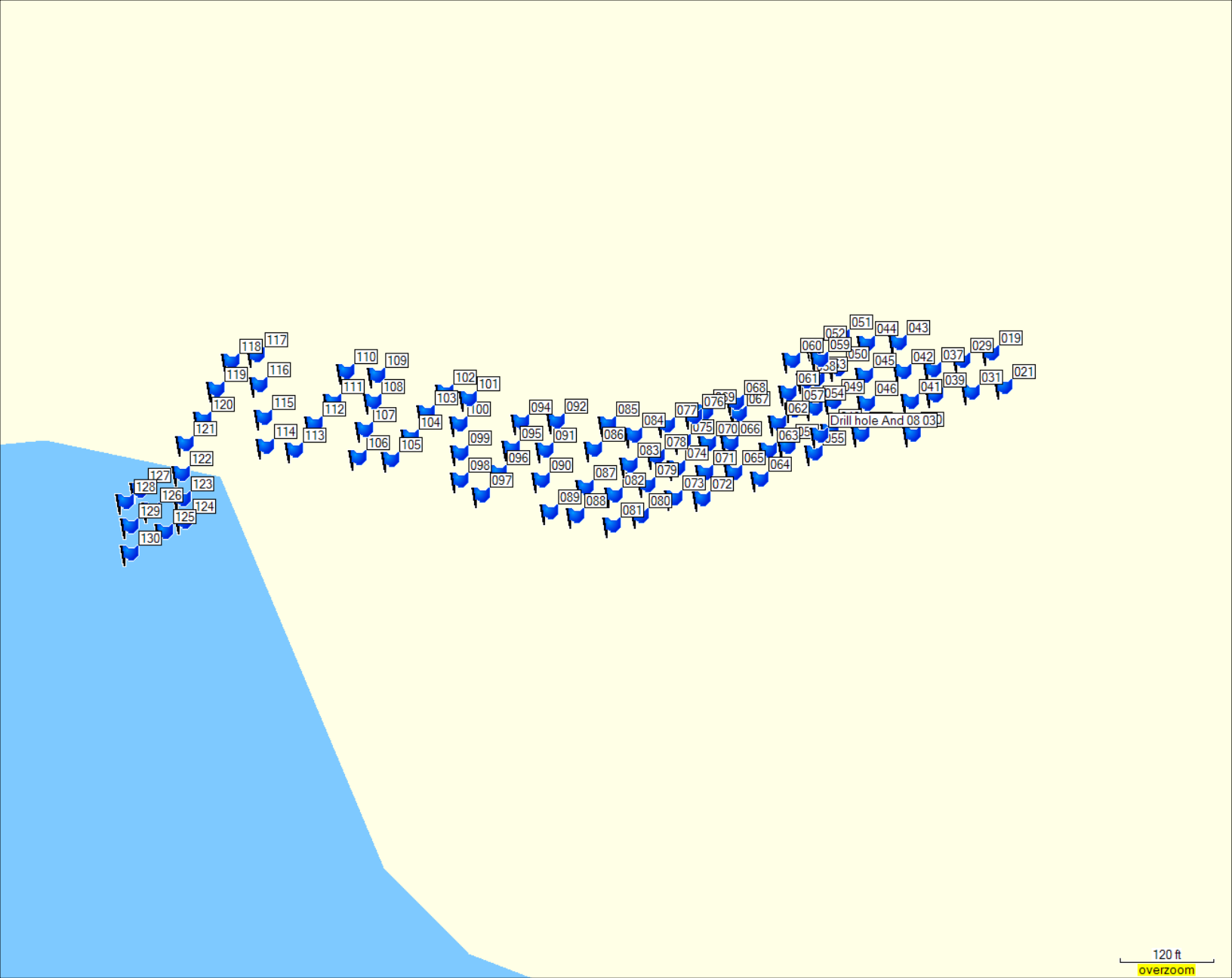
Analyte	Units	Result	DL	Date Entered
<b>Inorganic Chemistry</b>				
Mercury	ug/g	0.16	0.05	Jul 11, 2008
Aluminum	ug/g	4800	20	Jul 11, 2008
Antimony	ug/g	<0.2	0.2	Jul 11, 2008
Arsenic	ug/g	2.8	0.1	Jul 11, 2008
Barium	ug/g	440	20	Jul 11, 2008
Beryllium	ug/g	0.7	0.1	Jul 11, 2008
Boron	ug/g	80	50	Jul 11, 2008
Cadmium	ug/g	0.3	0.1	Jul 11, 2008
Chromium	ug/g	10	0.5	Jul 11, 2008
Cobalt	ug/g	5.8	0.2	Jul 11, 2008
Copper	ug/g	15	0.5	Jul 11, 2008
Iron	ug/g	55800	20	Jul 11, 2008
Lead	ug/g	6.9	0.1	Jul 11, 2008
Manganese	ug/g	360	20	Jul 11, 2008
Molybdenum	ug/g	1.6	0.1	Jul 11, 2008
Nickel	ug/g	19	0.1	Jul 11, 2008
Selenium	ug/g	0.4	0.1	Jul 11, 2008
Silver	ug/g	0.1	0.1	Jul 11, 2008
Strontium	ug/g	80	0.5	Jul 11, 2008
Thallium	ug/g	<0.2	0.2	Jul 11, 2008
Tin	ug/g	0.5	0.1	Jul 11, 2008
Titanium	ug/g	66	0.5	Jul 11, 2008
Uranium	ug/g	4.7	0.1	Jul 11, 2008
Vanadium	ug/g	9.4	0.1	Jul 11, 2008
Zinc	ug/g	56	0.5	Jul 11, 2008
<b>Radio Chemistry</b>				
Lead-210	Bq/g	0.65	0.04	Jul 11, 2008
Polonium-210	Bq/g	0.71	0.01	Jul 11, 2008
Radium-226	Bq/g	0.08	0.01	Jul 11, 2008
Thorium-230	Bq/g	0.08	0.02	Jul 11, 2008

"<": not detected at level stated above.



# APPENDIX 4

## GAMMA RADIATION SURVEYS



July 9, 2008

Post gamma Survey  
Andrew - 08-08 KS

Top Number: Autotess Reading in  $\mu\text{Sv/h}$   
Middle Number: Sppy Reading in Counts per Second  
Bottom Number: GPS Waypoint Number

0.024	0.061	0.063
15	10	15
130	#129	#126
0.064	0.068	0.021
25	25	20
#125	#126	#127
0.070	0.050	0.014
40	30	30
#124	#123	#122

} lake

0.051	0.059	0.074	0.075
25	40	40	40
#121	#120	#119	#118
0.037	0.037	0.065	0.028
50	40	40	40
#114	#115	#116	#117
0.119	0.057	0.045	0.093
40	30	30	40
#113	#112	#111	#110
0.034	0.054	0.029	0.045
30	50	40	30
#106	#107	#108	#109
0.075	0.036	0.020	0.070
35	40	30	40
#105	#104	#103	#102
0.040	0.058	0.023	0.048
30	40	50	35
#98	#99	#100	#101
0.049	0.033	0.042	0.116
40	40	95	50
#97	#96	#95	#94
0.035	0.047	0.038	0.016
40	40	45	50
#89	#90	#91	#92
0.072	0.030	0.016	0.065
40	40	40	40
#88	#87	#86	#85
0.126	0.055	0.105	0.033
50	60	80	60
#81	#82	#83	#84
0.050	0.043	0.136	0.055
40	60	80	40
#80	#79	#78	#77
0.053	0.162	0.189	0.085
60	50	60	40
#73	#74	#75	#76
0.042	0.036	0.152	0.053
105	50	75	40
#72	#71	#70	#69
0.018	0.157	0.033	0.042
42	75	50	40
#65	#66	#67	#68

0.055	0.025	0.151	0.096
55	100	140	60
#64	#63	50 #62	#61

0.021	0.093	0.069	0.102
45	80	60	60
#56	#57	#58	#59

0.065	0.059	0.252	0.081
60	50	220	60
#55	#54	#53	#52

0.051	0.121	0.035	0.073
55	80	60	60
#48	#49	#50	#51

0.047	0.074	0.095	0.043
40	50	55	50
#47	#46	#45	#44

0.101	0.291	0.101	0.097
60	200	60	100
#40	#41	#42	#43

0.051	0.025
120	50
#39	#37

0.062	0.220
80	100
#31	#29

0.094	0.085
40	60
#21	#19

Approx where  
drill is located

$\mu\text{Sv/h}$

Counts Per Second

Sample #

# Kiggavik Project - Gamma Survey

Date: June 27/08 (mark drill hole as ⊗)

GPS Drill Hole Location: N 7134763 E 0553357

Grid spacing: 5 m X 5 m

Drill Hole #: And-08-03

All gamma readings will be written as  $\mu\text{Sv}$

Pregamma

			0.03	0.11	0.02			
			0.24	0.02	0.11			
		0.08	0.07	0.013	0.08	0.03	0.18	
		0.09	0.13	0.08	0.01	0.14	0.09	
		0.17	0.26	0.17	0.07	0.34	0.08	
		0.08	0.07	0.22	0.32	0.15	0.10	
		0.07	0.04	0.14	⊗ 0.23	0.38	0.15	
		0.06	0.07	0.05	0.10	0.39	0.23	
		0.18	0.07	0.04	0.05	0.12	0.13	
		0.06	0.14	0.22	0.10	0.03	0.16	
		0.03	0.02	0.10	0.09	0.05	0.08	
		0.12	0.17	0.12	0.12	0.14		
		0.07	0.19	0.05	0.15	0.14		

