



## **WORK PLAN 2016**

**Inuit Land Use Licence Number: KVL308C09**

**INAC Land Use Permit Number: N2012C0030**

**Nunavut Impact Review Board File Number: 08EN052**



**Submitted to: KIA, INAC, NIRB**

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**Kivalliq Energy Corporation**

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## PROPERTY DESCRIPTION AND LOCATION

The Angilak Property consists of 103 mineral claims and Inuit Owned Land Parcel RI-30 (IOL), comprising a total area of 101,110.9 hectares (249,850.6 acres) in the Kivalliq Region of southern Nunavut Territory. The property is located 350 kilometres west of Rankin Inlet and 225 kilometres southwest of Baker Lake (Figure 1). The property dimensions measure 55 kilometres east-west by 35 kilometres north-south.

As indicated on Figure 2, all mineral claims and the IOL are contiguous and extend north, south, east and west between 6925500N to 6962000N and 479300E to 533000E, NAD83, Zone 14 (latitudes 62° 27' North and 62°48' North and longitudes 98° 21' West and 99°24' West) in NTS map areas 65 J/06, 65 J/07, 65 J/09, 65 J/10, 65 J/11 and 65 J/15.

Land use permits, authorizing exploration work over the entire property area have been issued, renewed and amended by the Kivalliq Inuit Association (KIA) for parts of the property covering Inuit Owned Lands (IOL) and Indigenous and Northern Affairs Canada (INAC) for mineral claims on crown lands. Kivalliq Energy Corporation (Kivalliq Energy) also operates under the terms and conditions of a Nunavut Water Board (NWB) licence, covering activities on both the IOL and mineral claims. See Table 1 for active permits and licences issued for lands that comprise the Angilak Property.

**Table 1: 2015 Land Use Permits and Licences**

<b>Issuing/Screening Agency</b>	<b>Date Issued</b>	<b>File Number</b>
KIA	01-Aug-08	KVL308C09
NIRB	31-Jul-08	08EN052
INAC	07-Aug-13	N2012C0030
NWB	04-Mar-13	2BE-ANG1318

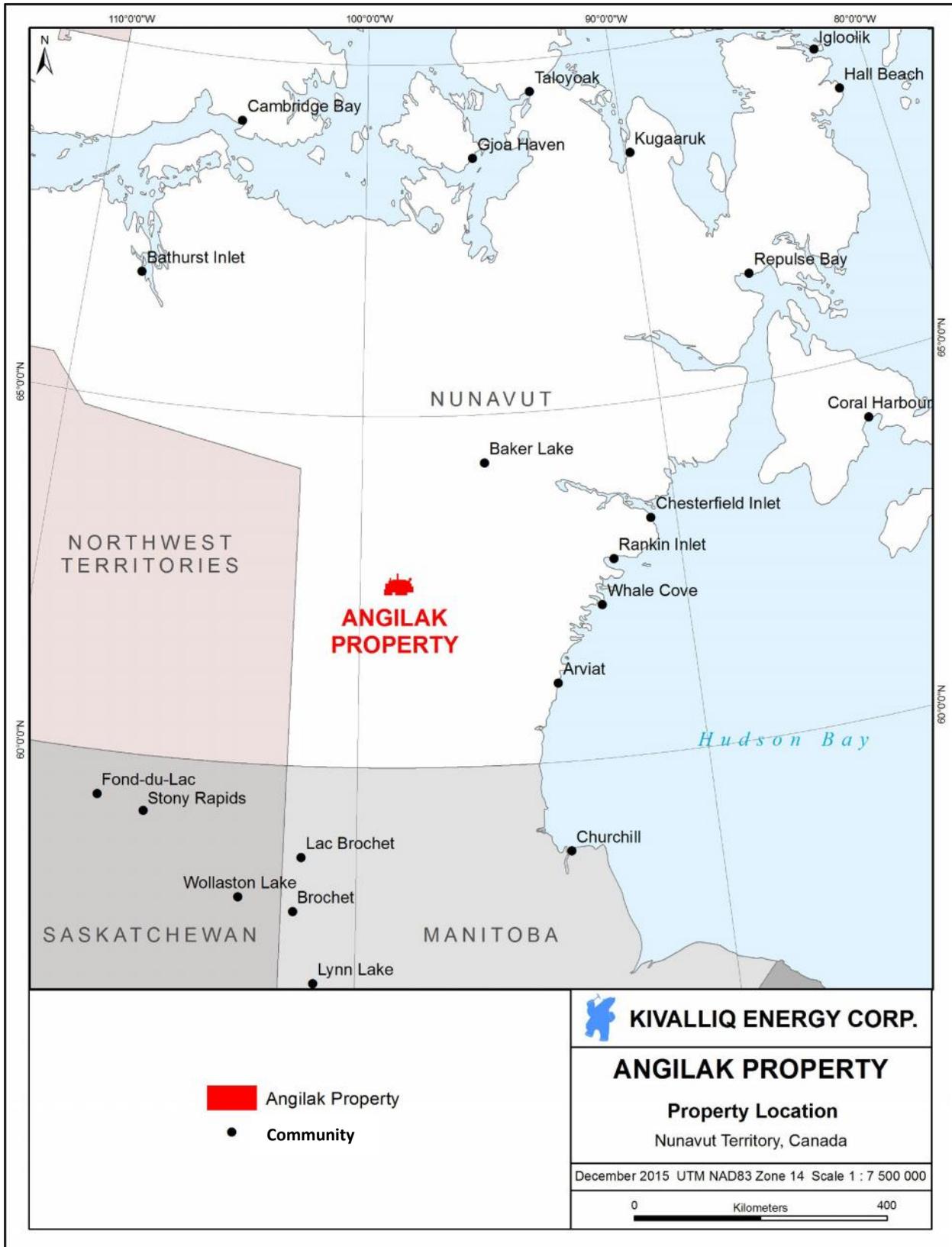


Figure 1: Angilak Property Location



## CORPORATE BACKGROUND AND PROJECT INFORMATION

Kivalliq Energy is a Vancouver-based uranium exploration company with Canada's highest-grade uranium resource outside of Saskatchewan's Athabasca Basin. The company has been operating in Nunavut since 2008. Its flagship project is the Angilak Property.

Kivalliq Energy was the first company in Canada to sign a comprehensive agreement with Nunavut Tunngavik Inc. (NTI) to explore on Inuit Owned Land for uranium. As part of this landmark partnership, Kivalliq Energy must meet certain expenditure and corporate commitments. Upon a production decision at the Angilak Property NTI can elect to have a participating interest in the project, or collect royalties. Kivalliq Energy also makes advance royalty payments to NTI annually. The agreement not only applies to IOL RI-30, but also, extends to 103 Crown issued mineral claims.

Kivalliq Energy was formed to focus on projects in Nunavut. Management has extensive background working in Canada's north. John Robins is Chairman of the Company's board of directors, Jim Paterson is the Chief Executive Officer, Jeff Ward serves as President and Andrew Berry is Chief Operating Officer. Jim Dawson, Garth Kirkham, Dale Wallster and Jim Malone serve as directors. The group is committed to the social and economic development of the north while maintaining a level of excellence in minimizing environmental impacts. Kivalliq Energy looks forward to conducting a third community tour this year to meet with community members and increase awareness about the company and its projects.

Since 1979, the Property and surrounding area has been called various names (i.e. LGT, Yathkyed, and Lac Cinquante); however going forward, Kivalliq Energy collectively refers to all land holdings as the "Angilak Property". The Angilak Property hosts the high-grade Lac 50 uranium deposit and more than 150 mineral showings.

From 2007 to 2013, Kivalliq Energy evaluated the Lac 50 trend uranium deposits through a series of exploration programs that included approximately 89,600 metres of diamond drilling and reverse circulation drilling. During that time the company delineated the Lac 50 Main Zone, Western Extension, Eastern Extension, J4 Zone and Ray Zone uranium deposits. On January 15, 2013 the Company announced a revised NI 43-101 compliant Mineral Resource estimate for the Lac 50 Trend uranium deposits (Lac Cinquante Eastern Extension, Western Extension, Ray and J4) that describes an Inferred Mineral Resource Estimate of 2,831,000 tonnes grading 0.69% U<sub>3</sub>O<sub>8</sub> (15.2 lbs U<sub>3</sub>O<sub>8</sub>/tonne), totalling 43.3 million lbs U<sub>3</sub>O<sub>8</sub> at a 0.2% U<sub>3</sub>O<sub>8</sub> cut-off grade. Smaller programs since 2013 have focused on acquiring additional property-wide geotechnical data, plus a modest 2015 drill program 25 kilometres southwest of Lac 50 at Dipole.

## WORK COMPLETED TO DATE

### 2015 Program

Exploration work in 2015 included diamond drilling, enzyme leach soil sampling, prospecting and environmental baseline monitoring. The focus was an area known as the Dipole-RIB Trend located approximately 25 kilometres southwest of the Lac 50 deposits, in a northeast trending belt of Archean meta-volcanic rocks that are an excellent analogue to Lac 50.

A total of 958 metres in nine diamond drill holes were completed by Major Drilling between July 5 and July 26, 2015. All holes were drilled on the Dipole Target and were designed to test the centre of a prominent two kilometre long ground Very Low Frequency Electromagnetic (VLF-EM) conductor having a coincident 3.4 kilometre long uranium-in-soil anomaly.

As part of the 2015 summer field program, one Kivalliq Energy prospector conducted helicopter-supported soil sampling from July 5, 2015 to July 21, 2015. The goal of the soil survey was to classify and prioritize bedrock conductors for drilling by identifying those which have associated surface geochemical anomalies. A total of 408 enzyme leach soil samples were collected in the RIB Area and YAT Zone. In addition eight rock samples were also collected as part of the program (Figure 4).

### 2014 Program

The 2014 exploration program included enzyme leach soil sampling, an airborne Versatile Time Domain Electromagnetic (VTEM) geophysical survey and environmental baseline monitoring.

In 2014, an APEX Geosciences field crew collected 1514 enzyme leach soils samples in the Lac 50 and Dipole-RIB Trends between August 26, 2014 and September 5, 2014. Geotech Airborne Geophysical Surveys conducted airborne VTEM surveying over a number of target areas on behalf of Kivalliq Energy. Between September 4 and September 13, 2014, 1334.7 line kilometres of VTEM geophysical surveying was completed over the KU and Dipole Targets.

### 2013 Program

Exploration work in 2013 included diamond drilling, prospecting, soil sampling, ground geophysical surveying and environmental baseline monitoring.

A total of 2,101 metres of diamond drilling in fourteen holes was completed from April 3 to May 17, 2013. The 2013 soil sampling program collected 1647 samples over two weeks in July. In 2013 Aurora Geosciences was contracted by Kivalliq Energy to conduct a variety of ground geophysical surveys. During the period March 18 to May 19, 2013, 591.6 line kilometres of OhmMapper survey, 300.9 line kilometres of combined Magnetic (Mag) and VLF-EM survey and 9.5 line kilometres of ELF survey were completed.

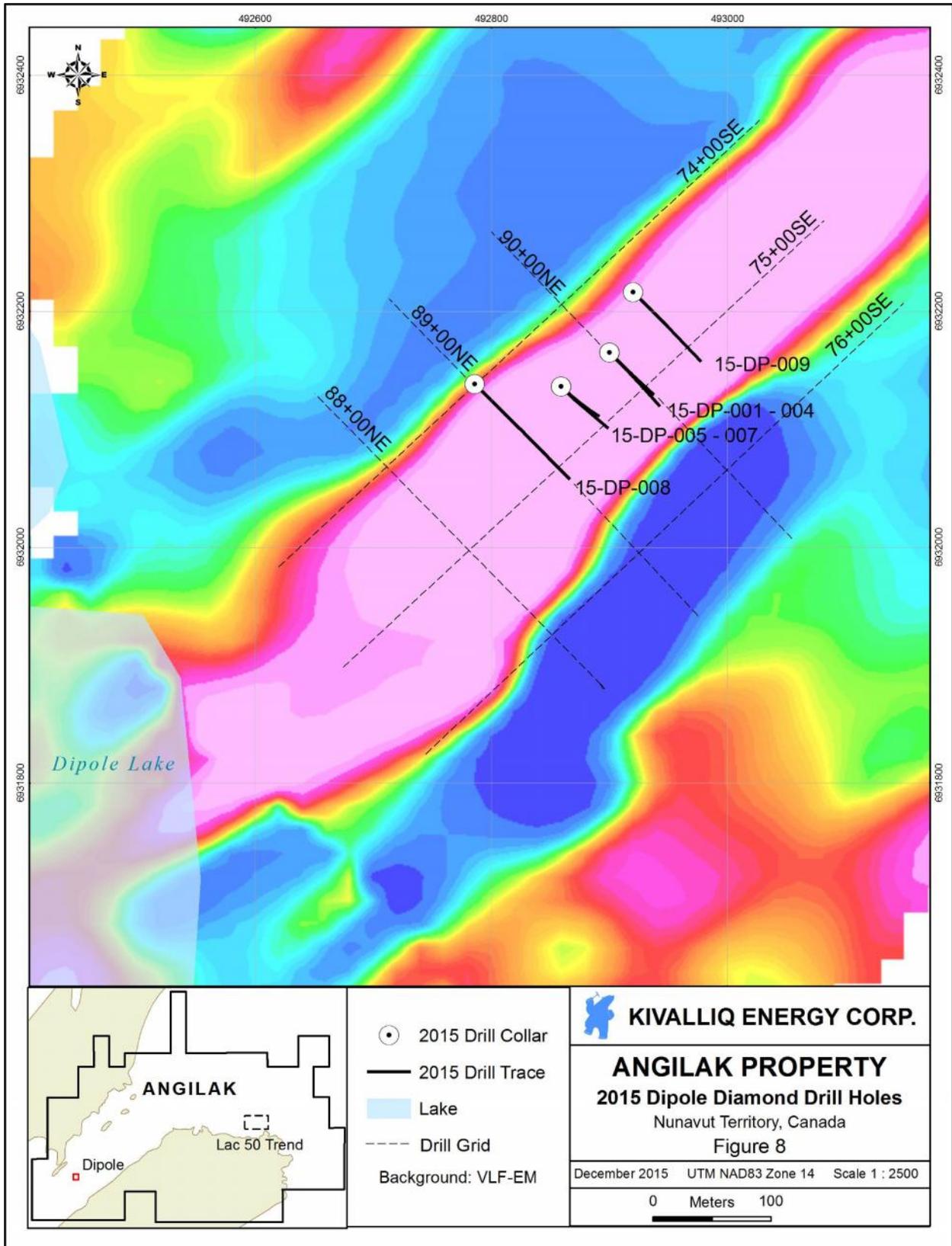


Figure 3: 2015 Diamond Drill Hole Locations

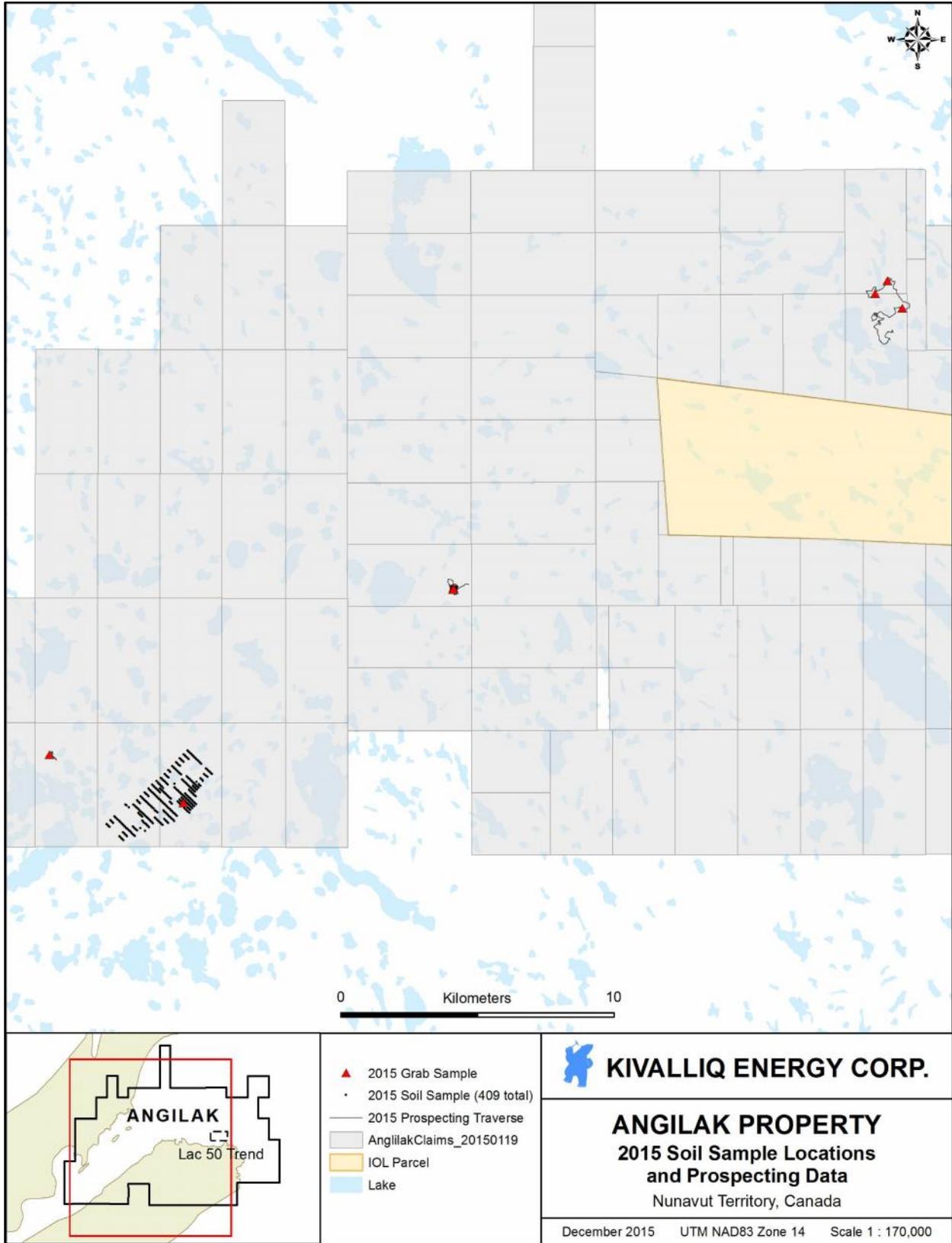


Figure 4: 2015 Soil Sample Locations and Prospecting Data

## 2007- 2012 Program

Exploration work between 2007 to 2012 included constructing a new camp, infrastructure upgrades, diamond drilling, reverse circulation (RC) drilling, prospecting, airborne geophysical surveys, ground geophysical surveys and environmental baseline monitoring.

A total of 33,583 metres of diamond drilling in 173 holes was completed from March 18 to September 15, 2012. The RC drilling program completed 5,273 metres in 38 holes between May 1 and September 4. MEG Systems Ltd. conducted a two phase ground gravity surveying program which covered a total of 2,556 stations on the VGR and YAT Zones. Aurora Geosciences conducted ground Mag/VLF-EM and OhmMapper surveys over a number of target areas. A total of 309 line kilometres of data was collected on four separate areas between April and May, 2012.

Frontier Geosciences Inc. conducted a seismic survey over a two kilometre line on the VGR Zone between August and September, 2012. A radiometric survey was conducted by Kivalliq Energy covering eight grids on the Angilak Property and a total of 95 rock grab samples were collected during the 2012 prospecting program.

The 2011 drill program totaled 23,849 metres in 153 holes of diamond drilling and 6,411 metres in 88 holes of RC drilling. The airborne geophysical survey flew a total of 5,470 line kilometres and ground geophysical surveys included 1,605 gravity stations and 1,597.47 kilometres of Mag/VLF-EM surveys. The 2011 prospecting program collected 273 rock grab samples and 348 soil geochemical samples.

The 2010 drill program totaled 16,606 metres in 107 holes drilled. Under the 2010 prospecting program a total of 291 samples were collected for geochemical analysis. A new camp named Nutaaq, comprised of 15 structures, was constructed to accommodate exploration activities. Baseline environmental work was initiated in 2010 and the first year of studies was successfully completed.

In total, 600 line kilometers of ground geophysical surveying was completed in 2009. The drill program comprised 1,745 metres of NQ core drilled in 16 holes targeting the Lac 50 uranium deposit.

Exploration in 2008 included 5,753 line kilometres of airborne geophysical surveying, 140 line kilometres of ground geophysics, prospecting, sampling and re-logging / re-sampling of select core and showings. Work was undertaken by GeoVector Management Inc. based out of Ottawa Ontario. Work in 2008 was conducted from the former YAT Camp on the western side of the Angilak Property and from the Ferguson Lake Camp located 80 kilometres east-northeast of the project area.

# ACTIVITIES FOR 2016

## EXPLORATION

The proposed 2016 exploration program will be conducted from June through to September and will include geochemical sampling, prospecting, diamond drilling, trenching, ground geophysical surveys and continued environmental baseline monitoring.

### Sampling and Prospecting

The 2015 soil sampling program will be undertaken during the summer months and include the collection of approximately 2,000 upper B horizon soil samples for Enzyme Leach analysis. Soil sample grids will be placed over known geophysical trends in the Dipole-RIB, YAT and Lac 50 areas, and analyzed for the geochemical signatures characteristic of anomalous mineralization. The geochemical surveys will be used to classify and prioritize bedrock conductors for drilling by identifying those conductors which have associated surface geochemical anomalies. Concurrently, soil sampling crews will map bedrock geology and collect prospecting samples where required.

### Drilling

Pending market conditions, Kivalliq Energy plans to drill approximately 10,000 metres in 2016 using two drill rigs contracted from Major Drilling International Inc. Three heli-portable Boyles 17 drill rigs and cuttings collection systems are currently stored on the Angilak Property and have been used to facilitate drill programs undertaken from 2009 to 2015 (see photo). Drilling activities will occur between June 1 and September 30, 2016.

Drill operations will be supported from the Nutaaq Camp via helicopter. Exploration drilling is planned for the RIB-Dipole target area and the YAT target, 27 kilometers and 16 kilometres southwest of the Lac 50 resource area respectively, and on targets within the Lac 50 Trend. Potential drill target areas for 2016 are shown on Figure 5.

### Trenching

Prospecting samples from historic trenches at the YAT target, 16 kilometres west of the Lac 50 resource area, have returned anomalous uranium, copper, silver and gold values. Using a small, heli-portable Candig mini-excavator currently on site (see photo), Kivalliq Energy plans to clean out and extend the historical YAT trenches. The cleaned trenches and exposed bedrock will then be subject to detailed mapping and rock chip sampling to evaluate the mineral potential of this target. Drill testing may follow as warranted.

### Ground Geophysics

Kivalliq Energy plans to continue with ground geophysical surveying in 2015. These surveys are done on foot and will be conducted during the summer months as directed by ongoing exploration and results. As on previous programs, this may comprise of several weeks of Mag/VLF and Gravity surveys. The ground geophysical surveys will investigate potential targets identified by the earlier airborne/ground geophysical surveys and the 2014/2015 sampling and prospecting programs.

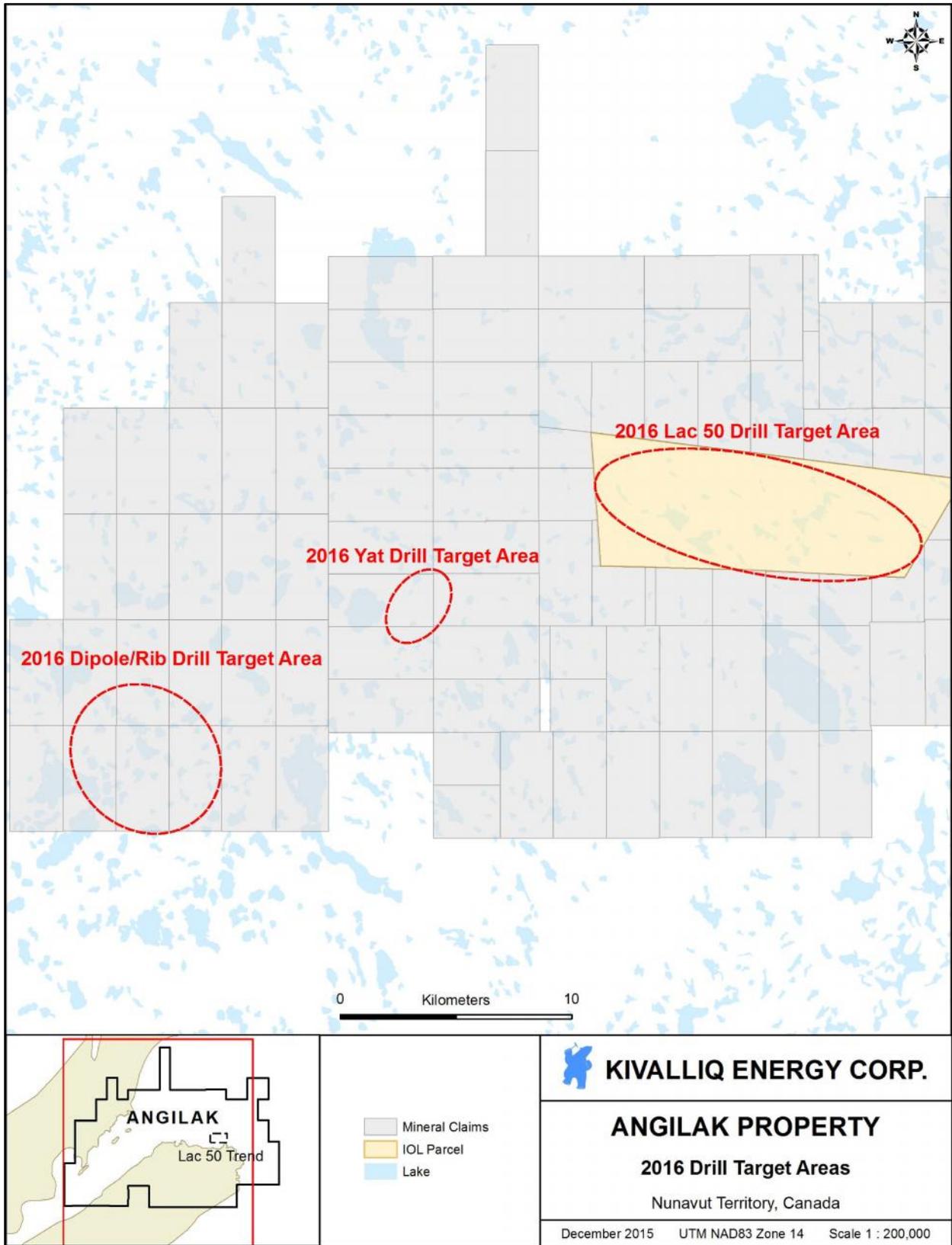


Figure 5: 2016 Diamond Drill Target Areas



*Boyles 17 Fly Drill Rig and Cuttings Settling Tanks / Collection System*



*Candig CD21 Mini Excavator*

## FUEL CACHES

Kivalliq Energy is permitted to store up to 3000 drums of fuel at the Nutaaq Camp fuel cache. The main cache site is located approximately 200 metres northwest of the Nutaaq Camp at 527800mE 6938100mN NAD 83 Z14 (62° 34' 22" N Lat. And 98° 27' 32" W Long.). The site offers an ideal smooth, sand covered, flat surface with no hazardous rocks or vegetation to perforate the berm membrane. All fuel is stored in secondary containment berms equipped with Spilfyter RailMat 3 ply hydrocarbon absorbent fabric and Rain Drain hydrocarbon filters for water drainage. Fuel drums will be transported to camp via Ookpik Turbo Otter. All drums, secondary containment berms and fuel caches are located a minimum 31 meters from any water body and will be inspected regularly. All storage, fueling and staging areas have readily available spill kits that are flagged. Spill trays are located under all the fuel drums behind the tents and at drill sites.

At the end of the 2015 program the Nutaaq Camp fuel cache contained 259 drums of diesel, 244 drums of jet fuel, one drum of gasoline and 19 propane cylinders. This fuel will be used for 2016 exploration activities. Empty drums are removed regularly and approximately 100 drums remain on site to be removed by Turbo Otter flights early in the 2016 season.



*Nutaaq Camp Fuel Berms*

## CAMP AND INFRASTRUCTURE UPGRADES

### Nutaaq Camp

Kivalliq Energy established the Nutaaq Camp at its present location on Crown mineral tenure in March 2010 (cover photo). The camp, helipads, fuel containment berms and core logging/storage facilities are located on an elevated flat topped gravel deposit at 527975m E, 6937950m N, NAD 83 Z14 (62° 34' 18" N Lat. And 98° 27' 19" W Long.)

The Nutaaq Camp comprises twenty-two individual structures; 1-14'x32' kitchen, 1-14'x16' kitchen overflow, 1-14'x32' wash tent, 1-14'x16' toilet shack, 1-14'x16' Level II First Aid facility, a 10'x12' generator shed, 1-14'x16' office, 1-14'x 32' core tent, 1-14'x32' core splitting tent, 1-30'x60' Sprung structure and 11-14'x16' vinyl Weatherport sleeper tents. A solar-operated Bearwise electric bear fence surrounds the Nutaaq Camp and the Sprung Tent. Figure 6 below shows the camp layout. No camp infrastructure upgrades are planned for 2016.

### Nutaaq Airstrip

The Nutaaq airstrip is a 350 metre long flat topped, gravel tundra strip located 1.5 kilometres west of the Nutaaq Camp at 526380mE 6938130mN NAD 83 Z14 (62 34' 20" N Lat., 98 29' 10" W Long.). This gravel strip will be used to support all summer exploration activities in 2016 on the Angilak Property.

### Water and Waste Management

Water and aquatic life are protected. Water supply pumps and fuel are stored a minimum of 31 metres from any water body, on level ground and/or down gradient whenever possible. Waterlines for drilling and domestic use are properly placed to minimize disturbance and are fitted with intake screens. No wastes enter water bodies and camp grey water is filtered through a grease trap then drained through a weeping tile bed buried in sands behind the camp dry/shower facility. Daily water use is recorded for domestic camp water and drill water usage.

The Nutaaq Camp has an A400 Inciner8 incinerator at the south end of the camp compound 25 metres south of the camp generator shed. All permissible combustible waste including food waste is incinerated daily. Incinerator ash is collected in 205 litre steel drums with locked lids. Filled ash drums are staged at the incinerator until removed from site. Recyclable plastics and cans are separated as produced and stored in bulk bags for removal from site. All disposal from site is arranged through waste management specialists KBL Environmental.

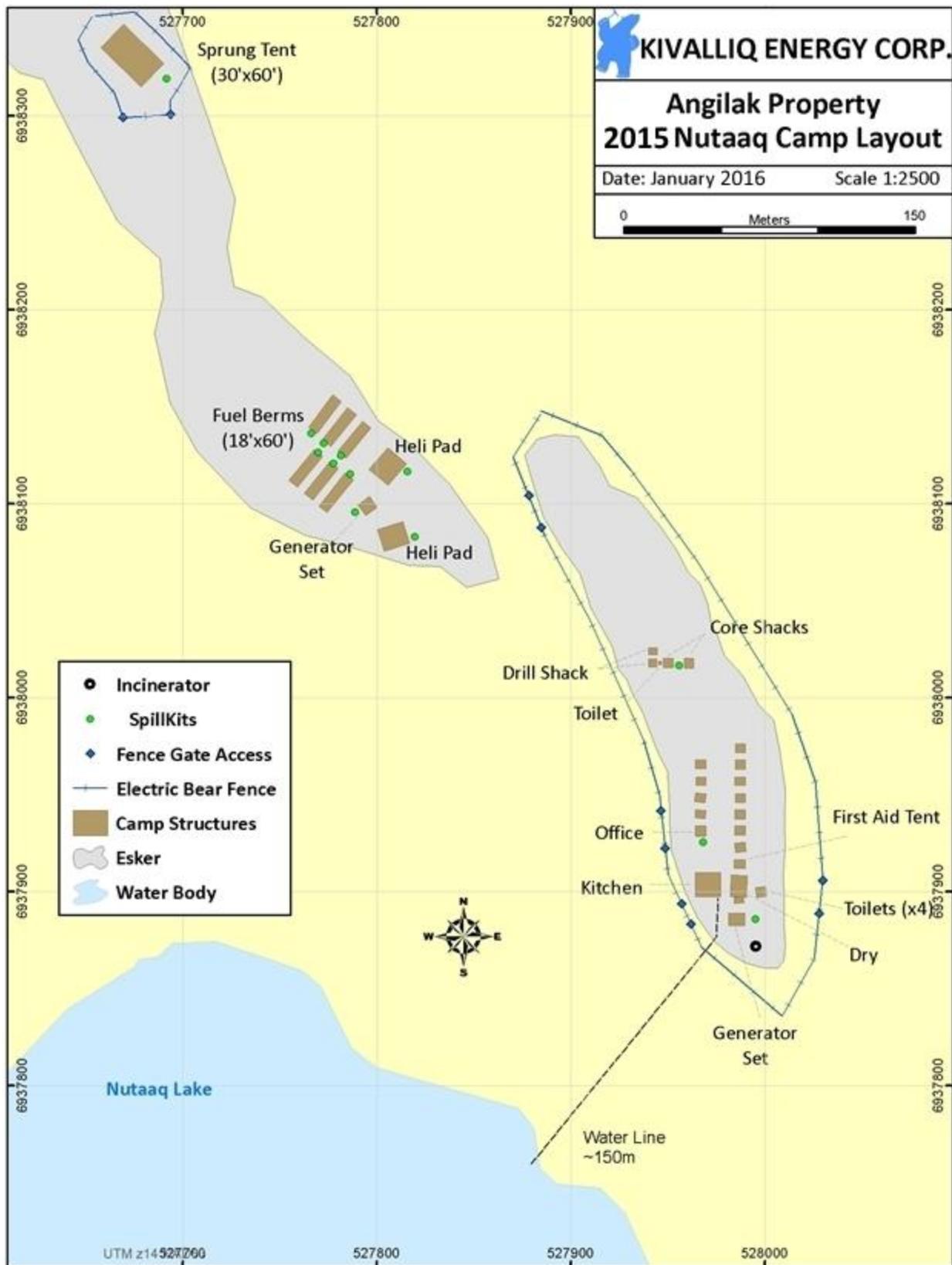


Figure 6: Nutaaq Camp Layout

## ENVIRONMENTAL BASELINE MONITORING PROGRAM

The ongoing environmental baseline program is designed to build an understanding of local and regional environmental attributes. The program was initiated in 2010 and has been conducted on an annual basis since that time. The environmental monitoring program results are compiled and appended to the report on work sent to the KIA, INAC and NIRB annually. The following environmental baseline monitoring will be conducted in 2016:

### Water Quality

In 2010, 20 representative sample sites were established on water bodies focused around the Lac 50 exploration area and camp location. An additional six sites were added in 2012. These sites have been sampled annually since the water quality sampling program commenced in 2010. Two more sites were added on the west side of the Property in 2015: a site at Dipole lake was added prior to the 2015 drilling and; a site at RIB lake, a high priority exploration target four kilometres south of Dipole.

As Kivalliq's ongoing exploration program advance targets elsewhere on the property, additional water quality sites may be added to the existing program in 2016 to monitor any possible influence. Water is analyzed for hardness, metals, pH, total suspended solids, ammonia, nitrate, cyanide and alkalinity.

### Meteorology

A fully automated climate station was installed near the camp in 2010. The parameters being recorded are: temperature, relative humidity, total precipitation, barometric pressure, wind speed and direction. The data is transmitted via satellite to a secure database every three hours. While camp is operational, manual weather information is also collected by trained Kivalliq Energy staff to corroborate the weather station data and fill gaps during intermittent technical interruptions.

### Wildlife Monitoring

The overall objective of the wildlife program is to record and describe wildlife use of the study area, and produce coarse-scale population estimates for Project valued ecosystem components (VECs) occurring in the study area. As in the previous six years, the 2016 program will consist of logging incidental observations of all wildlife encountered and providing information to field staff to help them recognize high profile VECs and Species at Risk that could potentially occur within the project area.

## ENVIRONMENTAL CONSIDERATIONS

All employees and contractors working for Kivalliq Energy are made aware of the company's internal policies and procedures and are made familiar with the Terms and Conditions of the project's operational licences and permits. Every person arriving at the Angilak Property undergoes an orientation which includes information on health, safety and environmental responsibilities and stewardship. In addition to operational licences and permits, all safety manuals, internal guidelines and plans are on file with the Project Supervisor, posted at the Nutaaq camp and include:

- 2015 Angilak Energy Field Safety Manual
- 2015 Radiation Hazard Control Plan
- 2015 Emergency Response Plan
- 2015 Spill Contingency Plan
- 2015 Fuel Management Plan
- 2015 Wildlife and Environmental Mitigation Plan
- Closure and Reclamation Plan

These documents are updated on an annual basis and are available upon request.

Archaeological sites identified during the course of exploration activities are handled with the utmost care. The location is recorded using a GPS and designated off limits to all workers. Disturbance is prohibited. Kivalliq Energy contracts Points West Heritage Consultants to document, survey and record, archaeological sites identified on the Angilak Property. As defined in the Nunavut Archaeological and Palaeontological site regulations and Nunavut Archaeologist Permits, final reports from Points West Heritage Consultants are submitted to the Chief Archaeologist at the Department of Culture, Language, Elders and Youth (CLEY) and the KIA.