



# Work Plan 2019 Angilak Property ValOre Metals Corporation

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**(formerly Kivalliq Energy Corporation)**

**Inuit Land Use Licence Number: KVL308C09**

**CIRNAC Land Use Permit Number: N2012C0030**

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



**Submitted to: KIA, CIRNAC, NIRB**

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**ValOre Metals Corp. (formerly Kivalliq Energy Corporation)**

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## 1. Corporate Background and Project Information

ValOre Metals Corporation (ValOre) (formerly Kivalliq Energy Corporation) is a Vancouver-based mineral 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. On June 28, 2018 Kivalliq Energy Corp. officially changed their name to ValOre Metals Corporation.

ValOre conducts exploration at the Angilak Property under a Mineral Exploration Agreement (MEA) with Nunavut Tunngavik Inc. (NTI) for Inuit Owned Land (IOL) parcel IOL RI-30. was the first company in Canada to sign a comprehensive agreement with Nunavut Tunngavik Inc. (NTI) to explore on Inuit Owned Land (IOL) for uranium. As part of this landmark partnership, ValOre must meet certain expenditure and corporate commitments to NTI. The company pays an advanced royalty annually. Upon a production decision at the Angilak Property, NTI can elect to have a participating interest in the project or collect royalties. The agreement not only applies to IOL RI-30, but also, extends to 57 Crown issued mineral claims.

ValOre Metals Corporation was formed to advance the Angilak Property and other uranium opportunities in Nunavut. Management has extensive background working in Canada's north. Jim Paterson is Chairman and Chief Executive Officer; Jeff Ward serves as President and Andrew Berry is Chief Operating Officer. The group is committed to the social and economic development of the north while maintaining a level of excellence in minimizing environmental impacts.

Since 1979, the Property and surrounding area has been called various names (i.e. LGT, Yathkyed, and Lac Cinquante); however, going forward, ValOre 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, ValOre 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. 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%  $U_3O_8$  (15.2 lbs  $U_3O_8$ /tonne), totalling 43.3 million lbs  $U_3O_8$  at a 0.2%  $U_3O_8$  cut-off grade.

The Angilak Property also hosts gold, silver, copper and platinum group metals occurrences. Programs since 2013 have focused on acquiring additional property-wide geotechnical data. A modest drill program was conducted in July 2015 at the Dipole occurrence 25 kilometres southwest of Lac 50. No further drilling has been completed on the property since that time.

## 2. Property Description and Location

The Angilak Property consists of 57 mineral claims, 1 pending mineral lease and Inuit Owned Land Parcel RI-30 (IOL), comprising a total area of 60,363 hectares 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, the area of the mineral claims and the IOL extends 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 licences and permits, authorizing exploration work over the entire property area have been issued, amended and renewed by the Kivalliq Inuit Association (KIA) for parts of the property covering Inuit Owned Lands (IOL) and Crown Indigenous Relations and Northern Affairs Canada (CIRNAC) for mineral claims on crown lands. A Nunavut Water Board (NWB) licence authorizes ValOre water usage on the property. See Table 1 for active permits and licences issued for lands that comprise the Angilak Property.

**Table 1: 2018 Land Use Permits and Licences**

<b>Issuing/Screening Agency</b>	<b>Date Issued</b>	<b>File Number</b>	<b>Expiry Date</b>
KIA	01-Aug-08	KVL308C09	06-Aug-19
NIRB	31-Jul-08	08EN052	N/A
CIRNAC	07-Aug-13	N2012C0030	01-Aug-19
NWB	18-May-18	2BE-ANG1823	17-May-23

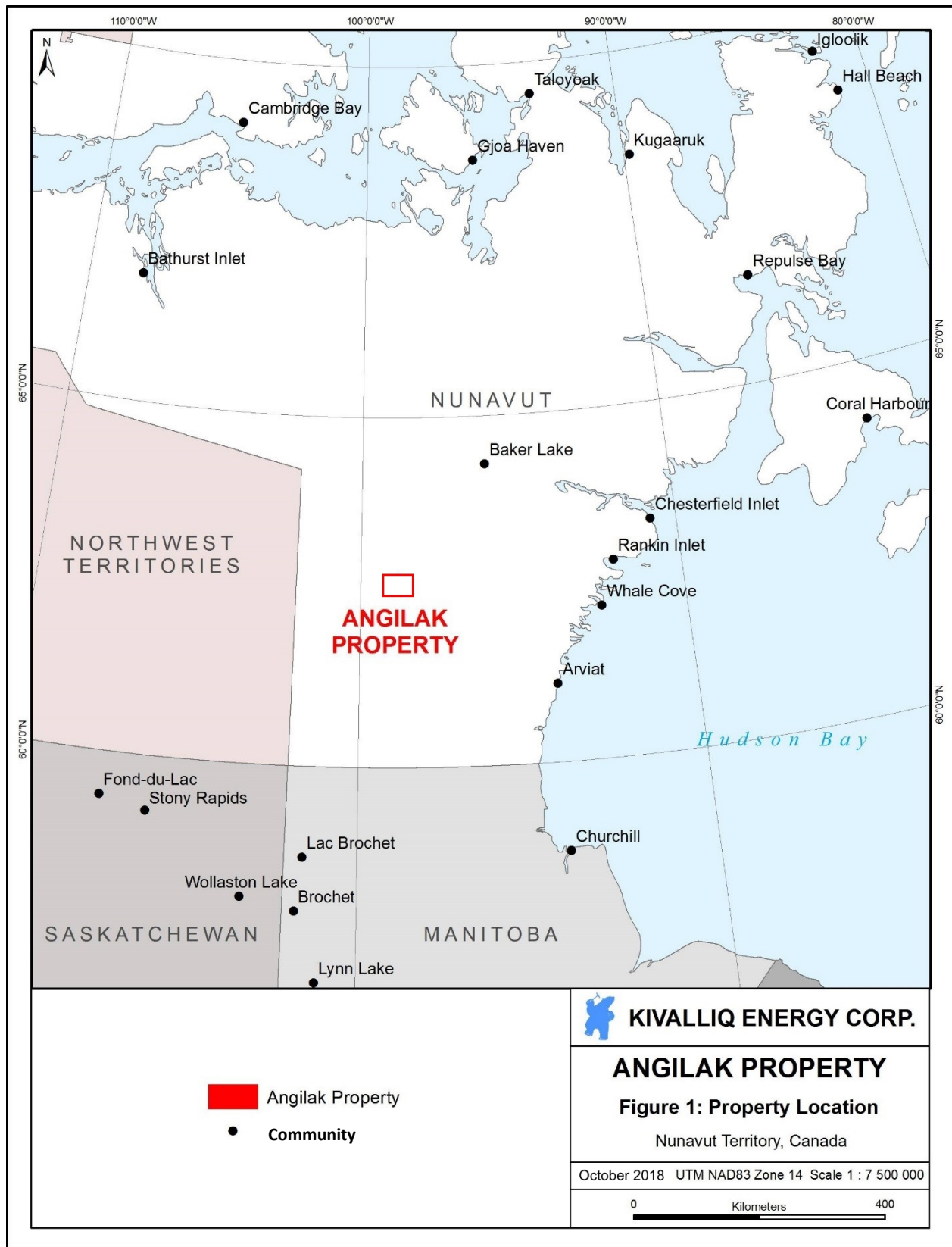


Figure 1: Angilak Property Location



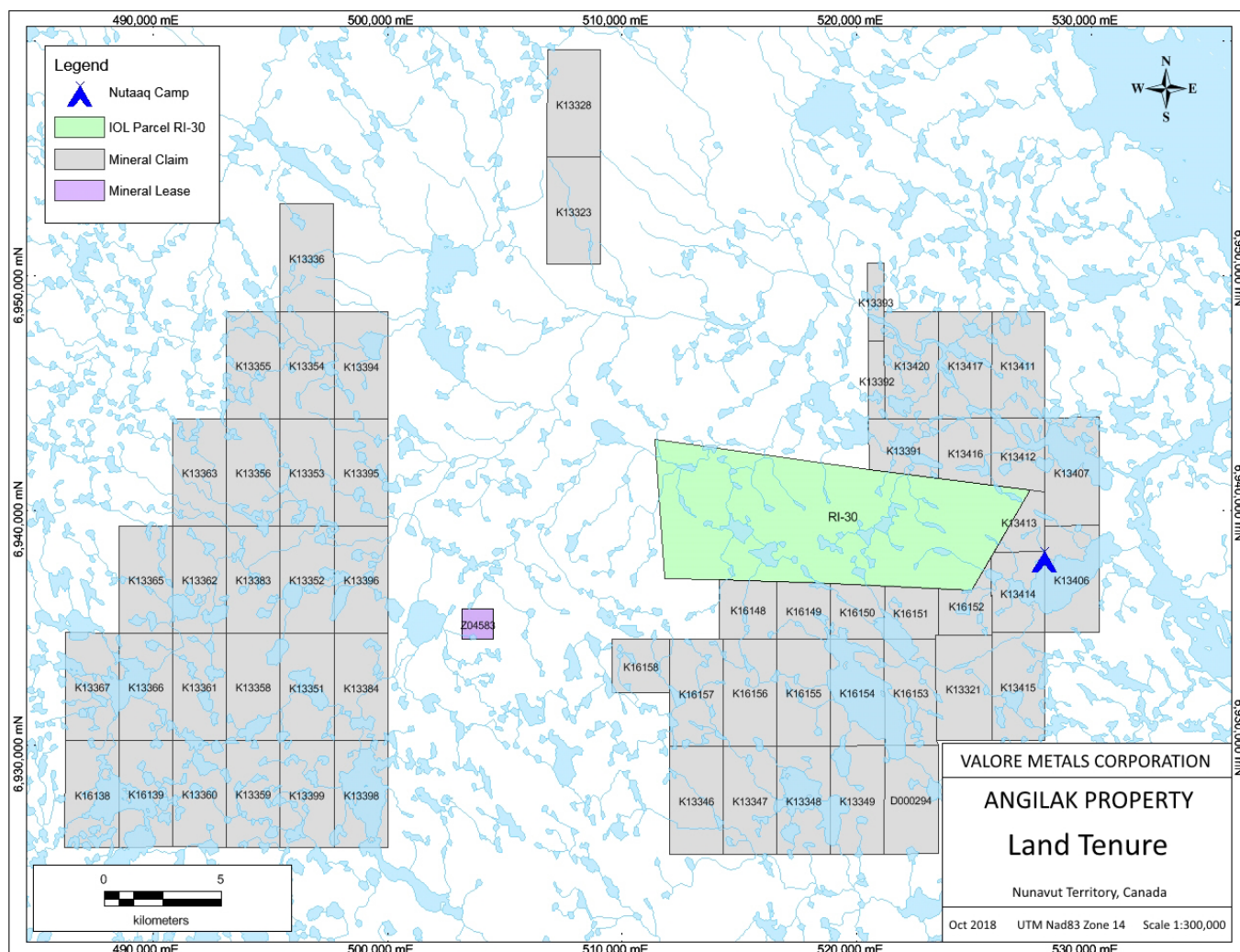


Figure 2: Angilak Property Land Tenure

### 3. Work Completed to Date

#### 3.1. 2018 Program

No exploration program was conducted at the Angilak Property in 2018. An annual property visit was conducted between July 4 and July 5, 2018 to conduct camp maintenance and claim surveying. Two Discovery Mining Services employees conducted camp maintenance including general clean up and fuel berm inspection. Two surveyors from SubArctic Geomatics Ltd. conducted a legal land survey of claim boundaries to bring one claim on the Angilak Property to lease.

#### 3.2. 2017 Program

No exploration program was conducted at the Angilak Property in 2017. A property inspection was conducted on June 26, 2017 at which time a camp maintenance visit was deemed necessary. From July 15 to July 20, 2017 a three-man crew performed camp maintenance, serviced the camp fuel berms and dismantled the bear fence surrounding the camp compound.

### **3.3. 2016 Program**

Exploration conducted on the Angilak Property in 2016 included soil sampling, heavy mineral sampling and trenching with channel and rock sampling.

Soil surveying collected 704 Enzyme Leach (EL) soil samples over three target grids and 172 conventional soil samples over the Yat target. Three historic trenches were re-excavated and five new trenches were excavated at the Yat target area. The program collected channel samples cut from exposed bedrock in the trenches and rock “grab” samples from frost heaved boulders. A total of 49 channel samples and 51 “grab” samples were sent to SRC for ICP-MS analysis. Thirteen magnetic low targets were tested for diamond indicator minerals with the collection of 39 heavy mineral samples.

### **3.4. 2007-2015 Program**

Exploration work in 2015 included diamond drilling, EL 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. A total of 958 metres in nine diamond drill holes were completed by Major Drilling between July 5 and July 26, 2015. A total of 408 EL soil samples were collected in the RIB Area and YAT Zone. In addition, eight rock samples were also collected as part of the program.

The 2014 exploration program included EL soil sampling, an airborne Versatile Time Domain Electromagnetic (VTEM) geophysical survey and environmental baseline monitoring. 1514 EL soils samples were collected in the Lac 50 and Dipole-RIB Trends and Geotech Airborne Geophysical Surveys conducted airborne VTEM surveying over 1334.7 line kilometres of VTEM at the KU and Dipole Targets.

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. The 2013 soil sampling program collected 1647 samples and 591.6 line kilometres of OhmMapper survey, 300.9 line kilometres of combined Magnetic (Mag) and Very Low Frequency Electromagnetic (VLF-EM) survey and 9.5 line kilometres of Extremely Low Frequency (ELF) survey were completed.

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. Ground geophysical surveying covered 2,556 stations of gravity data, 309 line kilometres of Mag/VLF-EM data, two kilometres of seismic data and eight radiometric grids. 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. 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.

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 2007/2008 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.

## **4. Activities for 2019**

### **4.1. Exploration**

The proposed 2019 exploration program will be conducted from June through to September and will include geochemical sampling, prospecting and continued environmental baseline monitoring. Exploration contemplated in 2019 will take place in areas of current and past exploration that are permitted by CIRNAC, KIA and the NWB (Figure 3).

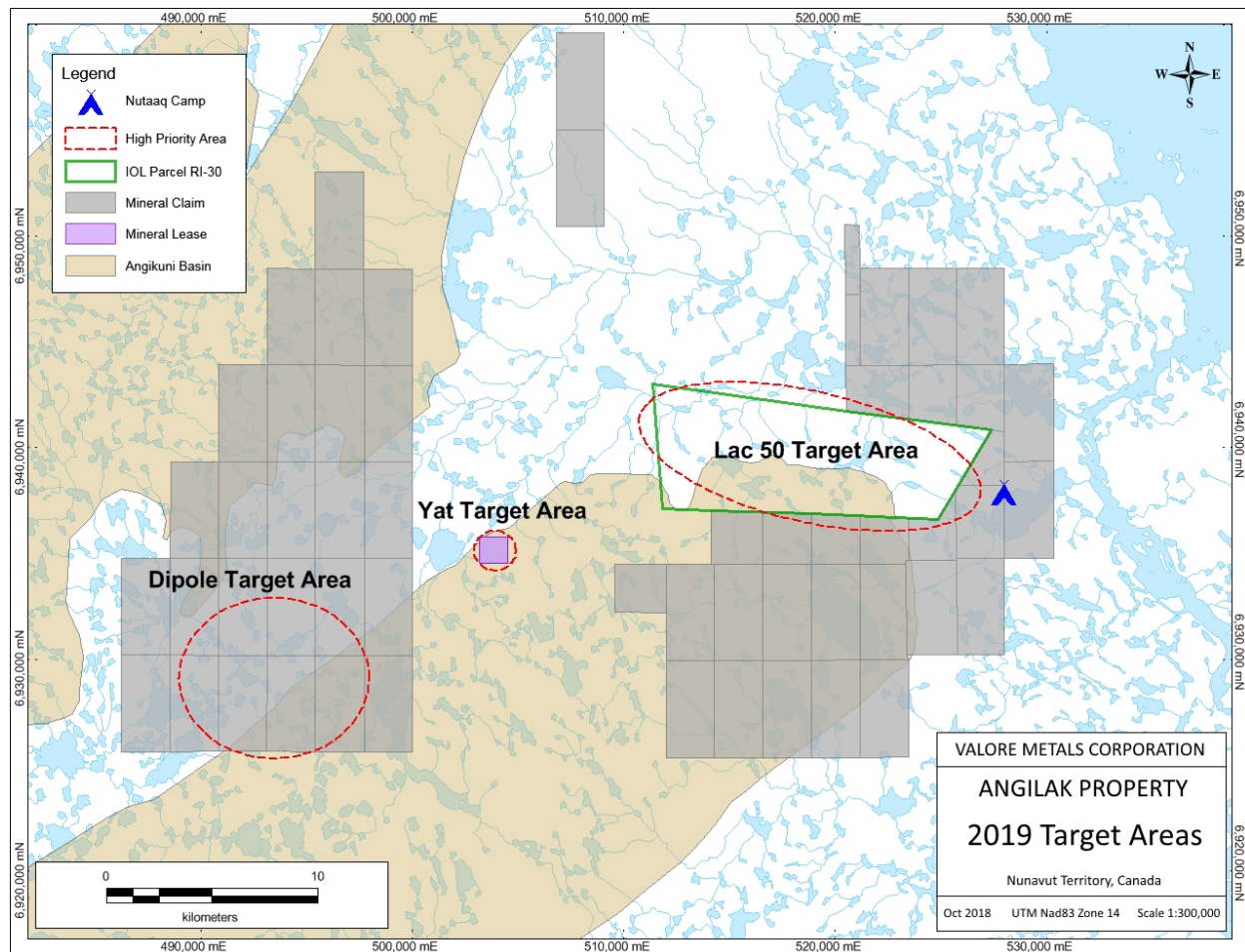
#### **4.1.1. Sampling and Prospecting**

The 2019 soil sampling program will be undertaken during the summer months and will include the collection of approximately 3,000 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 electromagnetic 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.

#### **4.1.2. Drilling**

Drilling is not proposed for the 2019 exploration program.





**Figure 3: 2018 Exploration Target Areas**

## 4.2. Fuel Caches

ValOre 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 on Crown Lands 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. 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 easily visible and readily available spill kits. Spill trays are located under all the fuel drums behind the tents and at drill sites.

At the end of the 2018 maintenance program the Nutaaq Camp fuel cache contained 235 drums of diesel, 187 drums of jet fuel, three drums of gasoline and 14 propane cylinders. Approximately 500 drums remain on site to be removed by Turbo Otter flights during future exploration programs. No fuel was brought in for the 2018 camp maintenance visit.



Figure 4: Nutaaq Camp Fuel Berms

### 4.3. Camp and Infrastructure

#### 4.3.1. Nutaaq Camp

ValOre 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 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 10-14'x16' vinyl Weatherport sleeper tents. Figure 4 below shows the camp layout. No camp infrastructure upgrades are planned for 2019.

Camp infrastructure, core storage, fuel storage and the airstrip are located on crown mineral claims subject to CIRNAC Land Use Permit N2012C0030. Temporary storage of drill cuttings and temporary drill equipment staging areas are located on IOL Parcel RI-30 and subject to KIA Land Use Licence KVL308C09.

#### 4.3.2. 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 2019 on the Angilak Property.

#### 4.3.3. 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. Waste materials are removed to Baker Lake and stored in a sea can for shipment south to an authorized disposal facility.

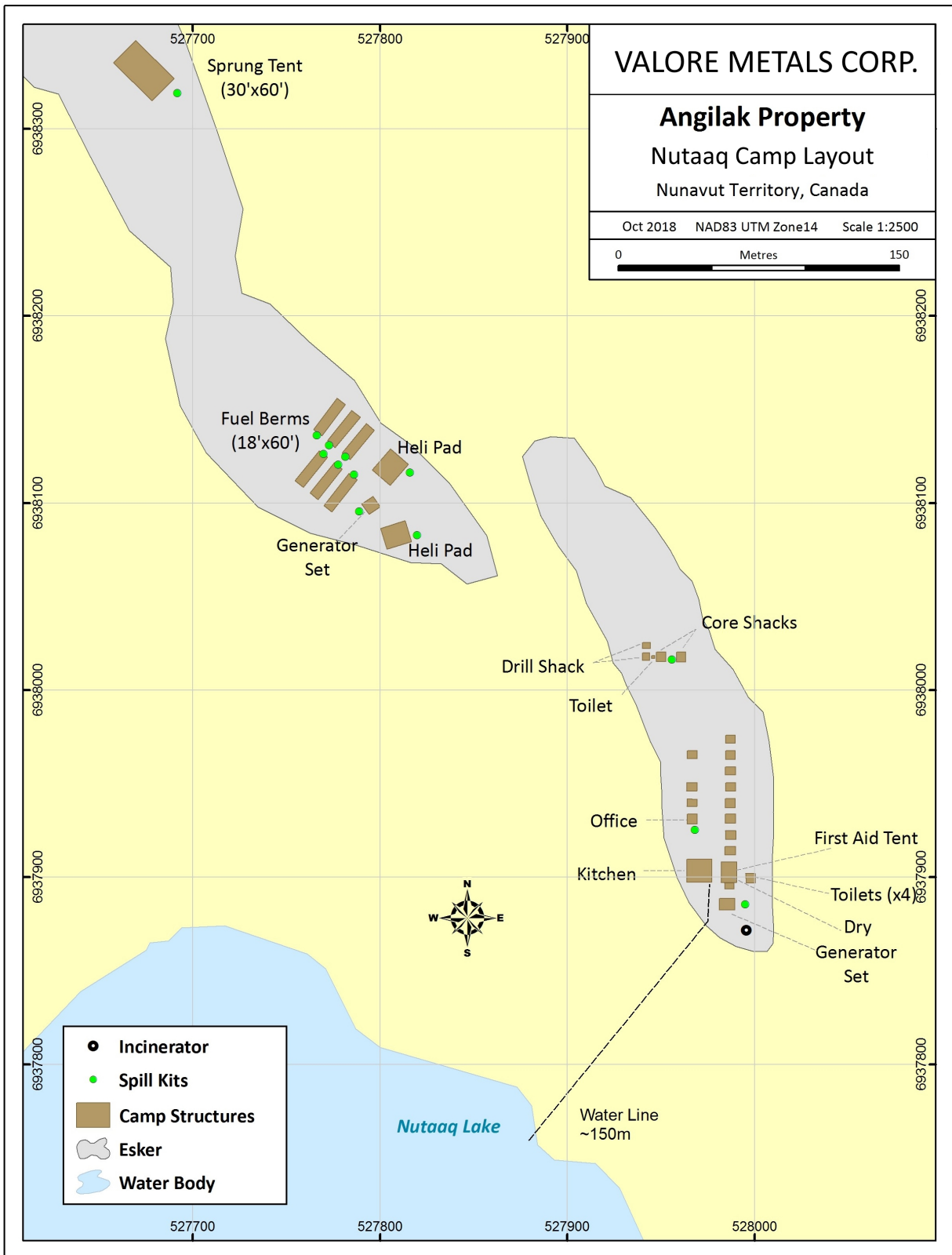


Figure 5: Nutaq Camp Layout

#### **4.4. 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 with the exception of 2017 and 2018 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, CIRNAC and NIRB annually. The following environmental baseline monitoring is proposed in 2019:

##### **4.4.1. 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 during drill programs 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 ValOre's ongoing exploration program advance targets elsewhere on the property, additional water quality sites may be added to the existing program in 2019 to monitor any possible influence. Water is analyzed for hardness, metals, pH, total suspended solids, ammonia, nitrate, cyanide and alkalinity.

##### **4.4.2. Meteorology**

A fully automated Onset Hobo Weather Station with an OTT Pluvial Rain Gauge that was installed on the Angilak Property in June 2010. Parameters recorded include; air temperature, relative humidity, total precipitation, barometric pressure, wind speed and direction. Meteorological data was collected regularly until 2014. Since then, data has been intermittently recorded manually and/or electronically, depending on the duration and scope of camp activity. Periodic interruptions are the result of damage to the station caused by extreme weather. Repairs and maintenance are proposed for 2019.

##### **4.4.3. 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 seven years, the 2019 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.



#### 4.5. Environmental Considerations

All employees and contractors working for ValOre 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:

- Field Safety Manual
- Radiation Hazard Control Plan
- Emergency Response Plan
- Spill Contingency Plan
- Fuel Management Plan
- Wildlife and Environmental Mitigation Plan
- Abandonment 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. Points West Heritage Consultants was contracted 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, project reports from Points West Heritage Consultants were submitted to the Chief Archaeologist at the Department of Culture, Language, Elders and Youth (CLEY).