

Kahuna Property Field Camp

$\mathcal{D}^{\mathfrak{b}}_{\mathcal{C}} \mathcal{D}^{\mathfrak{c}}_{\mathcal{A}}: 778\ 327\ 5799, \mathcal{A}^{\mathfrak{b}}_{\mathcal{C}} \mathcal{A}^{\mathfrak{c}}_{\mathcal{A}}: 778\ 327\ 6675$

ᐅᑦᓂᕈᖃᓯᔭᓪᓗᒃᓴᓱᓄᑦ: Dunnedin Ventures Inc. Kahuna Property is located between the communities of Rankin Inlet (Kangiqitiniq) and Chesterfield Inlet (Igluigaarjuk) in the Kivalliq Region of Nunavut. The property comprises 145 mineral claims encompassing 166,463 hectares and extends north, south, east and west between Latitudes 62°58' and 63°19' North and Longitudes 90°44' and 92°13' West. A total of 82 mineral claims have surface rights covering 87,570 Ha that are within, or partially within, the boundaries of surface Inuit Owned Land parcel CI-15. Exploration activities on the Kahuna Property are currently permitted under INAC Land Use Permit N2015C0019, KIA Land Use Licence KVL315B01, KIA Land Use Licence KVR16F01 and NWB Water Licence 2BE-KDP1722. Project amendment documents are being submitted to NPC and NIRB and then distributed to INAC, KIA and NWB, to authorize a temporary field camp and a fuel cache on Crown Lands under INAC Land Use Permit N2015C0019, and to authorize domestic water use for the temporary field camp under NWB Water Licence 2BE-KDP1722. The temporary camp will be used to support planned 2018 exploration activities that are currently authorized by Dunnedin's existing permits and licenses. The planned 2018 exploration program includes rock, till and soil sampling, prospecting and geological mapping, ground geophysical surveying, diamond drilling and reverse circulation drilling. Work will start in mid-February with an overland haul of equipment and supplies on Dunnedin's permitted overland winter trail from Rankin Inlet to the property using Caterpillar Challengers and cargo sleds. Camp construction will commence in late February upon arrival of the camp supplies. The drill program will operate from March to mid-May. Ground based prospecting and sampling activities will follow in mid-June once the land is free from snow and the property surface is fully accessible. Members of the Chesterfield Inlet HTO provided assistance and recommendations for the site selected by Dunnedin for the proposed field camp location. More than 10 different sites were investigated. A large, flat topped esker feature was recommended as the best the location. The site is on Crown Lands approximately 40 kilometres northeast from Rankin Inlet and 50 kilometres southwest from Chesterfield Inlet at 575,975mE and 6,990,875mN in Zone 15, UTM NAD83. The new camp will operate seasonally from March through September and will accommodate up to 20 people. The camp will include: 1 kitchen tent, 1 office tent, 1 dry tent, 1 utility tent, 1 core logging tent, 7 supplementary sleep tents, a Pacto latrine facility, a small generator shed, an incinerator and 2 arctic grade containment fuel berms. Structures will consist of a combination of WeatherPort vinyl tents, canvas prospectors' tents and small plywood sheds. The field camp will be fully closed and dismantled completely once exploration activities cease. The site will then be reclaimed and restored to its original state.Dunnedin's existing permits and licenses include authorization for 3 fuel caches that together contain an aggregate of 75 drums (205L each) of jet fuel and 120 drums of diesel fuel. Dunnedin requests an increase in the amount of fuel to be cached on the Kahuna Property to support the field camp, the proposed 2018 winter drill program and the summer 2018

DΔΛNOC: The proposed project will not affect the city of Iqaluit.

Inuinnaqtun: The proposed project will not affect the communities of Cambridge Bay, Kugluktuk, Bay Chimo or Bathurst Inlet.

Post-Closure Phase: from to

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ᐃᓄᓕᓴᓯᐱᖅ	Simeonie Sammurtok, Mayor of Chesterfield Inlet	Hamlet Council of Chesterfield Inlet	2017-11-10
ᑲᖅᒋᖅᓇᓂᖅ	L.Manzo, J.Tulugak, B.Osmond (KIA).	Kivalliq Inuit Association	2017-10-26
ᑲᖅᒋᖅᓇᓂᖅ	L.Manzo, J.Tulugak, B.Osmond (KIA). J.Tattuinee, B.Sigurdson, H.Towtongie, C.Beardsall (CLARC). C.Tartak (HTO Manager)	Kivalliq Inuit Association. Community Lands and Resources Committee. Aqiggiag HTO.	2017-10-27
ᐃᓄᓕᓴᓯᐱᖅ	S.Sammurtok (Mayor). P.Kattegatsiak, P.Kadjuk, L.Mimialik, A.Kadluk, H.Aggark (CLARC). V.Ipkarnerk (KIA). R.Mullins, D.Kattegatsiak, L.Autut (Hamlet).	Community Meeting: CLARC, KIA, Hamlet of Chesterfield Inlet, Aqigiq HTO and members of the community.	2017-10-25

	J.Misheralak, J.Aggark, M.Arnauyok (HTO).		
ᑭᖃᓴᐅᓂᖅ	G.Karlik, J.Tulugak, L.Manzo (KIA)	Kivalliq Inuit Association	2017-09-30
Δᓄᓕᓴᓗᖅ	H.Aggark (Deputy Mayor of Chesterfield Inlet), J.Misheralak (Aqigiq HTO)	Hamlet of Chesterfield Inlet, Aqigiq HTO	2017-09-29
Δᓄᓕᓴᓗᖅ	S.Sammurtok (Mayor), R.Mullins, D.Kattsegatsiak (Hamlet)	Community Meeting: Hamlet of Chesterfield Inlet and members of the community.	2017-08-17
Δᓄᓕᓴᓗᖅ	S.Sammurtok (Mayor), R.Mullins, D.Kattsegatsiak, J.Krako, L.Autut (Hamlet), H.Aggark (HTO Chair), S.Autut	Hamlet of Chesterfield Inlet, Aqigiq HTO	2017-08-16
Δᓄᓕᓴᓗᖅ	S.Sammurtok, R.Mullins, D.Kattsegatsiak (Hamlet)	Hamlet of Chesterfield Inlet	2017-08-16
Δᓄᓕᓴᓗᖅ	T.Sammurtok (MLA), P.Kattegatsiak, V.Ipkarkerk (KIA), S.Sammurtok (Mayor), H.Aggark (Deputy Mayor/HTO Chair)	Community Meeting: Hamlet of Chesterfield Inlet, Kivalliq Inuit Association, Aqigiq HTO and members of the community.	2017-06-20
Δᓄᓕᓴᓗᖅ	S.Sammurtok (Mayor of Chesterfield Inlet), J.Misheralak (HTO)	Site Visit: Hamlet of Chesterfield Inlet, Aqigiq HTO	2017-06-20

	circulation drilling and bulk sampling.			
የኢትዮጵያ ፌዴራል ዲሞክራሲያዊ ሪፐብሊክ	KVL315B01. Land Use License for Staking & Prospecting, Exploration, Drilling, Bulk Sampling on Inuit Owned Land Parcel CI-15.	Active	2017-07-14	2019-11-02
የኢትዮጵያ ፌዴራል ዲሞክራሲያዊ ሪፐብሊክ	KVRW16F01. Right of Way Land Use License for an Overland Winter Trail from Rankin Inlet to the Kahuna Property.	Active	2017-04-02	2018-04-02
ዶክተር ልብ ለብ	2BE-KDP1722. Type B Water Licence for the use of water on the Kahuna Project. Quantity of water use not to exceed: one hundred (100) cubic metres per day.	Active	2017-06-01	2022-05-31
ኢ.ኤስ.ሲ. ፌዴራል ንግድ ቤት	An INAC amendment application has submitted to NIRB and upon screening decision will be submitted to INAC to add a temporary field camp on Crown Lands under N2015C0019.	Applied, Decision Pending		
ዶክተር ልብ ለብ	A NWB amendment application has submitted to NIRB and upon screening decision will be submitted to NWB to authorize domestic water use not exceeding three (3) cubic metres per day for the temporary field camp under Water Licence 2BE-KDP1722.	Applied, Decision Pending		

Project transportation types

Transportation Type	የፍሳሪ ቁጥር	ፖርት ትይዩም	Length of Use
Air	0	Helicopter-supported	

Land	0	Caterpillar Challengers with sleds, snowmobiles	
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Project accomodation types

Temporary Camp

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 $\mathbb{Q}^b C d^c$

$$\Delta^b C d_{\sigma} \sim \Delta^a \sigma^a$$

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Camp	የፍጥነት መለኪያ የፍጥነት መለኪያ ዓይነት	~0.05m3/day	Duel-walled fuel-fired incinerator	Ash collected and removed from site for authorized disposal.
Camp	የፍጥነት መለኪያ የፍጥነት መለኪያ ዓይነት	<3m3/day	Greywater sump	Sump backfilled upon final closure.
Camp	የፍጥነት መለኪያ የፍጥነት መለኪያ ዓይነት	0.005m3/day	Collected in sealed and labelled drums.	Removed from site to a registered hazardous waste receiver.
Camp	የፍጥነት መለኪያ የፍጥነት መለኪያ ዓይነት	0.05m3/day	Collection	Transported off site for authorized recycling/disposal.
Camp	የፍጥነት መለኪያ የፍጥነት መለኪያ ዓይነት	0.05m3/day	Incinerated and ash collected.	Ash transported off site for authorized disposal.

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Camp activities are not likely to significantly impact the permafrost, soil and sediment quality. Camp structures will be elevated to prevent permafrost thaw. Soil quality can be impacted by hazardous materials spills and waste discharge and will be treated as per the Spill Prevention and Response Plan. The camp grey water sump will be outfitted with a grease trap and screen to ensure food grease and solids do not enter the waste water sump. No contamination of the water supply is predicted. Upon final closure, the sump will be infilled and re-contoured. The camp location was chosen in a location with minimal vegetation to reduce the need for clearing. Due to the short duration of the program and the remote location of the field camp, measurable impacts to the air quality are not anticipated. Noise quality may be effected by helicopters and generators which can disturb wildlife. Helicopters are to maintain a minimum altitude of 610 metres where wildlife is observed to mitigate impacts by noise. The predicted impacts to wildlife due to the presence of the Kahuna Property field camp include attracting wildlife and habitat disturbance. Dunnedin will discourage attracting wildlife by minimize all waste and properly storing attractants until they can be removed from camp. Habitat disturbance from the field camp is temporary and upon final closure the site will be reclaimed and restored to its original state. Camp layout will be designed to minimize its footprint and limit its impact. No birds, eggs or nests are to be disturbed. Flight restrictions are in place where colonies of birds are observed. Positive socioeconomic impacts are anticipated from employment opportunities for local Inuit and increased business for northern companies and services. Please see the Environmental and Wildlife Management Plan and other management plans included in the project documents for additional details.

Additional Information

SECTION A1: Project Info

SECTION A2: Allweather Road

SECTION A3: Winter Road

SECTION B1: Project Info

SECTION B2: Exploration Activity

SECTION B3: Geosciences

SECTION B4: Drilling

SECTION B5: Stripping

SECTION B6: Underground Activity

SECTION B7: Waste Rock

SECTION B8: Stockpiles

SECTION B9: Mine Development

SECTION B10: Geology

SECTION B11: Mine

SECTION B12: Mill

SECTION C1: Pits

SECTION D1: Facility

SECTION D2: Facility Construction

SECTION D3: Facility Operation

SECTION D4: Vessel Use

SECTION E1: Offshore Survey

SECTION E2: Nearshore Survey

SECTION E3: Vessel Use

Vegetation within the Southern Arctic Ecozone is adapted to short, cold growing seasons; high persistent winds and acidic soils over permafrost. The Ecozone is bounded to the south by the tree line, a broad ecological division between the taiga forest and the treeless arctic tundra. Low precipitation and extremely low winter temperatures are among the factors that discourage tree growth. The near continuous blowing of cold, dry winds and the presence of permafrost also restricts plant growth. Low shrubs such as the Shrub Birch, Willow and Labrador Tea are well adapted to these conditions. On the most exposed sites, low shrubs give way to mats of lichens, mosses, and ground-hugging shrubs such as Mountain Cranberry and Least Willow. Low biological productivity, a short growing season, and extremely cold long winters are demanding on wildlife so those found

Impacts

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Camp		-	-	N	-	N	-	-	-	N	-	N	M		N	N	N	-	-		P	-	-	-	-
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