ᓄᓇᕘᒥ ᐊᕙᑎᓕᕆᔨᒃᑯᑦ ᑲᑎᒪᔨᖏᑦᑎᒍᑦ ᑐᒃᓯᖅᑑᑦ ᕿᒥᕐᕈᔭᒃᓴᖅ #125411

3BM- GJO 1318 Gjoa Haven Water Licence Renewal , Type B

ᑐᒃᓯᖅᑑᑕᐅᔪᖅ ᖃᓄᐃᑦᑑᓂᖓ:	Amendment
ᐱᓕᕆᐊᕆᔭᐅᔪᒪᔫᑉ ᖃᓄᐃᑦᑑᓂᖓ:	ᐃᒪᖅ
ᐅᓪᓗᖓ ᑐᒃᓯᖅᑑᑎᓕᐊᖏᓂᐅᑉ:	10/19/2018 7:31:00 PM
Period of operation:	from 0001-01-01 to 0001-01-01
ᑲᔪᓯᒃᑲᐃᓯᐅᓂᐊᕋᓯᒋᔭᐅᔪᑦ:	from 0001-01-01 to 0001-01-01
ᐱᓕᕆᐊᖃᕈᒪᔪᖅ:	Shah Alam Community and Government Services (CGS) Helen Maksagak Centre Cambridge Bay NU X0B 0C0 Canada ᐅᖄᓚᐅᑏᑦ: 8679834156, ᓱᑲᔪᒃᑯᑦ: 8679834123

ᑐᓴᐅᒪᔪᑦᓴᑦ

ᖃᓄᐃᑦᑐᑎᓂᒃ ᐱᓕᕆᐊᖃᕐᓂᐊᕆᐊᖃᖅᑎᓂᒃ

ᖃᓄᖅᓱᓇᑎᑐᓪᓗ: The Hamlet of Gjoa Haven is responsible for the supply of potable water and disposal of sewage waste and solid waste generated from the community. These facilities are currently operating under the current Licence 3BM-GJO 1318 which remains active until Nov 12, 2018. The buried water line sometime faces frozen issues due to crack in insulation or insufficient coverage which required replacing some of the sections of the pipe line. Water line improvement works also included replacement of two heat exchanger pumps, increase sizes of intake pumps, and SCADA monitoring system- all completed during the year 2015-2017. Raw water drawn from Swan lake by two intake pumps, transport to 3.2 km away treatment plant through buried line where water is treated by gravity pressure filtration and chlorination before truckfill for delivery. Water flow meters are included in the treatment system to address the volume of water drawn and delivery to residents using Hamlet operated water trucks. Current engineered lagoon constructed in 2014 and in operation for raw sewage deposition and primary treatment. Decanting of effluent carried during July-August by using pump and hose to a designated point on wetland from where the effluent travels 1275 m towards Ocean through the Final Discharge point GJO-4. The old sewage lagoon was decommissioned and the A&R plan was received to the Board on July 25, 2014. Solid waste site facility had some issues over the years in terms of mixing runoff contamination within the solid waste management (SWMA) area and hazardous materials leachate mixing onto water through wetland, poor segregation in waste dumps, illegal dumping outside the facility, broken spots of fence and poor performance of facility operations. The community has fixed majority of those issues over the years with own resources and some assistance through Government initiatives including the reduction in vehicles parts, reinstalling the fallen fences, filling the broken gaps of berms and stopping the leachate runoff from free flow outside. A sampling monitoring point GJO-5 and signage established for leachate sampling. Other monitoring stations GJO-2, GJO-3, GJO-4 are remains active with GPS locations and identity signage. Monitoring of solid waste and sewage facilities continued during May-August and operators training of Environmental Awareness. Annual Reports are upto date to the Board to 2017.

ᐅᐃᐦᑎᑐᓪᓗ: Le hameau de Gjoa Haven est responsable de l'approvisionnement en eau potable et de l'élimination des eaux usées et des déchets solides générés par la communauté. Ces installations sont actuellement exploitées sous la licence actuelle 3BM-GJO 1318, qui reste active jusqu'au 12 novembre 2018.Lagune aménagée actuellement construite en 2014 et en exploitation pour le dépôt d'eaux d'égout brutes et le traitement primaire. Décantation des effluents transportés entre juillet et août à l'aide d'une pompe et d'un tuyau jusqu'à un point désigné sur une zone humide à partir de laquelle l'effluent se déplace sur 1275 m vers l'océan.L’ancienne lagune d’égout a été mise hors service, point de contrôle GJO-5 et affichage mis en place pour l'échantillonnage du lixiviat. Les autres stations de surveillance GJO-2, GJO-3, GJO-4 restent actives.La surveillance des installations de traitement des déchets solides et des eaux usées s'est poursuivie de mai à août. Les rapports annuels sont jusqu’à 2017 pour le Conseil.La Commission d’évaluation des incidences du Nunavut a déjà approuvé la licence actuelle, mais elle doit être renouvelée car elle expire le 11 novembre 2018.

ᐃᓄᖅᑎᑐᓪᓗ: wu3b3Fs2 wmzl xN3b3F[l n7M4f5 s6h6+g6u vmQCq. Mwnzb~Nns+b 3BM-GJO 1318 +b7N MwnECsD6 xg3ix6 kF2WE 12, 2018a3y3lA.kNs2 x+b~i5g6 h9lw5 w~M8i4f5 eec5b3g5 sdDtcq9Mq8k5. nNCsymo3gFisZlw5 2015-2017l xf8zi +sNdy3bs9lt4 VVVV (Pump) cspnstzi9l woy9lt4. s6h6+gt4+vu wm6 h9l4+f3Li3.2km u szyio1j5 wu3b3F1jzc5b3g6 bwvil nlmw~E4ft4+fc5b3g6 gdNo3bs9lil bwm wu3bstjzc5b3g6 wm6. ck6 x4t4hu wm3u wu3bsts2 wlxkz3iz cspnstc3g6 wu3b3F1u x7ml x4n~lts2 wlxi cspnstc3uD6 ck6 xqtQDu w7u3bsc5b3m+zb w[lc3g9l n8NFsD9l.xN3b3F4 2014u nNCsD6. JMwa+Cz5 x[Zyul u4OQx3bsc5b3g6 xN3b3F4 S2M4nst4f5 wm3jz3bs9lil 1275 mu szyio1j5 wm3j5 bw+fN

GJO-4. xN3b3FFi6 xgDw3bsD6 JMw 14, 2014u xyD3t3ym1mb x?9lw, moZ3ul xyDw9lt4 wQbsiq xN3b3Fs2 wlx~i5gi.nN+p5 wMq8i nN+DZlw5 Z?m4f8i wvJ3bs9lt4. cspnsti GJO-5, GJO-2, GJO-3 GJO-4ul woCsD5 cspnc5b3ix7mb ckE5+b4+n5 wQbsD5.vmpsD5 kNi gn3tbs5txc5b3g5.CG&Sf5 b5e b+m5 xs9M3t5tc5b3g5 cspn3bs/Exc3gi wu3b3F1u+z3gi wm3u x7ml xN3b3F1u+zgi. bwml nNCs2c3X9o3ix3bz xN3b3Fsc5b3g6. csEn3ix5 2018-2019ul ck6 xrc3ixEx4+n5 nNCsQxc3iz s=?~l8~i5 k+bu WQxc3iz.xrc3ixEx4+n5 nNCsQxc3iz s=?~l8~i5 k+bu WQxc3iz.

Inuinnaqtun: not required.

Personnel

Personnel on site: 3

Days on site: 32

Total Person days: 96

Operations Phase: from 2018-10-30 to 2033-10-30

ᐱᓕᕆᐊᕆᔭᐅᓂᐊᖅᑐᑦ

ᓇᒥ	ᖃᓄᐃᑦᑑᒥᑦ ᐱᓕᕆᐊᖃᕐᓂᐊᖅᐸ	ᑭᒃᑯᑦ ᓄᓇᖁᑖᓂ	ᑐᓴᐅᒪᔭᒃᓴᑦ ᓄᓇᐅᑉ ᖃᓄᖅ ᐊᑐᒐᐅᓚᐅᖅᓯᒪᔭᕆᐊᖕᒐᓐᓂᒃ	ᐃᑦᓴᕐᓂᑕᖅᑲᕐᕕᐅᕙᓚᐅᖅᐸ ᐃᓄᒃᓄᑦ ᓇᔪᖅᑕᐅᖃᑦᑕᕐᓂᑰᕙᓗ ᑕᐃᑦᓯᒪᓂᑐᖃᐅᓕᖅᑐᖅ	ᖃᓂᖕᓂᖅᐹᖅ ᓄᓇᓕᒥᔭᐅᔪᖅ ᐊᒻᒪᓗ ᓴᐳᒻᒥᒃᓰᕕᐅᕙᓗ ᓯᓇᓄᑦ
Latitude: 68o 30' N, Longitude:95o 53' W	Other	Municipal	Active water License ued to draw water and delivery to hosehold tanks for domestic uses, municipal waste and sewage disposal to waste facility and engineered Lagoon.	Fine -grained marine deposits, numerous lakes & ponds, covered with thin layer of tundra & grasses, poor soil quality, various types of lichen, moss, continuous permafrost, annual precipitation 5 cm of rain fall and 25 cm of snowfall. January -39°C to -23°C and July high & low 13.9°C and 7.2°C.	South-East coast of King William Island, in the Kitikmeot Region of Nunavut, approximately 142 air km SW of Kugaaruk, and 1,056 air km NE of Yellowknife.

ᓄᓇᓕᐅᑉ ᐃᓚᐅᖃᑕᐅᓂᖓ ᓄᓇᓖᑦᑐ ᐊᕕᒃᑐᖅᓯᒪᐅᕐᓂᖓᓄᑦ ᐃᑲᔪᑕᐅᔪᓐᓇᖅᑐᑦ

ᓄᓇᓕᒥᔭᖅ	ᐊᑏᑦ	ᑲᑐᔾᔨᐊᖃᑎᒌᒥᔭᖅ	ᖃᖓᒍ ᑐᓴᖅᑎᑕᐅᓚᐅᕆᐊᖏᓐᓂᒃ
ᐅᖅᓱᖅᑑᖅ	SAO and Director of Works	Hamlet of Gjoa Haven	2018-06-11

ᓇᐃᓴᓐᓰᑦ ᐱᒍᖕᓇᐅᑏ ᐊᖏᕐᑕᐅᓯᒪᔪᑦ

ᓇᒦᒥᐊᖏᓐᓂᒃ ᐱᓕᕆᐊᕆᕝᕕᐅᓂᐊᕐᑐᑦ ᑎᑎᕋᕐᔪᒥᑦ:

Kitikmeot

ᓇᐃᓴᓐᓰᑦ ᐱᒍᖕᓇᐅᑏ ᐊᖏᕐᑕᐅᓯᒪᔪᑦ

ᒐᕙᒪᒋᔭᐅᔫᑉ ᐊᕕᒃᑐᖅᓯᒪᐅᕐᓂᖅᒐᓐᓂ ᒪᓕᒐᕐᔫᖅᒐᔪᓂᒃ ᐱᕐᑯᔭᕐᔫᖅᒐᔪᓂᒡᔪ ᑲᒪᔩᑦ ᐱᔪᖕᓇᐅᑎᑖᕈᑎᓂᒃ ᓇᐃᓴᓐᓯᔫᓪᔪ ᑲᔪᓯᒃᑲᐃᔩᑦ	ᖃᔪᐃᑦᑐᓪᓚᓇᐅᕙ ᓇᐃᓴᓐᓯᑖᕈᑕᐅᔪᖅ ᐱᔪᖕᓇᐅᑎᑖᕈᑕᐅᔪᖅ ᐊᖏᖅᑕᐅᔪᕐᔫᓐᓃᑦ	ᒫᓐᓇ ᖃᔪᐃᓕᖕᒐᕙ	ᐅᓪᓗᒥ ᑐᓂᔭᖅ/ ᑐᒃᓯᖅᑑᑕᐅᓚᐅᖅᓯᒪᔪᖅ	ᑭᒡᓕᖅᑲᕐᕕᖕᒐ
ᓄᓇᕘᒥ ᐃᒪᓕᕆᔩᑦ ᑲᑎᒪᔩᖕᒥᑦ	Amendment renewal application	Active	2013-11-13	2018-11-12

Project transportation types

Transportation Type	ᓯᓇᒍᑦ ᐊᑐᒐᐅᓂᐊᖅᐸ	Length of Use
Air	Charter flight and commercial airlines (First Air and Canadian North)	
Water	using burried lines of 150 mm diameter HDPE pipes with 100 mm thick insulation all around.	
Land	Hauling water using water truck, sewage and solid waste using waste truck to the lagoon and solid waste site.	

Project accomodation types

ᓄᓇᓕᒥᔭᖅ

ᐊᓯᖓ,

ᐊᑐᒐᐅᓂᐊᖅᑐᖅ

ᐱᕐᑯᑦ ᐊᖏᔪᖅ ᐊᑐᖅᑕᐅᓂᐅᓴᔪᖅ ᐃᓚᖃᓯᐅᑎᓗᒋᑦ ᐃᑰᑕᐃᑦ, ᒥᓪᓗᐊᕈᑏᑦ, ᖃᖓᑕᓲᖅ, ᓘᓇᓯᐅᑦ ᐊᓯᖏᓪᓗ

ᐊᖏᔪᖅ ᐱᕐᑯᑦ ᐊᑐᒐᐅᓂᐊᖅᑐᖅ ᖃᓗᐃᑦᑑᓂᖓ	ᖃᑦᓯᐅᑉᐹᑦ	ᐊᖏᓂᖏᑦ - ᐳᖅᑐᓂᖏᑦ	ᓱᓇᒧᑦ ᐊᑐᒐᐅᓂᐊᖅᐸ
pumps	2	6 inches	for water intake

ᑎᑎᕋᐅᓯᓐᓗᒍ ᐅᖅᓱᒃᓴᐃᑦ ᐊᑦᑕᓇᖅᑐᖅᑕᓖᓪᓗ ᐊᑐᖅᑕᐅᓂᐊᕐᓂᖏᑦ

ᓱᓇᒧᑦ ᐅᖅᓱᒃᓴᑊᒥᐊᖅ ᐊᑐᒐᐅᓂᐊᖅᐸ	ᖃᓄᐃᑦᑐᓪᓚᓐᐅᕙ ᐅᖅᓱᒃᓴᑊᒥᐊᖅ	ᖃᑦᓯᐅᑉᐹᑦ ᐅᖅᓱᒃᓴᖃᐅᑏᑦ	ᑑᒃᓴᐅᑉ ᐃᒪᖃᖅᑎᒋᔪᓐᓇᕐᓂᖓ	ᑲᑎᓪᓗᒍ	ᑑᒃᓴᐃᑦ ᐊᒥᓲᓂᖏᑦ	ᓱᓇᒧᑦ ᐊᑐᒐᐅᓂᐊᖅᐸ
Information is not available						

ᐃᒪᖅ ᐊᑐᖅᑕᐅᔮᖅᑐᖅ

ᐅᓪᓗ ᑕᒫᖅ ᐊᑐᖅᑕᐅᓂᐊᖅᑐᖅ	ᖃᓄᖅ ᐃᒥᖅᑕᖃᑦᑕᕐᓂᐊᖅᐸᑦ	ᓇᑭᑦ ᐃᒥᖅᑕᖃᑦᑕᕐᓂᐊᖅᐸᑦ
170	using twin intake pumps at the pumphouse, then delivery to Water treatment plant using 3.2 km long, 150 mm diameter buried pipe line.	From the Swan lake which is about 3.5 km away of town

ᐊᑲᑕᔪᑦ

ᐊᑲᑕᔪᓪᓗᓂᐊᖅᓂᖅ

ᐱᓪᓗᐊᓗᐅᑦᔨᒪᔪᒍᑦ ᐱᓪᓗᐊᓗᐅᑦᓂᐊᖅᑐᖅ	ᖃᓄᐅᐃᑦᑐᖅ ᐊᑲᑕᔪᖅ	ᖃᓄᐅᑎᒋ ᐊᑲᑕᔪᑦ ᓴᖅᑭᐊᓂᐊᖅᑐᓗᐅᔾᑦ	ᖃᓄᐅᖅ ᐊᑲᑕᖅᑕᐅᓂᐊᖅᐸ	ᓴᓗᒪᖅᓴᐅᑎᑲᓴᓕᖅᓂᐅᓂᐊᖅᑐᑦ
Quarry/Borrow pit	ᖁᑯᖅᑕᓪᓗᓂᖅ	60,000 m3	trucks hauling	segregate of light weigh waste and control burn

ᐊᓯᑎᒥᐅᑕᓚᑦᑐᑦ ᐊᑲᑐᖅᑕᐅᓱᒪᔪᑦ

No environmental impacts since the infrastructures are outside of town and no impact to tourism, wildlife or water course.

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

SECTION F1: Site Cleanup

SECTION G1: Well Authorization

SECTION G2: Onland Exploration

SECTION G3: Offshore Exploration

SECTION G4: Rig

SECTION H1: Vessel Use

SECTION H2: Disposal At Sea

SECTION I1: Municipal Development

İᐢᓂ ᐊᕿᑎᐅᐸ ᖃᓄᐃᑦᑐᑦᓂᓇᐅᓂᖅᓯ: ᓄᓇᐅᐸ ᖃᓄᐃᑦᑐᕐᓂᖅᓯ

İᐢᓂ ᐊᕿᑎᐅᐸ ᖃᓄᐃᑦᑐᑦᓂᓇᐅᓂᖅᓯ: ᐅᒪᔪᖅᑕᖃᖅᓂᖅᓯ

İᐢᓂ ᐊᕿᑎᐅᐸ ᖃᓄᐃᑦᑐᑦᓂᓇᐅᓂᖅᓯ: ᐃᓄᓕᓇᓂᖅᔩᖅᓯᔪᑦ-ᐱᕿᑦᓕᐊᔪᓕᓇᓂᖅᔩᖅᓯᔪᑦ

Miscellaneous Project Information

ᓇᓗᓇᐃᖅᑕᐅᓂᖅᑭᑦ ᐊᒃᑐᖅᑕᐅᓱᒪᔪᑦ ᖃᓄᐃᑦᑐᕐᓂᖅᑭᑦ ᕿᓚᐅᒥᒃᔪᓱᖅᑕᐅᓂᐊᖃᓂᖅᑭᑦᓗ

Cumulative Effects

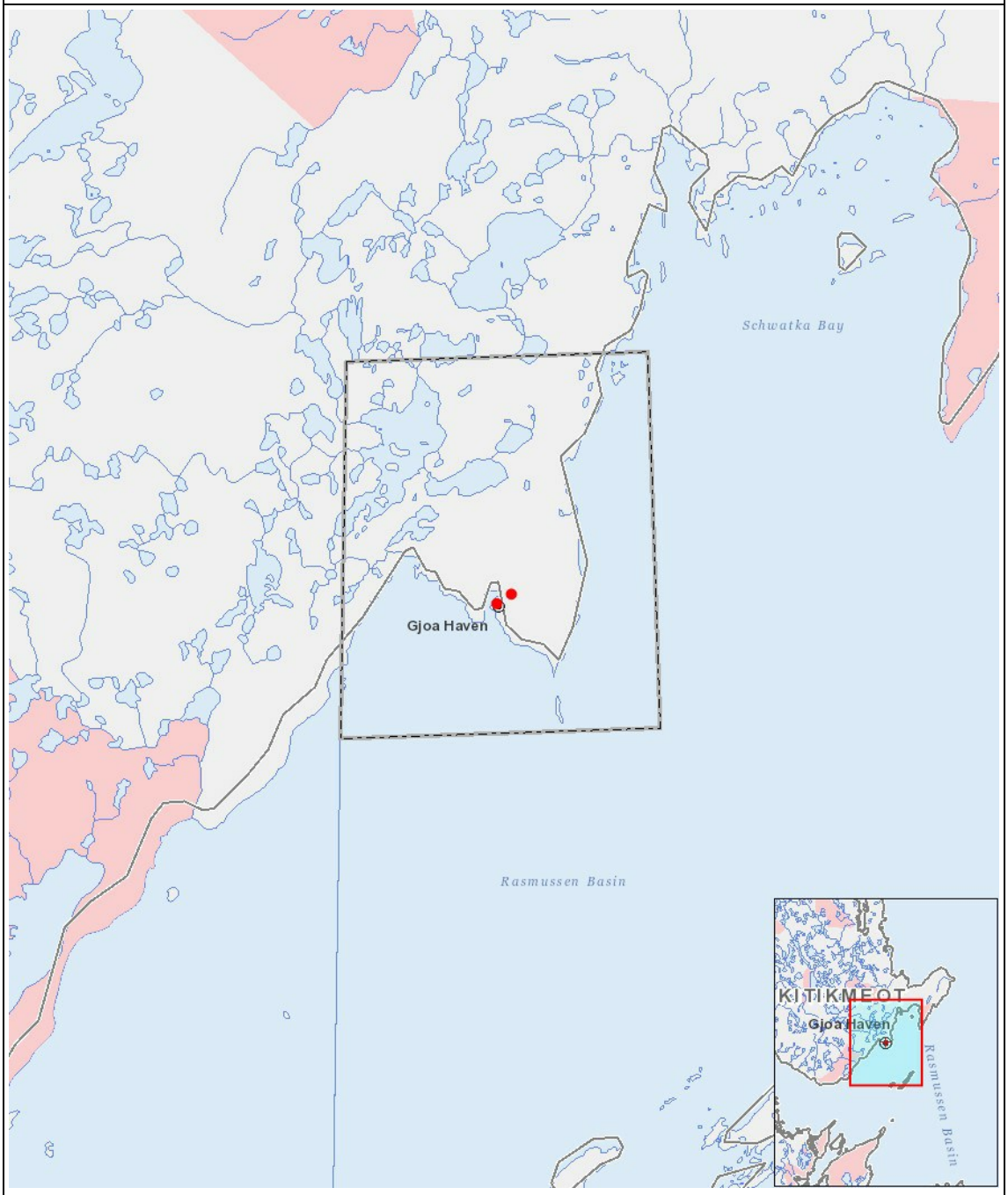
Impacts

ᓄᓗᓄᐃᖅᑕᐅᓂᖅᑎᑦ ᐊᕐᑎᑎᒥᐅᑕᓂᑐᑦ ᐊᑲᑐᖅᑕᐅᓯᒪᔪᑦ

	PHYSICAL	Designated environmental areas	Ground stability	Permafrost	Hydrology / Limnology	Water quality	Climate conditions	Eskers and other unique or fragile landscapes	Surface and bedrock geology	Sediment and soil quality	Tidal processes and bathymetry	Air quality	Noise levels	BIOLOGICAL	Vegetation	Wildlife, including habitat and migration patterns	Birds, including habitat and migration patterns	Aquatic species, incl. habitat and migration/spawning	Wildlife protected areas	SOCIO-ECONOMIC	Archaeological and cultural historic sites	Employment	Community wellness	Community infrastructure	Human health
ᓴᓇᓂᖅ																									
-		-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-		-	-	-	-	-
ᐅᔨᕋᑲᑦᓂᖅ																									
Other		-	-	P	-	P	P	-	P	N	P	P	P		P	P	P	P	P		P	-	-	-	-
ᐃᑐᑦᑎᓇᓂᖅ																									
-		-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-		-	-	-	-	-

(P = ᐊᑲᐅᓴᕈᑎᔪᓐᓇᖅᑐᑦ, N = ᐊᑲᐅᖅᑭᔨᔪᑕᐅᔪᓐᓇᖅᑐᑦ ᕿᓚᐅᒥᔨᔪᓂᖅᑐᑦᑕᐅᔪᓐᓇᖅᑭᓐᓂᑐᑦᓗ, M = ᐊᑲᐅᖅᑭᔨᔪᑕᐅᔪᓐᓇᖅᑐᑦ ᕿᓚᐅᒥᔨᔪᓂᖅᑐᑦᑕᐅᔪᓐᓇᖅᑐᓐᓂᓗ, U = ᖃᑲᐅᕈᒪᓐᓇᖅᑭᓐᓂᖅᑐᑦ)

PROJECT MAP



LIST OF PROJECT GEOMETRIES:

1 point Latitude: 68o 30' N, Longitude:95o 53' W