(866) 233-3033 (867) 983-2594 info@nirb.ca www.nirb.ca @NunavutImpactReviewBoard ᑎᑎᖅᑲᕐᓂᐊᕐᕕᖓ 1360 ᐃᖃᓗᒃᑑᑦᑎᐊᖅ, ᓄᓇᕗᑦ X0B 0C0

ᒪᒃᐱᒐᖅ 1 ᐅᑯᓇᖓᑦ 1

ᖃᐅᔨᓴᖅᑕᐅᓂᕐᒧᑦ ᑐᓴᖅᑎᑦᓯᔪᑦ
ᐃᓄᐃᑦ ᐃᓱᒪᒋᔭᒥᖕᓂᒃ ᐅᖃᕈᖕᓇᖁᑉᓗᒋᑦ

NIRB File No.: 25YN017

ᐱᓕᕆᐊᖑᔪᑉ ᐊᑎᖓ: The “Mars Exploration through Analog-site Drilling” project
ᓇᖕᒥᓂᖃᖅᑐᑉ ᐊᑎᖓ: NASA Ames Research Center

ᐱᓕᕆᐊᖑᔪᖅ: ᖃᐅᔨᓴᕐᓂᖅ ᐊᕕᒃᓯᒪᓂᖓ: ᕿᑭᖅᑕᓂ

ᐊᕙᑎᓕᕆᔨᒃᑯᑦ ᖃᕆᑕᐅᔭᖓᓐᓂ: www.nirb.ca Application No.:

ᐅᖃᐅᓯᒃᓴᓄᑦ ᐃᓱᓕᑉᕕᒃ: ᒪᐃ 9, 2025

ᐱᓕᕆᐊᖑᓂᐊᖅᑐᖅ:

ᐱᓕᕆᐊᖑᓂᐊᖅᑐᖅ “Mars Exploration through Analog-site Drilling” ᐊᕕᒃᓯᒪᓂᖓᓂ ᓄᓇᓕᐅᑉ ᓇᓂᔭᐅᔪᖕᓇᖅᑐᖅ ᐅᕙᓐᓂ ᕿᑭᖅᑕᓂ ᐅᖓᓯᖕᓂᖃᕐᖢᓂ 175 ᑭᓚᒦᑐᔅ ᓄᓇᓕᖕᒥᑦ ᕋᓴᓘᑦᖃᐅᓱᐃᑦᑐᖅ ᓇᖕᒥᓂᖃᖅᑐᖅ ᐱᓕᕆᐊᖃᐳᐊᖅᐳᖅ ᐅᑯᓂᖓ MEAD drilling to excite the local surface to create a shallow seismic map and collect small samples to study microbial population changes at different depths. This information would enable future Mars and lunar missions to generate target maps before drilling and sampling. ᐱᓕᕆᐊᖑᓂᐊᖅᑐᖅ ᐊᑯᓂᐅᑎᒋᓂᐊᖅᐳᖅ ᐅᕙᖓᑦ ᐊᐅᒡᒍᓯ 2025. ᐱᓕᕆᐊᖑᓂᐊᖅᑐᖅ ᓇᓗᓇᐃᖅᑕᐅᓯᒪᔪᖅ ᓄᓇᕘᒥ ᐊᕙᑎᓕᕆᔨᑯᓐᓂᑦ ᐅᑯᓂᖓ ᐱᓕᕆᐊᖃᕐᓂᐊᕐᓗᓂ:
▪ Use of a low-power drill to drill up to four (4) shallow
holes (less than 1 meter) for sampling and local
seismic vibration at two (2) sites;
▪ Use of geophones to create shallow seismic map;

▪ Use of a tool called SOLID to search for tiny life signs;
▪ Use of a tool called ARIA to detect minerals and
organic changes in crater rocks;

ᐊᕙᑎᓕᕆᔨᒃᑯᑦ ᖃᕆᑕᐅᔭᒃᑯᑦ ᖃᐅᔨᒪᔪᑎᖓᑦ ᑕᑯᔪᖕᓇᕐᓂᐊᖅᐸᓯ ᑎᑎᖃᖃᕐᖢᓂ NIRB File No.: 25YN017 ᐱᓕᕆᐊᖑᓂᐊᖅᑐᑦ ᐃᓗᓕᖏᓐᓂᒃ, ᓄᓇᖑᐊᕐᓂᒃ, ᐃᓄᖕᓂᓪᓗ ᐅᖃᕐᕕᒃᓴᒥᒃ ᑎᑎᕋᕐᕕᒃᓴᖃᕐᖢᓂ.
ᐅᖃᐅᓯᒃᓴᓂᒃ ᑐᒃᓯᕋᐅᑦ
ᐃᓚᐅᖃᑕᐅᖁᔭᐅᒐᓗᐊᖅᐳᑎᑦ ᐅᖃᐅᓯᒃᓴᖃᕐᓗᑎᑦ ᐊᕙᑎᓕᕆᔨᒃᑯᓐᓄᑦ ᐱᓕᕆᐊᖑᓂᐊᖅᑐᒧᑦ ᖃᓄᖅ ᐃᓱᒪᖕᒪᖔᖅᐲᑦ ᐅᑯᓂᖓ:

▪ ᐃᓄᖕᓄᑦ ᐃᓱᒫᓗᒋᔭᒃᓴᓂᒃ ᐱᑕᖃᕐᒪᖔᑦ, ᐱᑕᖃᕐᓂᖅᐸᓪᓗ ᓱᓇᐅᖕᒪᖔᑖ;
▪ ᓄᓇᒧᑦ ᐊᕙᑎᑉᑎᖕᓄᓪᓗ ᐃᓅᓯᕐᒧᑦ ᐱᕙᓪᓕᐊᓂᕐᒧᓪᓗ ᐊᒃᑐᐃᓇᔭᕐᓂᖅᐸᑦ, ᓱᓇᐅᖕᒪᖔᑖᓘ;
▪ ᓂᕐᔪᑎᓂᒃ ᐱᓱᒡᕕᖏᓐᓂᒡᓗ ᐊᖑᓇᓱᖕᓂᕐᒥᒡᓗ ᐊᒃᑐᐃᓇᔭᕐᒪᖔᑦ, ᐊᒃᑐᐃᓇᔭᕐᓂᖅᐸᑦ, ᓱᓇᐅᖕᒪᖔᑖ;
▪ ᐊᒃᑐᐃᓇᔭᕐᓂᖏᑦ ᓱᓇᐅᓇᔭᕐᒪᖔᑖ ᖃᓄᕐᓗ ᒥᐊᓂᕆᔭᐅᔪᖕᓇᕐᒪᖔᑦ ᐊᒃᑐᐃᑕᐃᓕᓗᓐᓂ ᐊᒻᒪ ᖃᓄᖅ ᐱᓕᕆᐊᖑᔪᖕᓇᕐᒪᖔᑖ.

ᑎᒥᐅᔪᑦ ᐃᓚᐅᖃᑕᐅᖁᔭᐅᕗᑦ ᐊᒃᑐᐃᑕᐃᓕᔪᑎᒃᓴᓂᒃ ᖃᐅᔨᒪᓐᓂᖅᐸᑕ ᓇᓗᓇᐃᖅᓯᖁᔭᐅᑉᓗᑎᒃ, ᐊᑐᕐᓂᖃᖅᑐᓪᓗ ᐅᖃᐅᓯᕆᓗᒋᑦ ᐱᓕᕆᐊᖑᓂᐊᖅᑐᒥᑦ ᓄᓇᕘᒥ ᐊᕙᑎᓕᕆᔨᒃᑯᓐᓄᑦ.

ᑐᓴᖅᑎᑕᐅᓇᔭᖅᑐᑦ

ᓄᓇᕗᒻᒥ ᐊᕙᑎᓕᕆᔨᒃᑯᑦ ᑲᑎᒪᔨᖏᑦ ᒫᓐᓇᕋᑖᖅ ᓴᖅᑭᑎᑦᑎᓯᒪᔪᑦ ᓄᑖᙳᕆᐊᖅᑐᒥ ᖃᕋᓴᐅᔭᑎᒍᑦ ᐃᓄᓕᒫᓄᑦ ᐊᑎᓕᐅᖅᑕᐅᕕᖕᒥᑦ, ᐊᒻᒪᓗ ᐃᓚᐅᖃᑕᐅᔪᑦ ᐊᑐᐃᓐᓇᖃᕈᓐᓇᖅᓯᕗᑦ ᐱᓕᕆᐊᒃᓴᐅᔪᓂ ᐅᖃᐅᓯᒃᓴᓂ ᐊᒻᒪᓗᑦᑕᐅᖅ ᑐᓂᓯᓗᑎᒃ ᐅᖃᐅᓯᒃᓴᒥᓂᑦ ᑕᐃᑯᖓᓪᓚᕆᒃ

ᓄᓇᕗᒻᒥ ᐊᕙᑎᓕᕆᔨᒃᑯᑦ ᑲᑎᒪᔨᖏᓐᓄᑦ ᐅᕘᓇ http://www.nirb.ca. ᐅᖃᐅᓯᒃᓴᓕᐅᕈᓐᓇᖅᐳᓯ ᑕᐃᑯᖓᓪᓚᕆᒃ ᓄᓇᕗᒻᒥ ᐊᕙᑎᓕᕆᔨᒃᑯᑦ ᑲᑎᒪᔨᖏᓐᓄᑦ ᖃᕋᓴᐅᔭᑎᑦ ᑎᑎᕋᕐᕕᒃᓴᐅᔪᒧᑦ ᐅᕗᖓ info@nirb.ca. ᐅᕝᕙᓘᓐᓃᑦ ᓱᒃᑲᔪᒃᑯᑦ ᐅᕗᖓ (867) 983-2594−ᒧᑦ.

ᐊᐱᖁᓯᒃᓴᖃᕐᓂᕈᕕᑦ ᑐᑭᓯᑲᓂᕈᐊᕐᓂᕈᕕᓪᓗ ᐱᓕᕆᐊᖑᓂᐊᖅᑐᒥᒃ ᐅᕙᓘᕙ ᐊᕙᑎᓕᕆᔨᒃᑯᑦ ᖃᐅᔨᓴᕐᓂᖓᓐᓂᒃ, ᑐᓴᖅᑎᑦᓯᓂᐊᖅᐳᑎᑦ ᐆᒥᖓ Kelli Gillard, Manager Impact Assessment ᐅᖃᓘᑖᑦ ᐊᑭᖃᖏᑐᖅ 1-866-233-3033 ᖃᕆᑕᐅᔭᒃᑯᓗ ᑐᕉᕋᑎᖓᑦ kgillard@nirb.ca.