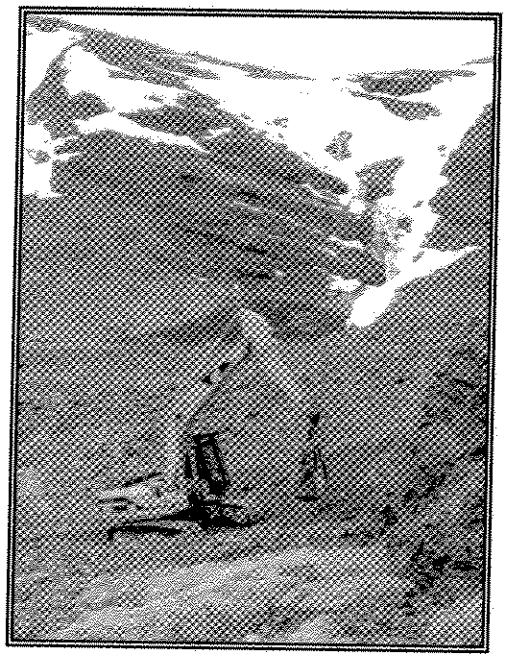
INDIAN AND NORTHERN AFFAIRS CANADA
NUNAVUT REGIONAL OFFICE

SUMMARY OF TECHNICAL ACTIVITIES - 2005

RESOLUTION ISLAND PROJECT

BAF-5: ABANDONED POLE VAULT MILITARY RADAR STATION



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QIKIQTAALUK ENVIRONMENTAL

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QIKIQTAALUK CORPORATION

January 2006

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RESOLUTION ISLAND PROJECT

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January 2006

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ᓇᓗᓇᐃᔾᔨᐸᑎᓪᓗᓐᓄᑦ ᓇᐃᓇᔾᔪᒪᓴᑦ

ᖃᒪᑦᑕᐅᓂᓯᒥᓂᖅ ᓈᓚᕕᐅᕐᓯᑐᒥᓂᖅ ᑐᐃᓐᑐᖅ ᓂᒋᖏᑕ ᓄᑲᐊᓂ ᖃᐱᖅᑕᓗᒥ ᐊᓯᒪᓚᓗᒃ ᐊᐸᑎᖏᑦ ᐱᐅᖏᑐᒪᓐᓇᖅ. ᖃᐅᔨᓴᖅᓂᐅᖃᖅᑕᓚᐅᖅᑐᑦ ᑕᕐᓂᖃᖅᑕᖅᑐᒥᓂᖅ ᐊᒥᐊᓕᓚᓄᓪᓕ ᓄᓇᒥᓂᖅ ᖃᐅᔨᔪᑎᑎᓯᒪᓕᒪ ᐊᐸᑎᖏᓂᖅ ᐊᖃᐅᖅᑎᓯᐅᑎᓂᖅᓂᖏᓂᖅ ᑕᕐᓂᖃᖅᑕᖅᑐᒥᓂᖅᓄᑦ. ᑐᑭᓄᓪᓕ ᐱᓕᓗᐊᖏᔪᖅ ᐱᑕᖃᖏᓪᓕ ᐱᐅᐃᓂᒥᒃ ᐊᒪᓕ ᐊᑕᑯᔭᓂᒥᒃ ᐋᓯᐋᓕᓂᓂᖅ (ᓯᑭᔾᓇᖏᑕᓂᖅ) ᐃᐅᔪᓂᖅ, ᐊᒪᓚᓗᑕᐅᖅ ᐊᐅᓕᑎᓂᒥᒃ ᑎᒥᒧᓪ ᐊᒪᓕ ᐊᐸᑎᒧᓪ ᑲᑎᐱᕆᔨᑎᑎᒪᔪᓇᖏᓂᖅ ᐃᒪᐃᓐᓂᖅ ᐊᑭᑭᓂᖅ ᓯᑭᔾᓇᖏᓕᓂᖅᓂᖅ ᓄᓇᒧᑐᓂᖅ, ᐃᑭᐊᑎᑎᓕᓂᔾᓂᖅ, ᖃᐅᑕᐅᔨᒥᓂᔾᓂᖅ. ᐃᓕᓂᓂᐊᖏᖅ ᐊᐅᓚᓄᓪᓕ ᐱᒪᓚᐅᐅᖅ ᑕᓯᓗᒪᓕᖅ ᐱᓕᒧᖅ. ᐊᐅᓚᑦᓚᓂᑎᑦᓗᒍ ᐃᓄᖃᓘᖅᓴᖅ ᐃᖅᑲᓇᖅᑐᖅ 70ᓂᒃ.

ᑐᑭᓄᓪᓕ ᐱᓕᓚᐊᖅ ᐱᑎᐊᓕᐅᔭᑯᖅ 1998ᒥ ᐊᖏᔪᓄᓪᓕ 7ᓄᓪᓕ ᖃᐅᔨᓴᖅᑕᐅᓕᐅᔾᔨᑎᑦᓗᒍ. ᐱᐅᓇᖅᑕᐅᓯᒪᓕᕐᓂᑦ ᐱᓕᓚᐊᖅᓴᖅᑐᑦ ᐅᑭᐅᖅᓯᐊᓕᓚᐅᖅᑐᑦ:

1997: ᓯᐅᓕᖅᑭᒥ ᓯᓇᐅᒡᒐᑦ ᐊᐅᓕᖅᑎᑕᐅᑦᓗᑎᒃ ᐃᖃᓗᓐᓂᓪᓓ ᑐᑭᓄᓪᓕ. ᖃᐅᔨᒡᓗᒃ ᐅᐊᐸᑦᓇᓴᖅ ᐃᖃᓗᐊᖅᓴᖅᑎᑎᓕᓗᓂ 20ᓂᒃ ᑐᑭᓄᓪᓕ ᐅᒥᐊᖅᓴᐊᓕᓚᓂᓂᐊᖅᑐᒃ ᐊᒪᓚ ᓄᓇᑲᐅᑕᓂᐊᖅᑐᒥᒃ ᐊᖃᓯᐃᐅᖅᑎᖅᑎᑎᒃ ᖃᐅᔨᒡᓗᒃ ᐅᐊᐸᑦᓇᓴᖅ ᐃᓇᓴᖅᑐᐃᑲᓕᓗᓂ ᐅᐃᓐᓄᓪᓕ ᐃᓕᓴᕐᓂᐊᕐᓗᒍ ASU, ᐊᒪᓚ LDS (ᓯᓚᓐ ᓯᓚᓂᐅᓕᓐᓂᖅ) ᑕᒪᓂ ᓄᓇᖏᓂ ᐱᓕᓚᓂᐊᖅᓴᓗᒃ.

1998: ᖃᐅᔨᒡᓗᒃ ᐅᐊᐸᑦᓇᓴᖅ 40ᓂᒃ ᐃᖃᓗᐊᖅᓴᖅᑎᑎᓕᓂᒃ ᑐᑭᓄᓪᓕᖅᑎᑎᓕᓂᓂ ᓄᓇᑲᐅᑕᓂᐊᖅᑐᑦ ᐱᔾᓇᓴᓕᑎᖅᑎᓂᒃ, ᐊᐅᓕᖅᑎᑎᓕᓂᒃ ᓴᓇᔾᔪᓂᒃ ᐊᒪᓚ ᓯᓇᐅᒡᒐᓂᒃ ᒪᖅᑐᕆᐊᖅᑎᖏᖅᑎᓂᒃ, ᐊᖃᓯᑕᐅᓕᓂ 290,000 ᓴᓕᖅᑎᒃ ᐅᖅᓯᐊᓕᖃᖅᐅᑎᖃᖅᓴᐃᓐᓂᒃ, ᐱᔾᖅᑕᐅᓕᓂᒃ ᐃᑭᐅᓕᖅᑎᑎᓕᖃᖅᑐᓂ, ᓴᓇᔾᔪᑎᑎᓕᓂᒃ ᐊᑐᓇᖅ, ᐊᒪᓚᓕ ᐃᓕᓴᕐᓂᐊᑎᑎᓕᓂᒃ ᐃᓄᓐᓂᒃ ᑲᒪᔾᔨᖅᑐᑦᓇᓄᓪᓕᖅᑎᑎᓕᓂᒃ ᐱᓕᓚᐊᖅᓴᐊᓕᓚᐅᖅᑐᒃ.

1999: ᖃᐅᔨᒡᓗᒃ ᑯᐊᐸᑐᓚᓴ 50ᓂᒃ ᐃᖃᓗᐊᖅᓴᖅᑎᑎᓕᓂᒃ ᑐᑭᓄᓪᓕᖅᑎᑎᓕᓂᓂ ᐱᒋᐊᖅᑐᒍ ᓱᓂ 15 ᑎᑭᖅᑐᒍ ᔨᑎᕕᓚ 15. ᐱᓕᓚᐊᓚᔾᔪᑎᑦᓂ ᐃᓕᓐᓂᖅ ᐃᒪᐃᓐᑐᒃ ᐃᓕᓴᕐᓗᓂᒃ ᐃᓕᒪᐸᑦ ᓯᓇᓂᓂ ᐸᑲᖅᑐᒃ ᐊᖅᑕᐊᓚᐅᑦᓴᖅᑐᒥᒃ ᐊᒪᓚ ᐊᖅᑕᐅᑯᐃᑦ ᑭᔨᓂᖏᑎᒍᑦ ᐃᓕᑯᓂᖅᑕᐅᓕᖅᑎᑎᓕᓂᒃ, ᐱᔾᐃᓕᖅᑎᑎᓕᓂᒃ ᐊᖅᑐᓕᖅᑎᑎᓕᓂᒃ ᐊᒪᓚ ᐊᐅᓕᖅᑎᑎᓕᓂᒃ NH ᐊᖅᑕᐅᑯᐃᑦ ᓄᓇᒧᓪ ᓴᓐᓄᐅᑎᑎᓕᓂᒃ, ᓯᓐᓄᓪᓕᐅᑎᑎᓕᓂᒃ ᐊᒪᓚᓗ ᐃᑎᑕᐅᑎᑎᓕᓂᒃ ᖃᐅᔨᓴᖅᑕᐅᓕᐅᔾᔨᑎᑦᓗᒍ, ᐃᑎᕕᐅᑎᑎᓕᓂᒃ ᐅᓇᓱᑦᓗᒍ ᐃᓐᓇᐃᓐᓂᒃ, ᐃᓐᓇᐃᓐᓂᒃ ᐊᒪᓚ ᐊᐅᓕᖅᑎᑎᓕᓂᒃ ᓴᓇᔾᔪᑎᑎᓕᓂᒃ ᐃᓐᓇᐃᓐᓂᒃ ᐊᒪᓚ ᐊᐅᓕᖅ

ᐃᒥᖅᓯᓇᓂᖅᓗᓐ, ᐅᖅᓱᐊᓗᒥᓂᓐ ᐃᑭᑕᐅᓐᓗᑎᑦ, ᓴᓇᔪᖏᖅᑐᓂ ᐊᑐᓇᐊᖏᑦ ᑕᓱᐅᑉ ᐊᒋᓂᓐ, ᐊᓱᐊᓂᖅᑕᐅᓐᓗᓂ ᑭᓇᓐᓂᓐ ᐊᖏᑕᐅᔪᖓ ᐊᒻᒪ ᑭᓇᓐᓗᑯᐃᑦ.

2001: ᖃᑭᖅᑕᓗᑦ ᑯᐊᐅᓇᓴ 50ᓂᑦ ᐃᖏᓇᐃᔨᖅᓂᐊᖅᑐᑦ ᑐᔨᓂᖅᑎᑎᓐᓗᓂ ᐱᒋᐊᖅᑐᒍ ᔪᓕᐃ 4 ᑎᑭᖅᑐᒍ ᓱᑎᐃᓇ 3. ᐱᓕᓇᐊᓇᔨᐅᓐᓗᐊᑕᖅᑐᑦ ᐃᒪᐃᖅᑐᑦ CEPA ᐋᓱᐋ ᓄᓇᖏᓂᕐ ᐅᕐᖏᓐ S1/S4 ᐃᒡᓗᒥᕐ ᐊᒻᒪ ᑯᐅᓂᖏᓂᕐ, ᐸᒃᑲᐅᐅᓐᓗᓂ ᐊᖅᑕᑯᐃᒃ ᐃᒪᐃᐸ ᓱᓴᓂᕐ, ᑯᐅᓂᖏᓂ ᐊᒻᒪ ᑲᒪᒋᔨᐅᓐᓗᓂ ᓱᑭᓇᖅᓯᒃ ᐃᒥᖏ ᑕᕐᓂᓄᑦ, ᓴᓇᒪᓴᖅᑕᐅᓐᓗᓂ ᕐᕕᑦᓄᕐ ᐊᖅᑕᑯᐃᒃ, ᐊᖏᑕᐅᓐᓗᓂ ᐊᕐᓄᖏᓐ ᑯᐅᓂᖏᓂᕐ Δᒃᓗᓱᐅᑎᒥᓂᔪᓂᕐ, ᐊᐅᓪᓚᑕᐅᓐᓗᓂ ᐊᒻᒪᓗ ᐃᑭᑕᐅᓐᓗᑎᒃ ᐅᖅᓱᐊᓗᒥᓂᕐ, ᓴᓇᔪᖏᖅᑐᓂ ᐃᑭᑕᐅᓐᓗᑎᒃ ᓄᑕᒥᒃ ᓄᓪᓕᐊᒥᓂᖏᓂᕐ ᖃᖃᓗᓂ, ᐊᐅᓪᓚᑕᑕᓐᓂᐊᖅ ᐊᒻᒪ ᐱᒋᐊᖅᑐᑦ ᐅᖅᓱᐊᓗᒥᓂᕐ, ᓴᓇᔪᖏᖅᑐᓂ ᐃᑭᑕᐅᓐᓗᑎᒃ ᐃᒪᐃᐸ ᓱᓴᓂᕐ ᐅᖅᓱᐊᓗᓂᖅᑐᓂᕐ, ᓴᓇᒪᓴᖅᑕᐅᓐᓗᓂ ᐃᑭᑕᐅᓐᓗᑎᒃ ᐊᖅᑕᑯᐃᒃ ᐃᒪᐃᐸ ᓱᓴᓂᕐ ᐅᖅᓱᐊᓗᓂᖅᑐᓂᕐ, ᓴᓇᔪᖏᖅᑐ

- <ᑲᑦᑐᑦ ᐊᒥᐊdᓕᒻᒧᑉ ᓱᑭᕆᑦᑖᓪᓕᑦ Δᐳᓴᐃᑦ (CEPA, PCB Tier I/II, Co Tier II, Pb Tier I/II ᐊᒪᒪ Cu Tier II);
- ΔᓕᐳΔᵒᓇᓪᓕᑦᑐᑦ ᓱᑭᕆᑦᑖᓪᓕᑦ Tier II Δᐳᓴᐃᑦ ᐊᒪᒪ ᓇᒥᑐᐃᵒᕆᑦᑐ ᐊᒪᒪ ᑕᒪᖁᑲ Tier I Δᐳᓴ Δᕐᓄᑐᐧᐣ Tier II ᓄᓇᖏᓂ;
- >ᐧᐣᑦᑐᑦ ᐊᒥdᓕᒻᒧᑉᵒ CEPA Δᐳᓴᖏᖓ ᐊᐅᓪᑎᑦᑐJ ᐊᑕdᕋᕆᐅᓪᑐᓂ;
- <ᑲᑦᑐJ ᐊᒪᒪ >ᐧᐣᑦᑐJ ᐊᓱᒪᒪᓇᵇ ᓱᑭᕆᑦᑖᓪᓕᑦ ᐊᐅᓪᑎᑦᑐᑦ ᐊᑦᑕdᕋᕆᐅᓪᑐᓂᑲᑎᵇ
- ᒪᕋᐳᓪᓇᓪᑐᓂᓂ ᐱᖓᓱᓂᵇ Δᓱᕋᕆᓂᵇ (ᓇᓪᕃᐱᵇ, ᒥᑦᑕᕋᐱᵇ ᐊᒪᒪ ᑕᓱᖓ 2) ᕆᕈᐯᑎᒋᓂᐊᖖᒪᑕ ᑕᓱᒧᖖᖓ Tier II ᓄᓇᒧᵒ ᕆᓇᐳᐅᓂᓂᓂ ᐊᒪᒪ ᕆᐅᐳᐅᓂᓂ ᐊᒪᒪᓂ ᐊᓱᖓᑦᓂᵒ ᕆᓇᐳᓇᐊᓪᓂᵒ
- ᑲᒪᐳᐅᓪᓂᓂ ᒪᔭᵒᓂᵒ ᐅᒥᐊᕐᐊᵒᓂᵒ (ᐅᓱᐳᐅᐳᓇᐊᖖᖓᑦᖓᵒᓂᵒ ᓱᓇdᑕᑦ, ᐊᑕdᕋᑐᑦ ᐊᒪᒪ ᑕᓱᖓ 2) ᕆᕈᐯᑎᒋᓂᐊᖖᒪᑕ ᑕᓱᒧᖖᖓ Tier II ᓄᓇᒧᵒ ᕆᓇᐳᐅᓂᓂ ᐊᒪᒪᓂ ᐊᓱᖓᑦᓂᵒ ᕆᓇᐳᓇᐊᓪᓂᵒ
- ᑲᒪᐳᐅᓪᓂᓂ ᒪᔭᵒᓂᵒ ᐅᒥᐊᕐᐊᵒᓂᵒ (ᐅᓱᐳᐅᐳᓇᐊᖖᖓᑦᖓᵒᓂᵒ ᓱᓇdᑕᑦ, ᐊᑕdᕋᑐᑦ ᐊᒪᒪ ᓱᑭᕆᑦᑖᓪᓕᑦ Δᐳᓴᐃᑦ ᐊᐅᓪᑎᑦᑐᑦ ᐊᑦᑕdᕋᕆᐅᓪᑐᓂ)
- ᑲᒪᐳᐅᓪᓂᓂ ᐊᑕᐅᓱᑦᓕᵒ ᐅᒥᐊᕐᐊᐧᓕᵒ Δᒥᐳᐊᵒᓂᵇ ᐅᓱᑲᕐᑦᓕᵒ (ᐅᑦᓱᐊᓂᒪᒥᵇ) ᐱᖖᓱᐅᑎᓪᓂᓂJ ᐅᑦᓱᐊᓂᖖᐅᑲᑦᑕ ᐊᒪᒪ ᕆᓂᒪᕆᑦᑐᑦ (ᕆᓂᐅᐳΔdᓱᑦᑐJ Δᒥᑦᓕᵒ ᐱᐳΔᐊᑦ) ᐊᒥᐊdᖖᓂᵒ ᐅᑦᓱᐊᓂᓕᵒ ᐊᑑᓪᐅᑦᑐᓕᵒ 2004ᒥ.
- ᓄᐊᑦᑎᓪᓂᓂ, ᐅᓱᖖᑕᑦᓂ, ᓱᑦdᓪᓂᐃᓪᓂᓂ ᐊᒪᒪ ᐊᑕᑕdᑦᑐᑦ ᑲᐧᐱᐊᖓᓱᑦᑐᑦ ᐊᑦᑕdΔᑦ ᕆᐅᓪᓂᑦᑐᑦ ᐊᒥᐊdᖖᵒ ᓇᒥᑐᐃᵒᖓᓱᑦᑐ ᐊᑦᑕdᑦ.
- ᑲᒪᓪᓂᓂ ᓇᒻᓂᖖᓂᵒ ᐊᒪᒪ ᓂᕐᑦ ᐅᓱᐳᐅᓂᖓᓱᵒᓄᵒ Bell 212 ᖃdᓪᖖᓕᒪᓕᒻᓕᵒ;
- Δᑭᑦᑐᑦ ᐊᒥᐊdᑦ ᐅᑦᓱᐊᓂᒥᓂᵒ; ᐊᒪᒪ
- ᐊᑦᐱᐊᓇᑦᑐᑦ ᐊᑦᑕdᑦ >ᐧᐣᑦᑐᑦ, ᓇᓂᓇΔdᓱᑦᓱᑦᑐᑦ ᐊᒪᒪ ᐅᒥᐊᵇdᑦ ᐅᓱᐳᐅᑦᓂᑎᵇ ᖃᑦᓂᓄᓇᵒ ᓄᓇᖓᑦᓄᵒ ᐊᑦᑕdᑦᑕᐅᒪᐳᖖᒪᑕ ᐊᑦᑕdᑦᕃᓪᑦᓄᵒ

ᑢdᐊ ᖃdᓪᓂ ᖃᓄΔᓪᐅᐳᑎᑕᐅᓱᒪᐳᓪᑦ ᓇᓂᓇΔᐳᖖᓱᒪᑦᑎᐊᖖdᑦ Δᓪᓇdᖓᓂᖓᓂ 2ᒥᵒ 6ᒧᵒ ᐅᕐᓂ ᐅᓂᑲᒥ. ᕆᓂᒪᖓᐃᓂᖖᒧᵒ ᐱᓪᓇᐊᓇᓴᐅᐳᓪᓕᑦ 2005ᖓᐄᑎᓪᓂᒍ ᑐᐳᓂ, ᒪᓪᓕᑐᒍ ᓄᓪᓇᓄᖖᑐᓇᓪᓇᓪᐅᐳᑦᖓᓄᵒ ᐅᑎᖓᑎᑎᕐᓪᓪᓇᐊᓂᖖᒧᵵ ᕐᖖᓇᐅᑎᓪᕆᖓ ᐊᖖᑦᑕᐅᓪᓇᐅᐳᑦᖓ 2003 ᐱᒋᐊᓪᐅᐳᑦᑎᓇᒍ. Δᓪᓇdᖓᓂᖓ 7 ᕆᕈᐯᖓ ᑭᖓᒍᓪᕐᐳᑦᐅᑎᓂᵇ ᐊᒪᒪ ᕆᖓᐳᖓᑎᑎᓪᓂᓂ ᓇᓂᓇΔᐳᑦᓕᒍᓂᵇ Δᓱᒪᒋᐳᐅᓪᓂᵇ ᖃᓄΔᓪᐅᐳᑦᕋᐅᐳᕆᑦᐅᓂᵇ 2006ᒧᵒ, Δᒪᑐᓪᐊᖖᑦᐅᖓ ᑐᑦᖓᓪᓄᐊᖖᓪᓂᓂ ᓱᖖΔᐳᑦᑕΔᓇᓪᓇᓪᑎᑦ ᑕᕈᓂᑐᑦ ᑭᓱᖖdᑎᓪᒪᐊᖖᖓᒍᓪᓓ.

ᐅᓇ ᐱᓪᓇᐊᖖᒍᓪᓓᖖ ᑭᓇᐅᐳᖖᖓᑕᐅᓪᓂᓂ ᐊᕈᑎᓪᓇᓂᖖᒧᵒ ᐊᒪᒪ ᓱᑭᵒᓇᑦᑐᓪᓇᓂᖖᒧᵒ ᐊᓪᓪᓇᐊᖖᖓᑕ, Δᓂᓪᓇᐳᑐᖓdᑦ ᑲᓇᑕᒥ. ᐊᖓᔪᑕᒪᖖ Δᓂᓪᓇᐳᑐᖓdᑦ ᖃᓄΔᓪᐅᐳᑦᓂᐊᖖᑦᑕᐅᖓᑦ ᑕᖓᓇᑦᕈᑦᑐᓪᓂᑲᑦ ᖘᑭᖓᑦᓪᓂᑦ dᐊᐸᑐᓇᓴ ᓇᒥᑐᓂᖓᑎᑎᓪᖖᖓᑦ ᐊᖓdᑕᐅᓪᓂᓂ ᑐᓂᑭᖓᑦᓂᖓdᑦ ᐊᖓᑎᑐᑦ. ᖘᑭᖓᑦᓪᓇᑲ dᐊᐸᑐᓇᓴ ᓇᒥᑐᓂᖓᑎᑎᓪᖖᖓᑦ ᖘᑭᖓᑦᓂ Δᓂᓪᓇᑦ ᑲᑐᐳᓇᖓᑎᑎᓪᖖᖓᑦᓂᵒ, Δᓂᓪᓇᑦ ᕆᖘᕐᓪᓇᒥᐳᖖᓴ ᑲᑐᐳᖖᑎᑎᓪᖖᖓᑦ ᖘᑭᖓᑦᓪᓇᑲᒥᵇ ᓄᓇᖓᑦᒥ. ᑐᐳᒧᵒ ᐱᓪᓇᐊᖖᒍᓪᓓᖖ ᐊdᓂᖓᑐᒧᵒ ᑐᑦᖓᓪᓄᐊᖖᓪᓂᓂ ᐊᕈᑎᓪᓇᓂᖖᒧᵒ ᐊᒪᒪ Δᓪᓇᓂᓂᖓdᑦ. ᓱᓪᓇᐳᐅᓪᓂᓂ, ᐱᓪᓇᐊᖖᒍᓪᓓᖖ ᒪᓇᐅᐳᖖᖓᑦᑐᓪᓇᐊᖖᖓ ᐊᕈᑎᓪᖖᓂᓂᵇ ᐊᑦᑐᖓᓂᖓᓂᓂᖓᑦᖓ ᖃᓄᐅᐳᖖᖓᓂᓂᵇ ᓄᓇᓪᐅᐳᕈᓂᵇ, ᕆᓪᒥᐳᐅᑎᓪᓂᓂ ᑎᒥᖖᑎᑎᓪᖖᑦ ᖃᓄΔᓪᐅᐳᑦᓂᐊᖖᑦᑕᐅᖓᑦᓂᵒ ᐊᒪᒪᓂ Δᓄᓪᐅᑦ ᓱᐅᓂᕆᖖᖓᓂᵒ.

EXECUTIVE SUMMARY

An abandoned radar station located on Resolution Island (RI) at the southeastern tip of Baffin Island was left in poor environmental condition. Previous investigations performed at this former USAF station determined the extent of environmental problems from past occupation. The Resolution Island Project consists of the removal and disposal of PCB contaminated soils, as well as the management of other health and environmental risks such as hydrocarbon and metal contaminated soils, asbestos, and waste drums. Training is an important aspect of this project. A fully operational core camp accommodates a working crew of approximately 70 persons.

The Resolution Island Project started in 1998 after several years of investigations. The work accomplished by Qikiqtaaluk Corporation (QC) is summarized as follows:

1997: Initial equipment mobilization from Iqaluit to RI. QC sends a 20 person crew to RI for sea lift operations and basic core camp renovations. QC also provides technical support to Queen's University ASU, and LDS (now Sinanni) for their respective field work.

1998: QC sends a 40 person crew to RI to complete camp renovations, to manage materials and equipment shipped from Montreal, to assemble a 290,000 litre fuel tank farm, to remove asbestos from abandoned buildings, to repair roads, and to provide training to Inuit in trades related to the scope of work.

1999: QC sends a 50 person crew to RI from June 15 to September 15. Activities include beach lead dump excavation and waste sorting, removal and containerization of mercury contaminated soils; off-site shipment of PCBs and other hazardous waste, furniture dump excavation, building demolition, construction/operation of a NH waste landfill, shredding and disposal of empty drums, incineration of POL products, structural steel construction to join the two maintenance buildings, and aluminium recycling.

2000: QC sends a 50 person crew to RI from July 5 to September 15. The main tasks accomplished include: excavation of the Furniture Dump, demolition of PCB contaminated buildings and containerization of CEPA material, removal of CEPA soil from S1/S4 building area, set up and operation of a drum staging/sorting/pumping/washing station, operation of an oil separator / water treatment system, waste oil incineration, construction of a road to Lower Lake borrow pit, relocation of the sewage line and lagoon.

2001: QC sends a 50 person crew to RI from July 4 to September 3. Activities include: excavation of CEPA PCB soil from S1/S4 building and drainage area, excavation of waste from Beach Dumps, drainage and treatment of phenol

contaminated water from beach POL tanks, clean up of Battery Dump, installation of trial silt fence in drainage path of former Furniture Dump, drainage of fuel from beach POL tank, management and incineration of waste POL products, construction of a new road to Radio Hill, operation of a new borrow pit located behind Radio Hill.

2002: QC sends a 50 person crew to RI from July 12 to August 28. Activities include: excavation of CEPA PCB soil from upper S1/S4 valley and PCL dump; repair old 3.1 m^3 steel containers to RI Environmental Impact Statement (EIS) specifications, containerize PCB CEPA soil from the Main PCB storage building; remove waste debris from Beach Dumps, remove and manage POL drums from various areas, incinerate grease and other waste POL products.

2003: QC sends a 60 person crew to RI from June 18 to September 14. Activities include: removal of remaining CEPA PCB soil from the S1/S4 valley; containerization of PCB CEPA soil from the Main and B2 PCB storage buildings, clean up and cover Airstrip dump, clean up debris from Maintenance dump, incinerate grease and other waste POL products; drums of hazardous waste shipped south for disposal, gravel production and partial construction of Tier II landfill berm core.

2004: QC sends over 60 workers to RI from June 14 to September 17. The main tasks accomplished include: Clean Up of CEPA PCB soils; excavation and temporary stockpiling of PCB Tier II soil from the S1/S4 valley; PCB Containerization and Storage of the CEPA soil; repackaging and containerization of various CEPA waste materials in compliance with TDG Regulations; Tier II Landfill: completion of the construction of the berm core, protective sand layer, installation of bottom geotextile and geomembrane, monitoring wells.

2005: QC sends over 60 workers to RI from June 16 to September 11. The main tasks accomplished include:

- Finalizing the construction of the Tier II Landfill;
- Excavation of all remaining contaminated soils (CEPA, PCB Tier I/II, Co Tier II, Pb Tier I/II and Cu Tier II);
- Placement of all contaminated Tier II soil and debris and all Tier I soil within the Tier II landfill;
- Containerization of all remaining CEPA soil for off-site disposal;
- Excavation and containerization of heavy hydrocarbons excavation for off-site disposal;
- Gravel production at three borrow pits (Radio Hill, Airstrip and Lake 2) to produce specified materials for the Tier II landfill construction and cover, and for other construction activities;
- Coordination of 2 dry sealifts (delivery of required supplies, and waste and contaminated soils off-site shipping);
- Coordination of 1 wet sealift (fuel delivery) including preparation of fuel tanks and cleaning (filtration for water removal) of fuel remaining from the 2004 season;

- Collection, hauling, shredding and disposal into non-hazardous waste landfill of all remaining site debris;
- Coordination of site access and food re-supplies by a Bell 212 helicopter;
- Incineration of remaining waste petroleum products; and
- Hazardous waste packaging, labelling and marine shipment for south disposal at registered facilities.

The above activities are described in section 2 to 6 of this report. All clean up activities were finally completed during the 2005 season at Resolution Island, as per the new remediation plan developed prior to the 2003 field season. Section 7 presents conclusions and provides a list of proposed tasks for the 2006 season, which will essentially be dedicated to the demobilization of all assets from the site.

This project is funded by the Environment and Contaminants Office, Indian and Northern Affairs Canada (INAC). Every year INAC mandates QC through a Contribution Agreement. QC is owned by the Qikiqtani Inuit Association (QIA), the Inuit birthright organization representing the Qikiqtani (Baffin Island) region of Nunavut. The Resolution Island Project provides long-term benefits to Inuit from Nunavut communities through employment and training. Furthermore, by removing the source of pollution, the project will eventually attenuate the environmental impacts on nearby communities, thereby protecting the health and future of the Inuit.

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GLOSSARY

ASU: Analytical Services Unit (Queen's University)

CEPA: Canadian Environmental Protection Act
(also refers to PCB concentration > 50 mg/kg)

EIS: Environmental Impact Statement

HC: Hydrocarbon contaminated (in reference to soils)

HDPE: High density polyethylene

H&S: Health and Safety

INAC Indian and Northern Affairs Canada

NTI: Nunavut Tunngavik Incorporated

OD: Outside diameter

O&M: Operations and Maintenance

NSSI: Nunavut Sealink and Supply Inc.

PCB: Polychlorinated Biphenyls

PCL: PCL construction company

PMT: Project Management Team

POL: Petroleum Oil & Lubricants

QIA: Qikiqtani Inuit Association

QC: Qikiqtaaluk Corporation

RI: Resolution Island

RRMC: Royal Roads Military College

SMT: Senior Management Team

Tier I: DEW Line Clean up criteria (*e.g.*, 1 mg/kg ≤ PCB concentration < 5 mg/kg)

Tier II: DEW Line Clean up criteria (*e.g.*, 5 mg/kg ≤ PCB concentration < 50 mg/kg)

TPH Total Petroleum Hydrocarbons

USAF: United States Air Force

drum: 45 imperial gallon steel cylindrical container

1- INTRODUCTION

The 2005 field season at Resolution Island (RI) started on June 16th with the initial crew mobilisation. Scheduled tasks were initiated once the camp was operational. All planned activities were conducted and completed by the end of the season. The site was closed on September 11th.

Indian and Northern Affairs Canada (INAC), in partnership with Qikiqtaaluk Corporation (QC), initiated this project in 1997 following several environmental investigations conducted by the Department of National Defence (DND), Environment Canada, the Royal Roads Military College (RRMC), and Queen's University Analytical Services Unit (ASU). QC and Qikiqtaaluk Environmental (QE) coordinated and conducted previous work focussing on mobilisation, infrastructure, settings, and environmental remediation. In 2005, 70 individuals combined their efforts to make this field season a successful one. The following major tasks were completed during the field season:

- Finalizing the construction of the Tier II Landfill;
- Excavation of the contaminated soils (CEPA, PCB Tier I/II, Co Tier II, Pb Tier I/II and Cu Tier II);
- Heavy hydrocarbons excavation;
- Gravel production at three borrow pits (Radio Hill, Airstrip and Lake 2);
- 2 dry sealifts (supplies delivering and contaminated soils shipping);
- 1 wet sealift (fuel delivery);
- POL incineration;
- Hazardous waste packaging and labelling; and,
- Site clean-up.

Some other tasks were accomplished during the 2005 season:

- Dismantling and landfilling of the 3 POL tanks;
- Renovation of the training centre into a small monitoring camp (ten (10) bed capacity); the kitchen trailer will be set up at the beginning of the 2006 season;
- Installation of monitoring wells at the Maintenance Dump;
- Landfilling of non-hazardous waste;
- Drum shredding and landfilling;
- Demolition of the Quonset Hut and the POL Pump House;
- Cleaning of the project's fuel tanks and transfer of 250, 000 L of fuel from NWS;
- Recontouring of the Former Borrow pits;
- B2 Caterpillar generators moved to the training centre.

This document summarizes the activities carried out on site between June and September 2005. Section 2 of the report describes the activities related to the transportation of equipment and material. Section 3 presents information on the excavation and/or removal of PCB contaminated soil and debris, while Section 4 describes the PCB CEPA soil and debris containerization and temporary storage activities. Section 5 presents information related to the construction and filling of the Tier II landfill, including gravel production. In Section 6, clean up activities, other than those related to PCB soil and debris, are presented. Section 7 presents the objectives for the last season.

Photographs depicting fieldwork activities are presented throughout this report. The 2005 As-Built Drawings are submitted as a separate document attached to the current report.

2- TRANSPORTATION SERVICES

Each year the success of the field season relies upon various transportation services which need to be planned, coordinated, and managed. These include marine and air transport operations.

2.1- Sealift Operations

In 2005, Nunavut Eastern Arctic Shipping Inc. (NEAS) was awarded the marine shipping contract to transport to Resolution Island the various equipment and materials required for 2005.

Qikiqtaaluk Environmental coordinated the shipping and receiving of cargo at the port of Valleyfield (south west of Montreal) with the various suppliers and the road transport companies. Qikiqtaaluk Environmental also supervised the ship loading operations and verified that all equipment and materials were loaded onto the ship without any damage.

The ship (*Aivik*) left the port on July 2nd, 2005. Prior to the ship's arrival at RI, the beach barging area was backfilled and graded to provide a smooth working surface. Approximately 120 m^3 of screened sand was used to prepare the barging area.

The sealift arrived at Resolution Island in the evening of July 12th. Due to swell, and in spite of very sunny weather, NEAS had to delay the offloading of supplies to RI and stayed on standby at the Island. NEAS finally delivered all material on the evening of July 14th, however, the *Aivik* had to anchor in Sorry Harbour.

Cargo unloading was carried out from 7:00 pm on July 14th until 5:30 am on July 15th. First, the loaders were unloaded from the ship. The cargo was then transferred from the ship to the barge. The NEAS loaders unloaded the cargo from the barge to the beach highwater mark. All unloaded cargo was temporarily stored at the beach barging area. Qikiqtaaluk Environmental and QC representatives monitored all operations, and verified and signed the shipping manifest. The inventory warehouseman added all new items received to the general inventory list.

Approximately 520 m^3 (144 metric tonnes) of equipment and materials were shipped to the island, including the following items:

- Cylinders of hydrogen and compressed air;
- Rolls of geomembrane and geotextile liner;
- Flower pot containers and lids;
- Bundles of steel and plywood;
- Drums of gasoline;
- Spare tires.

A copy of the NEAS transport manifest is provided in Appendix 1.

2.2- Air Transportation

Air transport services were required for crew mobilization and rotation, as well as for shipment of equipment and supplies to and from the island.

Supplies shipped to Iqaluit from Montreal by First Air were temporarily stored at the airport, before being sent to RI by helicopter and airplane.

Canadian Helicopters Ltd was awarded the contract to provide regular air transportation services using a Bell 212 helicopter. QC managed the contract and coordinated the helicopter flights from RI on a daily basis, over the duration of the field season. Flight data, such as departure and arrival times as well as flying time was logged. In 2005, a total of 256.7 hours of flying time were used on Bell 212, including one trip with Bell 206.

Photograph 2.1: Bell 212 helicopter

In addition to the helicopter services, chartered Twin Otter flights were used to transport crew and cargo to and from the site. Twin Otter flights were mainly scheduled at the beginning and at the end of the field season to carry bulky materials and supplies as well as larger crews. Twin Otter flights were also used during the season to relieve cargo backlogs whenever the helicopter was down for several days due to bad weather or mechanical problems. In 2005, a total of eight (8) Twin charters were used. Kenn Borek Air was contracted on an as required basis.

The following equipment and materials were shipped by air:

- Ladders;
- Pumps;
- Filters;
- Tooth for buckets;
- Rolls of geotextile;
- Food.

3- PCB CLEAN UP

The excavation and removal of PCB CEPA soils (*i.e.*, > 50 ppm PCB) continued at the S1/S4 Beach area during the 2005 season. New pockets of CEPA soil were also discovered and removed from the S1/S4 Valley while conducting Tier I/II excavation. All soils were screened and containerized. Soil containerization and storage are discussed in Section 4 of this report. All containers filled with CEPA soil were shipped south for disposal during the 2005 season. Since these activities are part of a separate contract, they are discussed in a different report [1].

Excavation of PCB Tier I/II (*Tier I:* PCB levels between 1 and 5 ppm PCB, *Tier II:* levels between 5 and 50 ppm PCB) contaminated soils was also carried out this season. This activity was conducted in the following areas:

- S1/S4 beach,
- S1/S4 valley,
- PCL dump and,
- DND Helipad.

The following section describes the nature of the PCB clean up activities conducted during the 2005 season.

3.1- S1/S4 Beach

3.1.1- CEPA soils

In 2004, the access road leading to the S1/S4 was completed and a loop was also built at the end of the road to ease the flow of truck traffic. In 2004, over 2,000 m^3 of soil was removed from the S1/S4 beach area.

In the 2005 season, an amount of 332 m^3 of CEPA soil was removed and as a result, a total of four (4) quadrants were decontaminated. These quadrants, identified on the As-Built Drawings, are: 7F, 7E, 8F and 8E. Copies of the signed quadrant log sheets are presented in Appendix 2. In order to access the remaining CEPA soil pockets near the ocean, the access road has been extended.

Despite the very steep profile of this area, all the CEPA soils were excavated, stockpiled and then hauled to the B2 processing for further screening and containerization (see section 4).

3.1.2. PCB Tier I/II soils

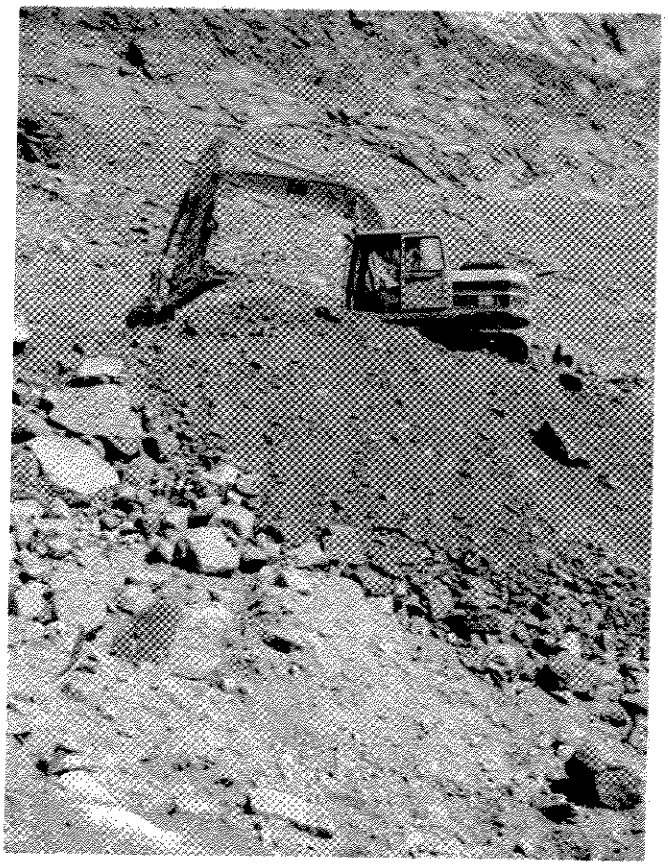
The excavation of PCB Tier II and Tier I soils was initiated on July 07 and was completed on July 31. Over 2,200 m^3 of Tier II soil and 880 m^3 of Tier I was removed from the S1/S4 beach area and as a result a total of twenty one (21) quadrants were totally or partially decontaminated. These

[1] Resolution Island - Disposal of PCB Contaminated Soil, 2005 - Final Report, PWGSC Contract No. A7157-030001/001/FK, Qikiqtaaluk Corporation, January 2006

quadrants, identified on the As-Built Drawings, are: 3B, 3C, 4B, 4C, 4D, 4E, 5C, 5D, 5E, 6C, 6D, 6E, 7C, 7D, 7E, 7F, 8D, 8E, 8F, 8G and 9F. Copies of the signed quadrant log sheets are presented in Appendix 2. All Tier II and Tier I contaminated soils were hauled to the landfill.

The excavation started at the highest point and then working down. As the working conditions were unsafe due to a very steep slope on the upper quadrants, Qikiqtaaluk Corporation, ASU and Qikiqtaaluk Environmental representatives decided to excavate and then cover only the accessible patches of contaminated soil. The log sheets mention if the excavation could be completed or not.

Once the excavation was completed, the boulders which were previously moved to access the contaminated areas, were replaced in order to avoid mud slides. Otherwise, the area was landscaped and no clean gravel was used to backfill excavated areas.



Photograph 3.1: Excavation of CEPA soil at the bottom of the cliff - S1/S4 beach

3.2- S1/S4 Valley

The soil stockpiles (approximately 3,000 m^3 Tier II soil had been stockpiled in the 2004 season) were ready to be loaded into trucks and hauled to the Tier II landfill in the S1/S4 valley. The

activities of excavation and hauling of PCB Tier II/Tier I contaminated soils in the S1/S4 valley were initiated on July 05 and completed on July 31. Over 6,000 m^3 of Tier II soil and 2,200 m^3 of Tier I soil was removed from the S1/S4 Valley area.

One area was inaccessible (Tier II) below the Billboards and was covered with 1 m of clean fill. In certain areas, due to access difficulties, Tier II and Tier I soils have been combined.

During Tier II soil excavation in the S1/S4 valley, new pockets of PCB CEPA soil were identified. These soils were discovered by ASU during routine soil testing to establish the limits between Tier I and Tier II contaminated soil areas. The CEPA soils were excavated and hauled to the B2 processing area. Approximately 155 m^3 of CEPA soil was removed from the valley.

Once the Tier II/Tier I soil (stockpiled and *in situ*) and debris were removed, approximately 1,350 m^3 of clean soil was hauled to cover the excavated areas. Inaccessible PCB Tier I soil patches were covered with 0,5 m^3 of clean soil.

Moreover, the labor crew provided ASU with help for the containerization of the PCB Tier II soil scraped out of the barrier. As the Tier II landfill was closed at the time of the request, four (4) small brown flower pots were filled with the PCB Tier II soil.

Photograph 3.2: Excavation of PCB Tier II soil - S1/S4 Valley