Appendix 3a

Site Photos

– Old Base 1

Site Photographs – Old Base 1

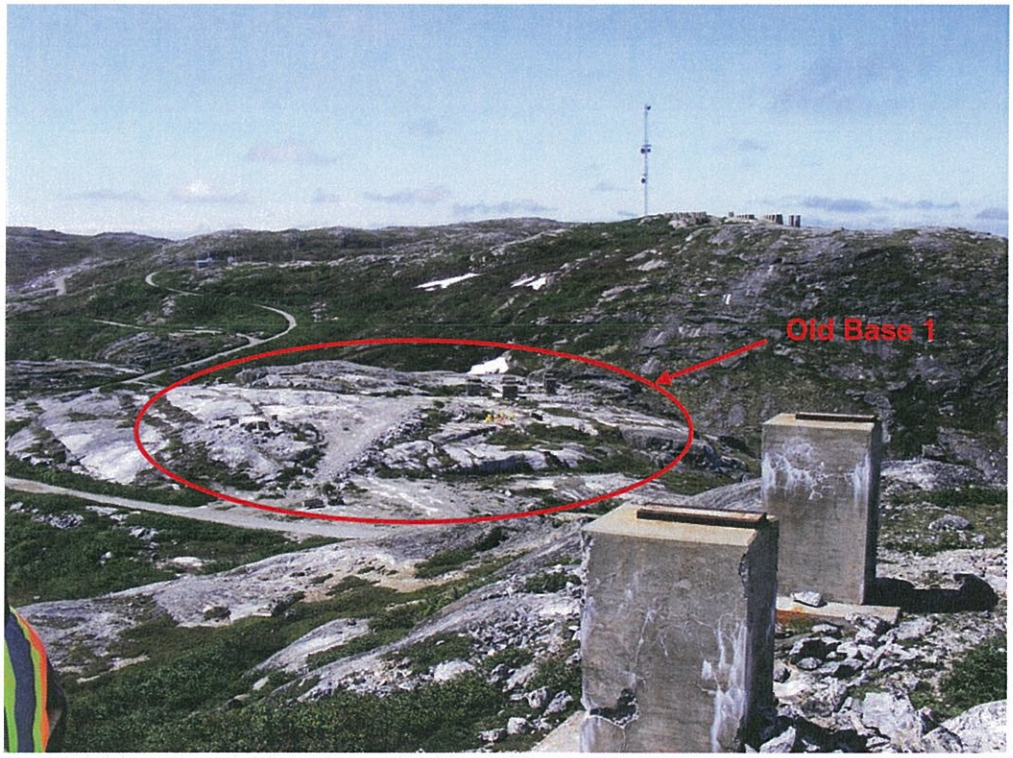

Photo 1 View over Old Base 1 Site to Aliant antenna and BMEWS site (looking southwest from Main Base site)

Photo 2 View of road and concrete foundations at the Old Base 1 site (looking west). The BMEWS site is apparent in the background.

Site Photographs – Old Base 1

Photo 3 Concrete foundations at the Old Base 1 site (looking east). The black truck in the background is parked on the main access road.

Photo 4 View PCB-impacted tar at the Old Base 1 site prior to remediation

Site Photographs – Old Base 1

Photo 5 View of PCB-impacted tar remediation activities at Old Base 1 (looking southwest)

Photo 6 Limited remediation of PCB-impacted tar at Old Base 1

Site Photographs – Old Base 1

Photo 7 Chipping bedrock to remove PCB-impacted tar at Old Base 1

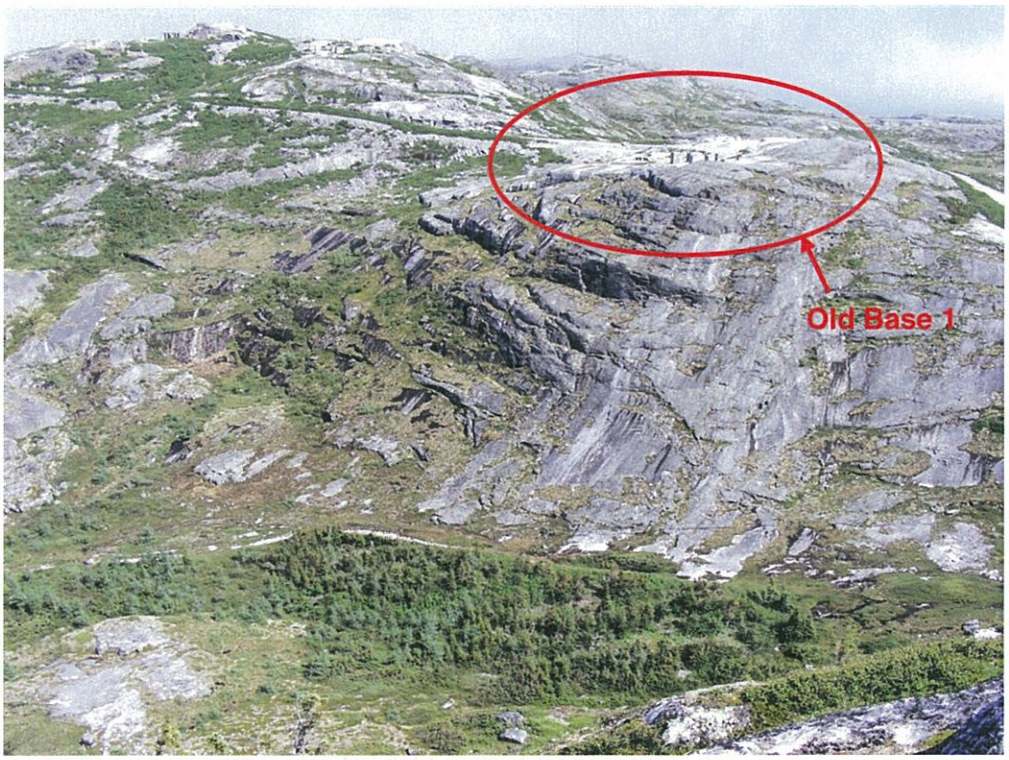

Photo 8 View of water draining into valley from Old Base 1 (looking south)

Appendix 3b

Sample Coordinates

– Old Base 1

Sample Coordinates - Old Base 1
Phase II/III ESA, HHERA and RAP/RMP
Former US Military Site and Residential Subdivision, Hopedale, NL
Project No. 121410103

Sample ID	Coordinates	
	Easting	Northing
SURFACE SOIL		
BS121	0674912	6150048
BS122	0674911	6150053
BS123	0674915	6150053
BS124	0674909	6150063
BS125	0674894	6150060
BS126	0674918	6150070
BS127	0674918	6150103
BS128	0674932	6150071
BS129	0674954	6150066
BS130	0674960	6150031
BS131	0674965	6150039
BS132	0674973	6150048

Appendix 3c

Soil Vapour Concentrations

– Old Base 1

Sample Tipping Results - Old Base 1
Phase II/III ESA, HHERA and RAP/RMP
Former US Military Site and Residential Subdivision, Hopedale, NL
Project No. 121410103

Sample ID	Sample Depth (mbgs)	Hydrocarbon Odour	Soil Vapour Concentration (ppm)
SURFACE SAMPLES			
BS121	0.00-0.03	No	2.0
BS122	0.00-0.11	No	2.2
BS123	0.03-0.05	No	2.4
BS124	0.00-0.07	No	2.3
BS125	0.00-0.05	No	2.7
BS126	0.00-0.02	No	2.7
BS127	0.00-0.02	No	3.0
BS128	0.00-0.08	No	3.2
BS129	0.00-0.05	No	3.3
BS130	0.00-0.03	No	3.5
BS131	0.00-0.05	No	3.6
BS132	0.00-0.04	No	3.9

Appendix 3d

Laboratory Analytical Results Summary Tables

– Old Base 1

Table 3.1 Results of Laboratory Analysis of TPH/BTEX in Soil - Old Base 1
Phase II/III ESA, HHERA and RAP/RMP
Former US Military Site and Residential Subdivision, Hopedale, NL
Project No. 121410103

Sample ID	Sample Depth (m)	Benzene	Toluene	Ethylbenzene	Xylenes	C_6-C_{10} (Gas Range)	C_{10}-C_{21} (Fuel Range)	C_{21}-C_{32} (Lube Range)	Modified TPH - Tier I[2]	Resemblence
RDL		0.03	0.03	0.03	0.05	3	15	15	20	-
Units		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	-
Tier I RBSLs[3]		0.16	14	58	17	-	-	-	140	-
SURFACE SAMPLES										
BS127	0.00 - 0.02	<0.03	<0.03	<0.03	<0.05	<3	57	160	220	OP F/L

Notes:
1 = Partnership in RBCA (Risk-Based Corrective Action) Implementation (PIRI) Tier I Risk Based Screening Levels (RBSLs) for a residential site with non-potable groundwater and coarse grained soil, fuel oil impacts (September, 2003)
2 = Modified TPH - Tier I does not include BTEX
RDL = Reportable Detection Limit for routine analysis
< # = Not detected above RDL noted
"-" = indicates value is not available or does not apply
OP F/L = One product in fuel/lube oil range
Shaded = Value exceeds generic criteria for a residential site with non-potable groundwater, coarse grained soil and fuel oil impacts

Table 3.2 Results of Laboratory Analysis of PCBs in Soil - Old Base 1
Phase II/III ESA, HHERA and RAP/RMP
Former US Military Site and Residential Subdivision, Hopedale, NL
Project No. 121410103

Sample ID	Sample Depth (m)	Polychlorinated Biphenyls (PCBs)
	RDL	0.05
	Units	mg/kg
	Criteria[1]	1.3
SURFACE SAMPLES		
BS121	0.00 - 0.03	170
BS122	0.00 - 0.11	16
BS123	0.00 - 0.05	13
BS124	0.00 - 0.07	4.5
BS125	0.00 - 0.05	<0.05
BS126	0.00 - 0.02	230
BS127	0.00 - 0.02	<0.05
BS129	0.00 - 0.05	1.5
BS130	0.00 - 0.03	2.2
BS130-Lab-Dup	0.00 - 0.03	2.2
BS131	0.00 - 0.05	4.7
BS132	0.00 - 0.04	8.7

Notes:
1 = CCME Canadian Soil Quality Guidelines for a Residential/Parkland Site (2007)
RDL = Reportable Detection Limit for routine analysis
Lab-dup = Laboratory duplicate sample
< # = Not detected above RDL noted
Shaded = Value exceeds applicable criteria

Table 3.3 Results of Laboratory Analysis of Available Metals in Soil - Old Base 1
Phase II/III ESA, HHERA and RAP/RMP
Former US Military Site and Residential Subdivision, Hopedale, NL
Project No. 121410103

Parameters	RDL	Units	Criteria[1]	SURFACE SAMPLES							
				BS121	BS122	BS124	BS126	BS128	BS129	BS131	BS131 Lab-Dup
Aluminum	10	mg/kg	-	12,000	6,500	7,000	5,000	5,600	8,200	8,000	8,100
Antimony	2	mg/kg	20	5	<2	3	2	<2	6	<2	<2
Arsenic	2	mg/kg	12	3	<2	<2	<2	<2	<2	<2	<2
Barium	5	mg/kg	500	170	150	51	140	43	41	68	65
Beryllium	2	mg/kg	4	<2	<2	<2	<2	<2	<2	<2	<2
Bismuth	2	mg/kg	-	<2	<2	<2	<2	<2	<2	<2	<2
Boron	5	mg/kg	-	7	<5	11	14	<5	<5	<5	<5
Cadmium	0.3	mg/kg	10	18	15	9.0	29	22	<0.3	11	11
Chromium	2	mg/kg	64	36	11	25	12	14	24	14	13
Cobalt	1	mg/kg	50	7	3	3	4	4	6	12	11
Copper	2	mg/kg	63	150	84	54	200	100	10	56	45
Iron	50	mg/kg	-	21,000	6,100	7,100	7,100	6,600	15,000	12,000	11,000
Lead	0.5	mg/kg	140	3,000	220	120	280	24	6.6	87	46[3]
Lithium	2	mg/kg	-	7	4	8	4	3	9	16	16
Manganese	2	mg/kg	-	370	98	150	180	150	130	170	160
Mercury	0.1/0.2[2]	mg/kg	6.6	<0.2[2]	0.2	0.7	0.2	<0.2[2]	<0.2[2]	<0.2[2]	<0.2[2]
Molybdenum	2	mg/kg	10	2	<2	<2	<2	<2	<2	<2	<2
Nickel	2	mg/kg	50	14	4	6	7	7	11	12	12
Rubidium	2	mg/kg	-	9	6	18	10	3	15	26	26
Selenium	2	mg/kg	1	<2	<2	<2	2	<2	<2	<2	<2
Silver	0.5	mg/kg	20	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Strontium	5	mg/kg	-	52	45	170	44	21	<5	15	14
Thallium	0.1	mg/kg	1	<0.1	<0.1	0.1	<0.1	<0.1	0.1	0.2	0.2
Tin	2	mg/kg	50	5	<2	2	2	6	<2	<2	<2
Uranium	0.1	mg/kg	23	1.5	1.4	1.3	1.2	1.5	0.7	0.3	0.3
Vanadium	2	mg/kg	130	21	14	16	16	13	40	21	20
Zinc	5	mg/kg	200	1,800	970	420	960	420	34	94	96

Notes:

1 = Canadian Soil Quality Guidelines for a Residential/Parkland Site

2 = Elevated RDL due to sample matrix

3 = Poor duplicate agreement due to sample inhomogeneity

RDL = Reportable Detection Limit for routine analysis

Lab-dup = laboratory duplicate sample

< # = Not detected above RDL noted

"-" = indicates value is not available or does not apply

Shaded = Value exceeds applicable criteria

Table 3.4 Results of Laboratory Analysis of PCBs in Rabbits - Old Base 1
Phase II/III ESA, HHERA and RAP/RMP
Former US Military Site and Residential Subdivision, Hopedale, NL
Project No. 121410103

Sample ID	Polychlorinated Biphenyls (PCBs)
RDL	0.05
Units	mg/kg
RABBITS	
RABBIT-1 HIND QUARTER	0.09
RABBIT-1 LIVER	0.16

Notes:
RDL = Reportable Detection Limit
< # = Not detected above RDL noted