
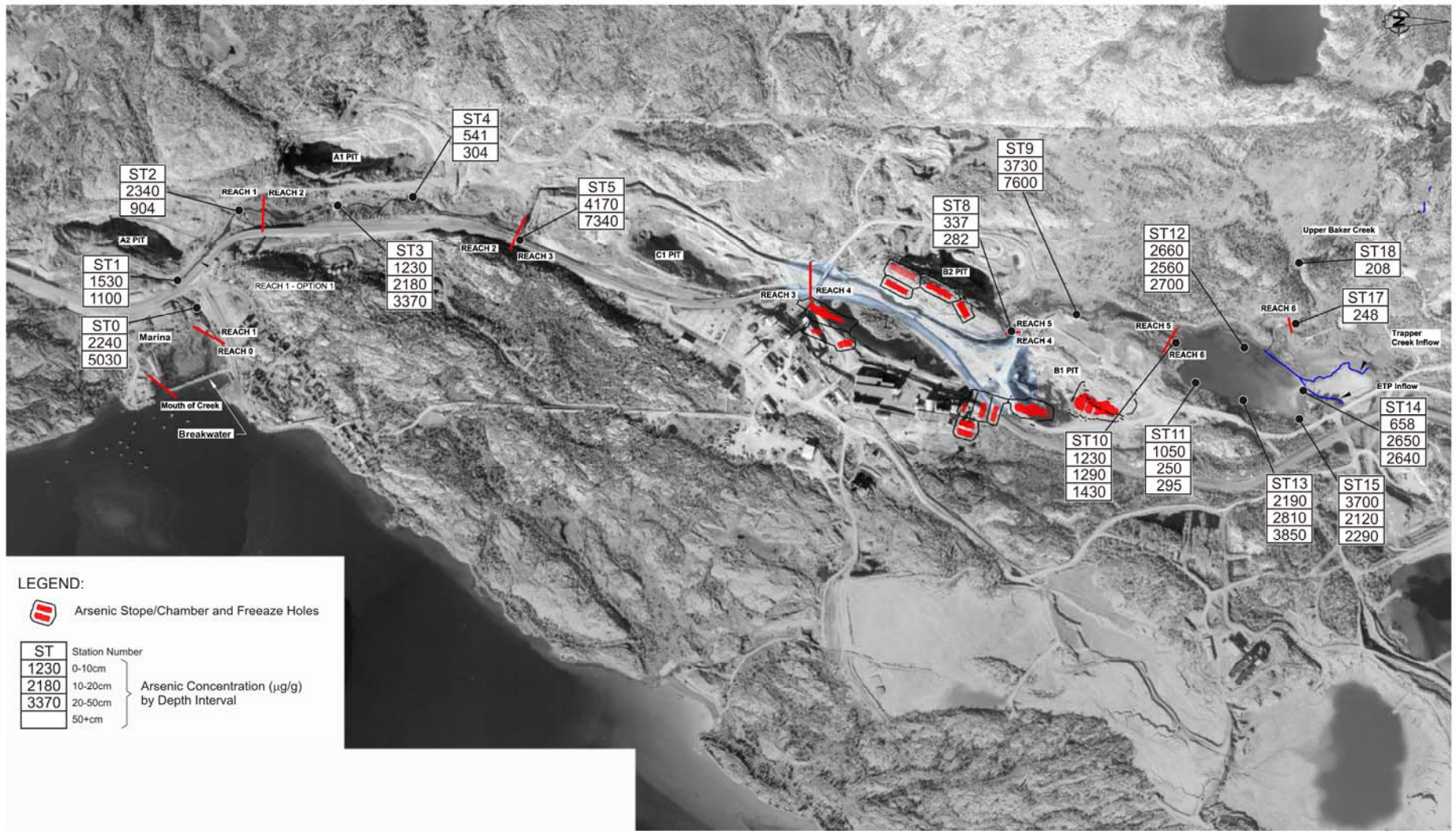
 SRK Consulting Engineers and Scientists <small>(INCORPORATED IN CANADA)</small>	 Indian and Northern Affairs Canada Affaires indiennes et du Nord Canada	Developer's Assessment Report		
		Arsenic Concentrations in North Yellowknife Bay Sediments		
SRK JOB NO.: 101001.013.0012.06	GIANT MINE	DATE:	APPROVED:	FIGURE:
FILE NAME: Arsenic concentration in YK Bay.dwg		Feb. 2010	MOR	7.1.6



0 100 200 300 400 Meters



SENE Job No: 35047-004

FILE NAME: Baker Creek Rehab.dwg



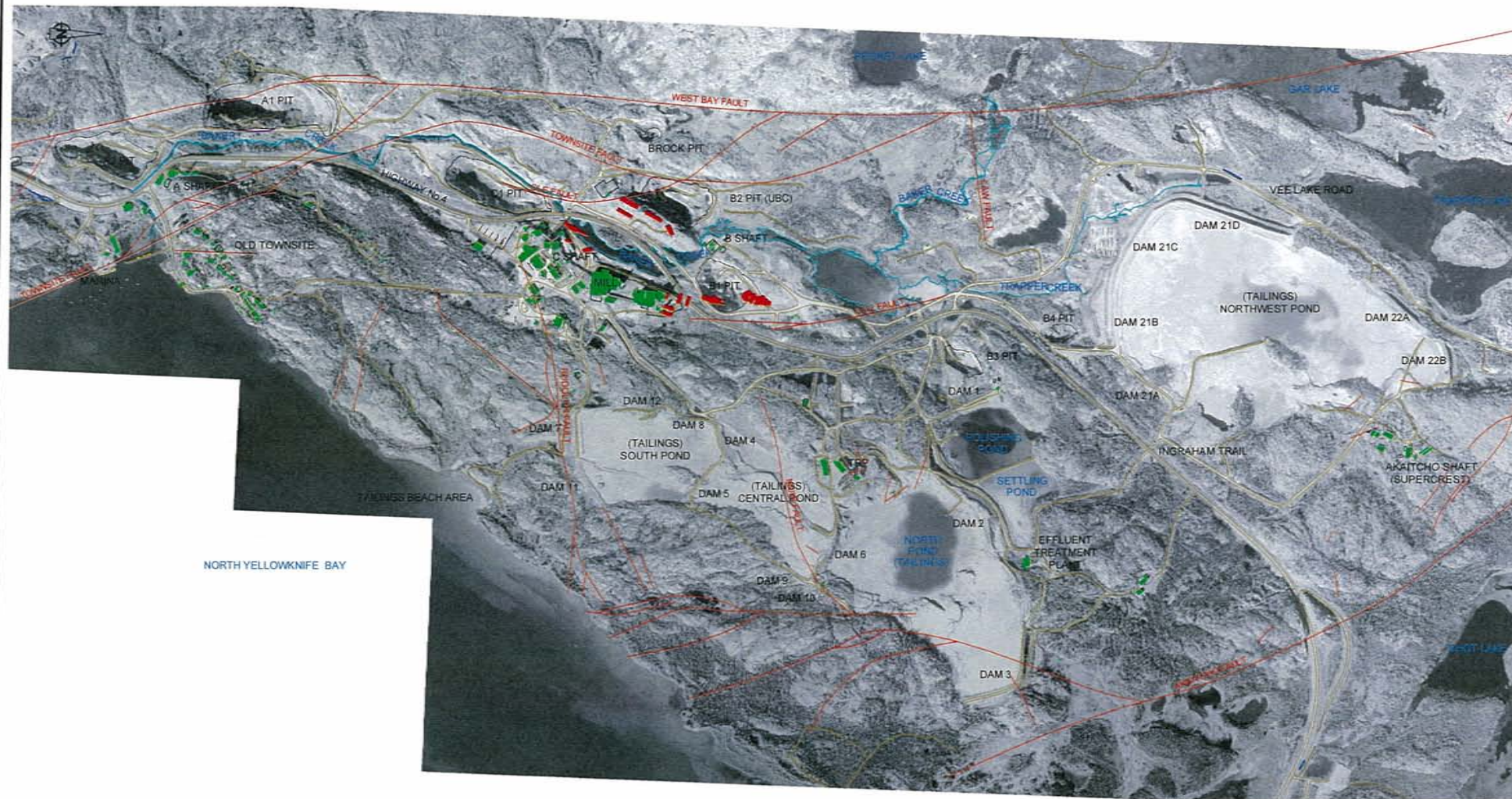
GIANT MINE PROJECT

Arsenic Concentrations
in Baker Creek Sediments

DATE: March 2010

APPROVED:

FIGURE: 7.1.7



- Legend**
- Fault Lines
 - Location of Underground Arsenic Chamber or Stope
 - Building
 - Road

1:40,000



SRK JOB NO.: 1C1001.013.0012.06
FILE NAME: Major Faults.dwg



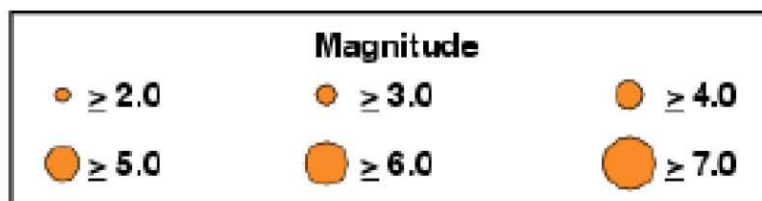
Indian and Northern Affairs Canada
Affaires indiennes et du Nord Canada

GIANT MINE

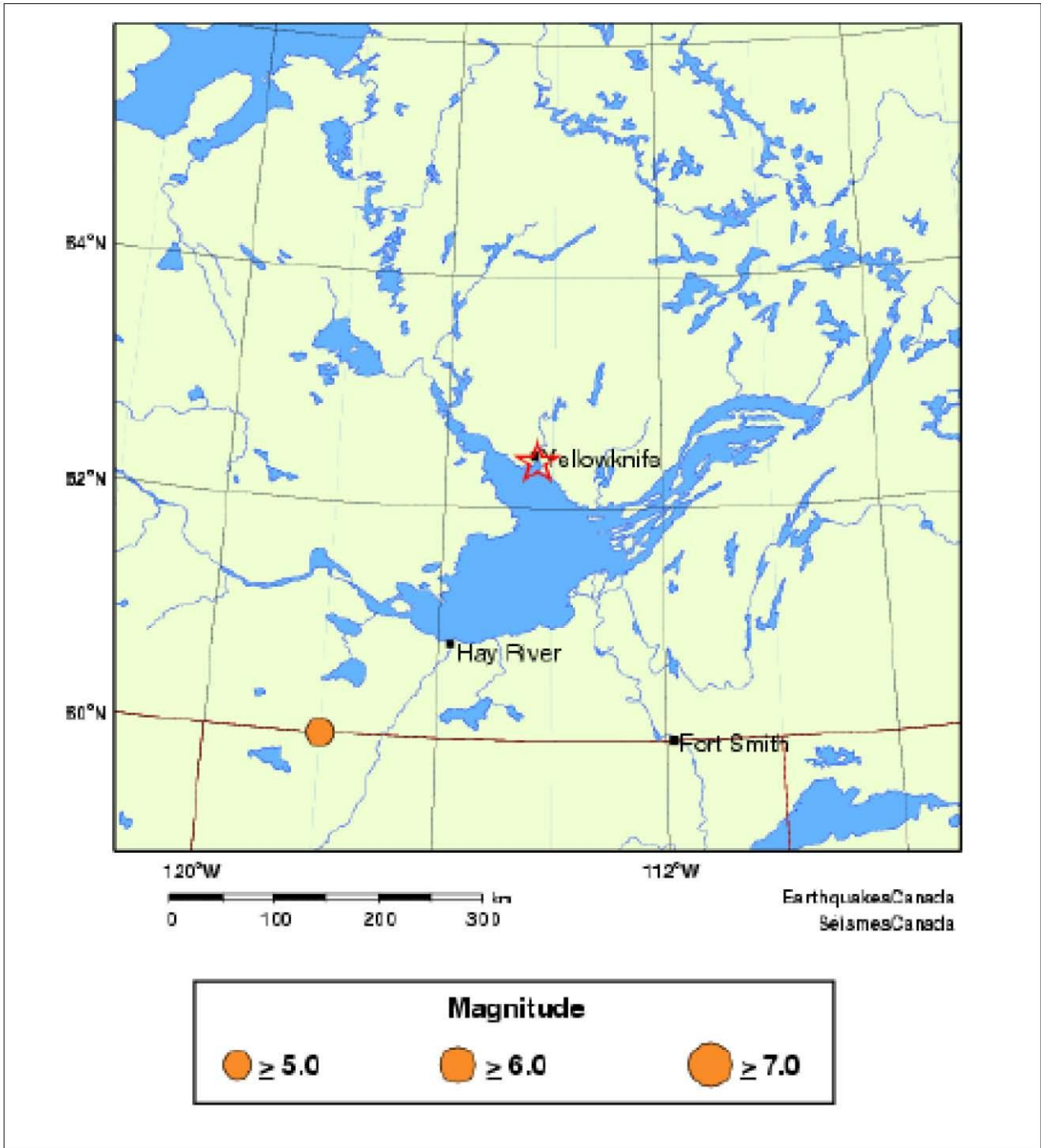
Developer's Assessment Report

Main Faults in the Vicinity of the Giant Mine



DATE: Nov. 2009 APPROVED: FIGURE: 7.2.1

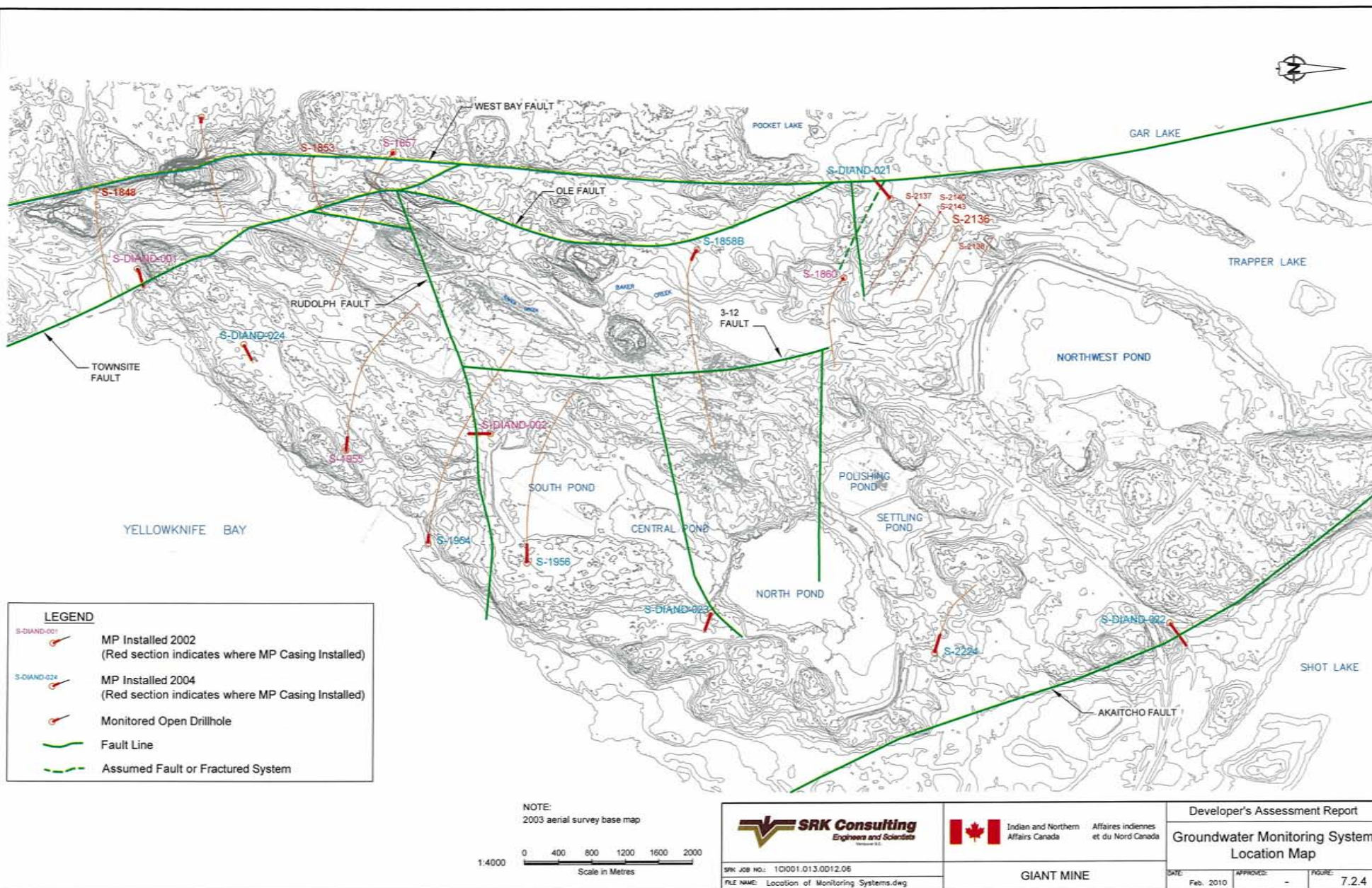


Source: <http://earthquakescanada.nrcan.gc.ca>

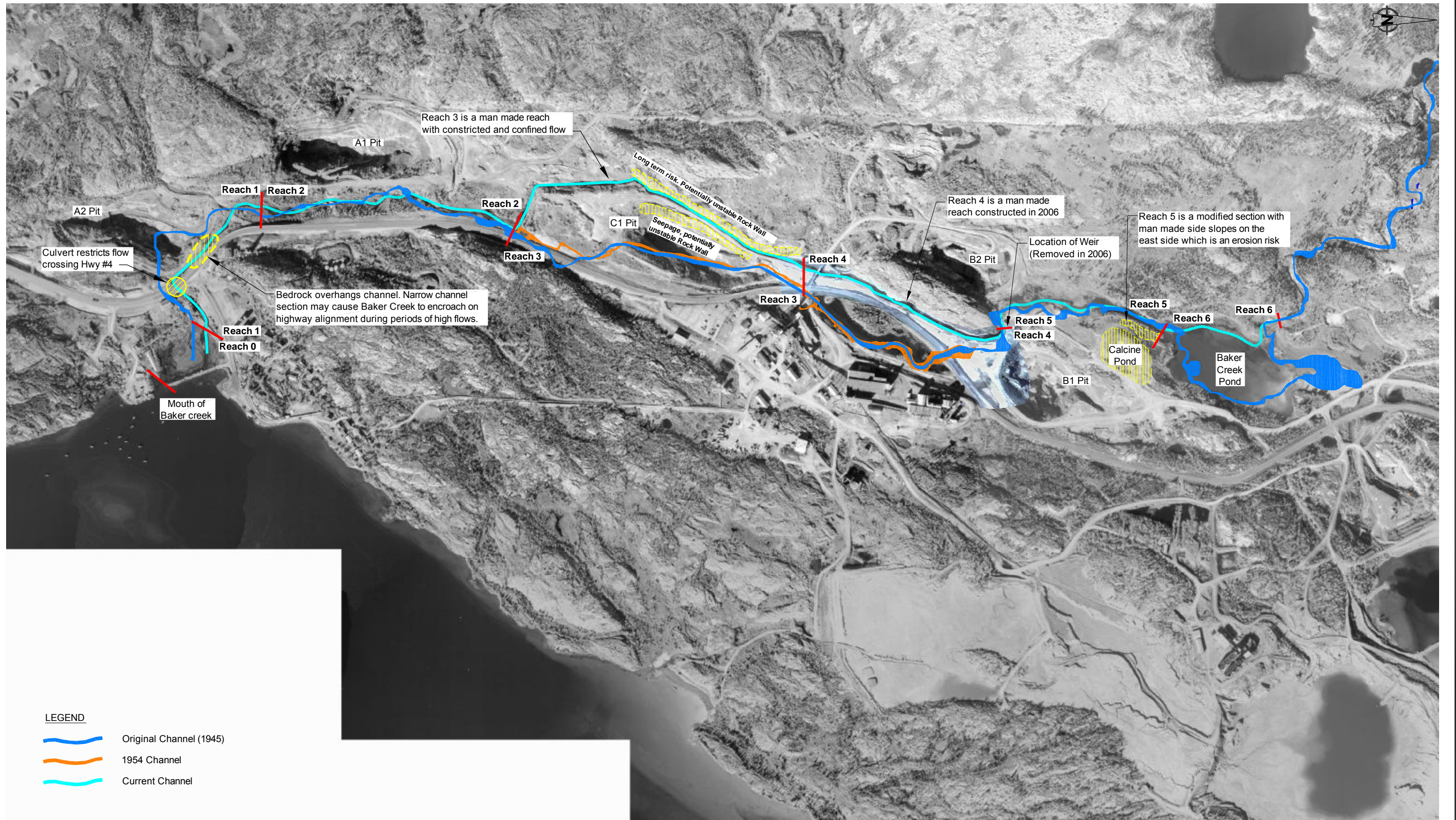


Source: <http://earthquakescanada.nrcan.gc.ca>


 SRK Consulting <i>Engineers and Scientists</i> VANCOUVER	 Indian and Northern Affairs Canada Affaires indiennes et du Nord Canada	Developer's Assessment Report		
		Historical Earthquakes Magnitude 5.0 and Larger		
Job No: 1CI001.013.0D12.06 Filename:	GIANT MINE	Date: March 2010	Approved: KK	Figure: 7.2.3





U:\01_SITES\GIANT\Shared\01_Acad\Imperial\2009_Environmental Assessment\10001.013.0D12.06\Current and historical alignments.dwg



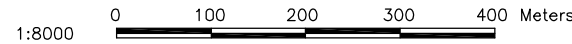
LEGEND

 Original Channel (1945)

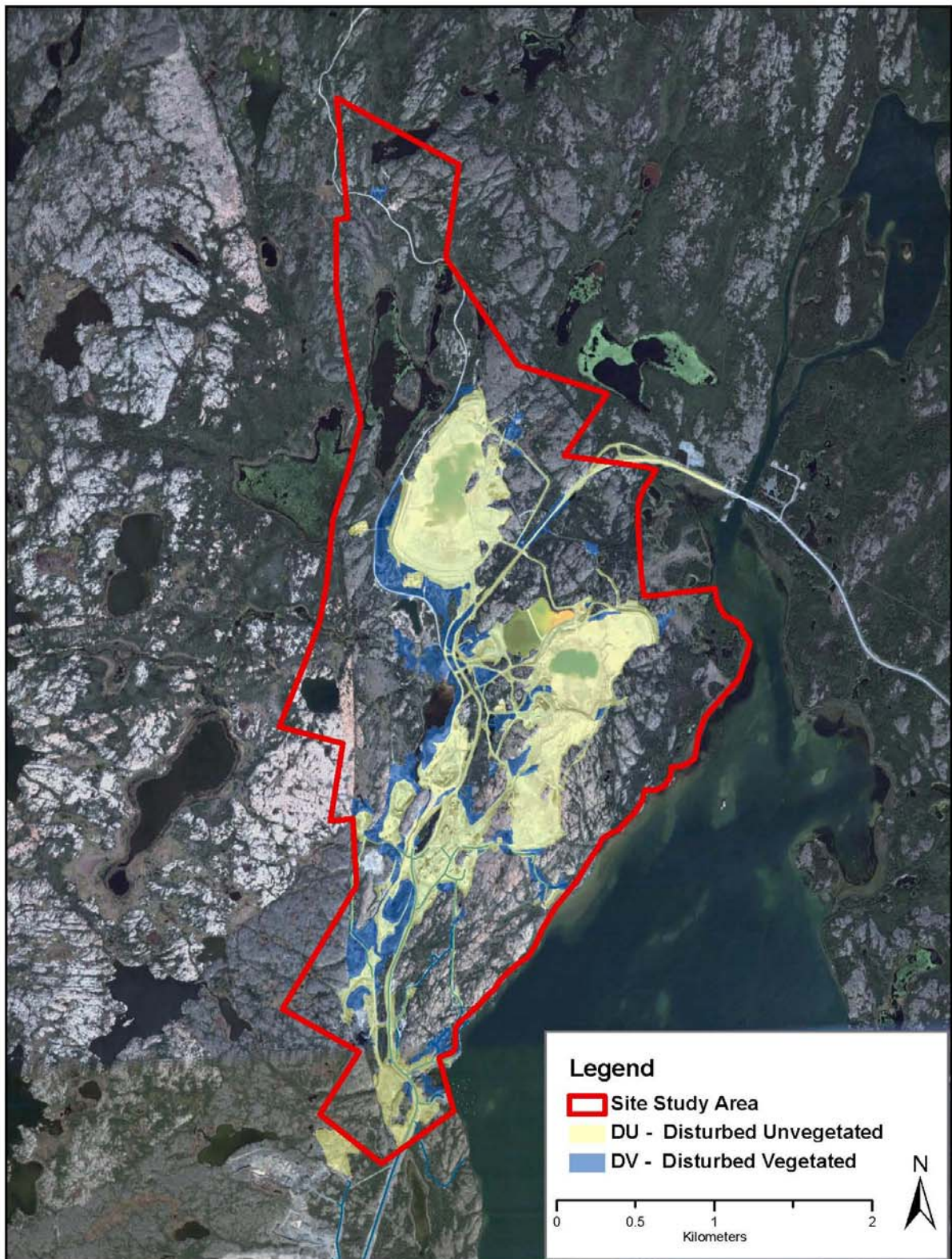
 1954 Channel

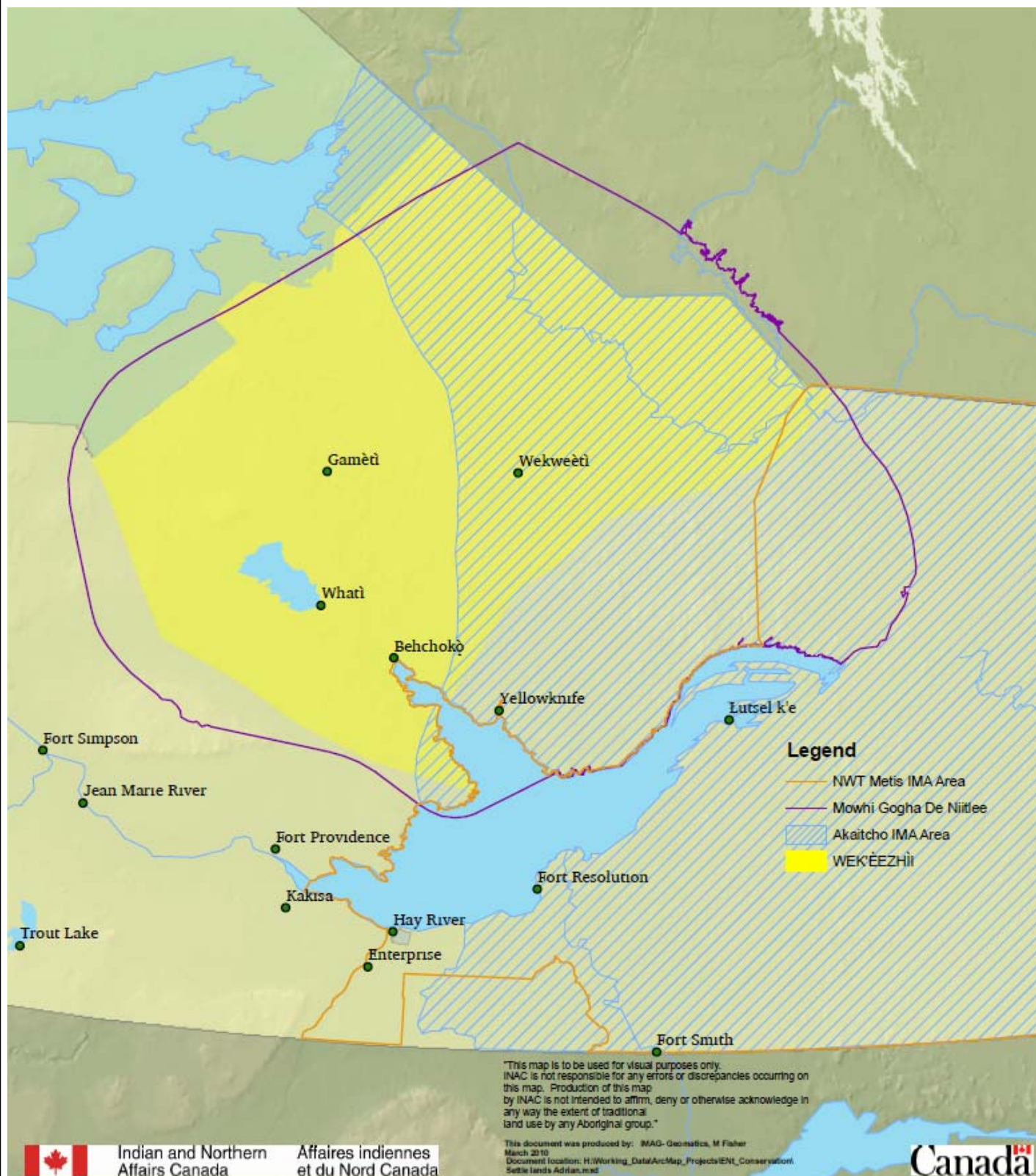
 Current Channel

Note:
Location of historical creek alignment is approximate due to distortion in original air photo.



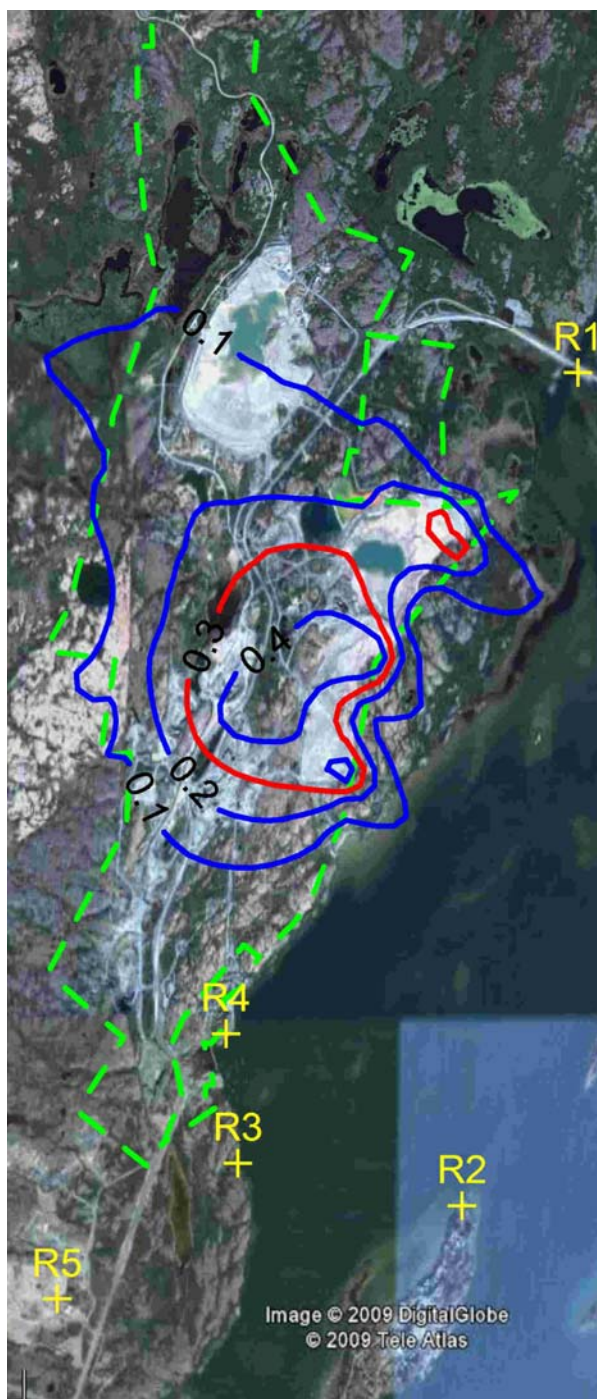
 SRK Consulting <i>Engineers and Scientists</i> Vancouver B.C.	 Indian and Northern Affairs Canada Affaires indiennes et du Nord Canada	Developer's Assessment Report		
		Original and Current Baker Creek Alignments		
SRK JOB NO.: 1CI001.013.0D12.06	GIANT MINE	DATE:	APPROVED:	FIGURE:
FILE NAME: Current and historical alignments.dwg		Feb. 2010	MK/LW	7.4.4



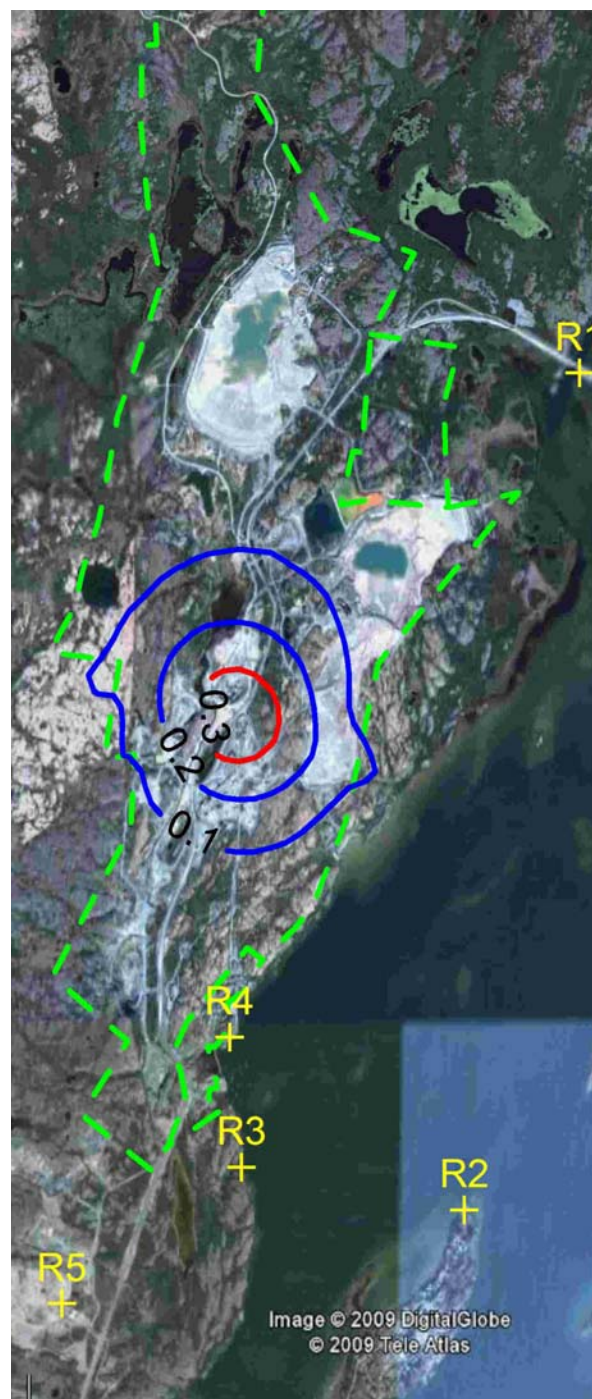


 SENEC Consultants Limited Specialists in Energy, Nuclear and Environmental Sciences		Developer's Assessment Report		
		Aboriginal Land Claim Areas		
Job No: 350047-004	GIANT MINE	Date: October 2010	Approved: TB	Figure: 7.6.1
Filename:				

Maximum 24-hour Arsenic Concentration
with Wind Erosion ($\mu\text{g}/\text{m}^3$)



Maximum 24-hour Arsenic Concentration
without Wind Erosion ($\mu\text{g}/\text{m}^3$)



Boundary of the Site Study Area

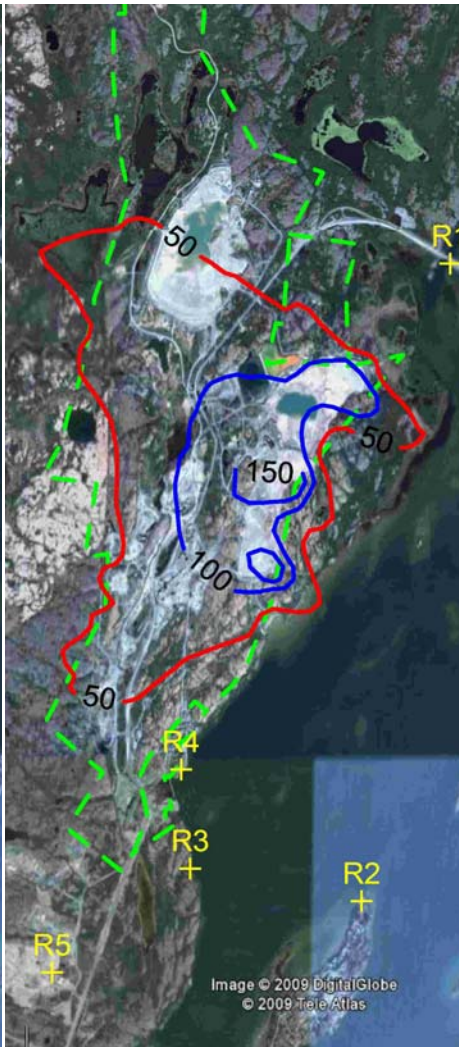
Concentration isopleths

Areas exceeding the applicable criterion

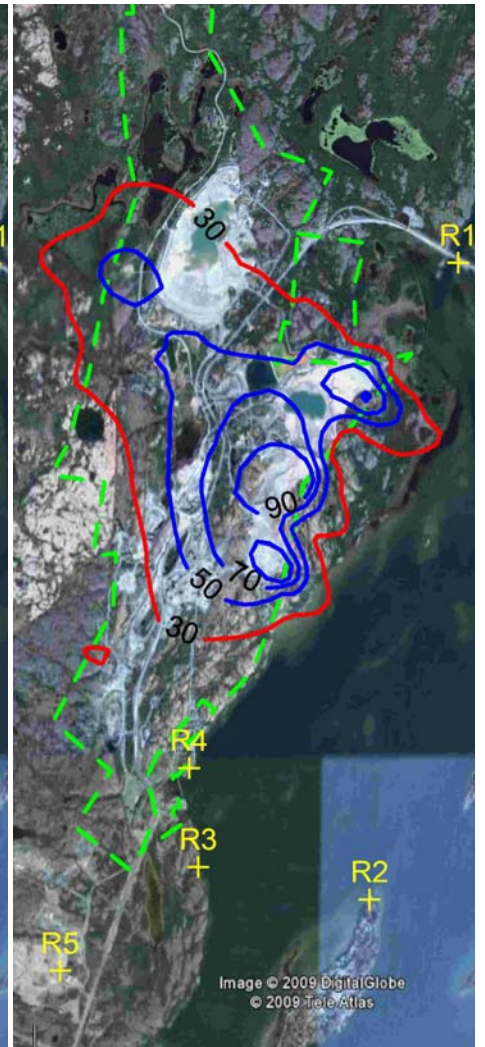
Maximum TSP ($\mu\text{g}/\text{m}^3$)



Maximum PM₁₀ ($\mu\text{g}/\text{m}^3$)



Maximum PM_{2.5} ($\mu\text{g}/\text{m}^3$)



Boundary of the Site Study Area

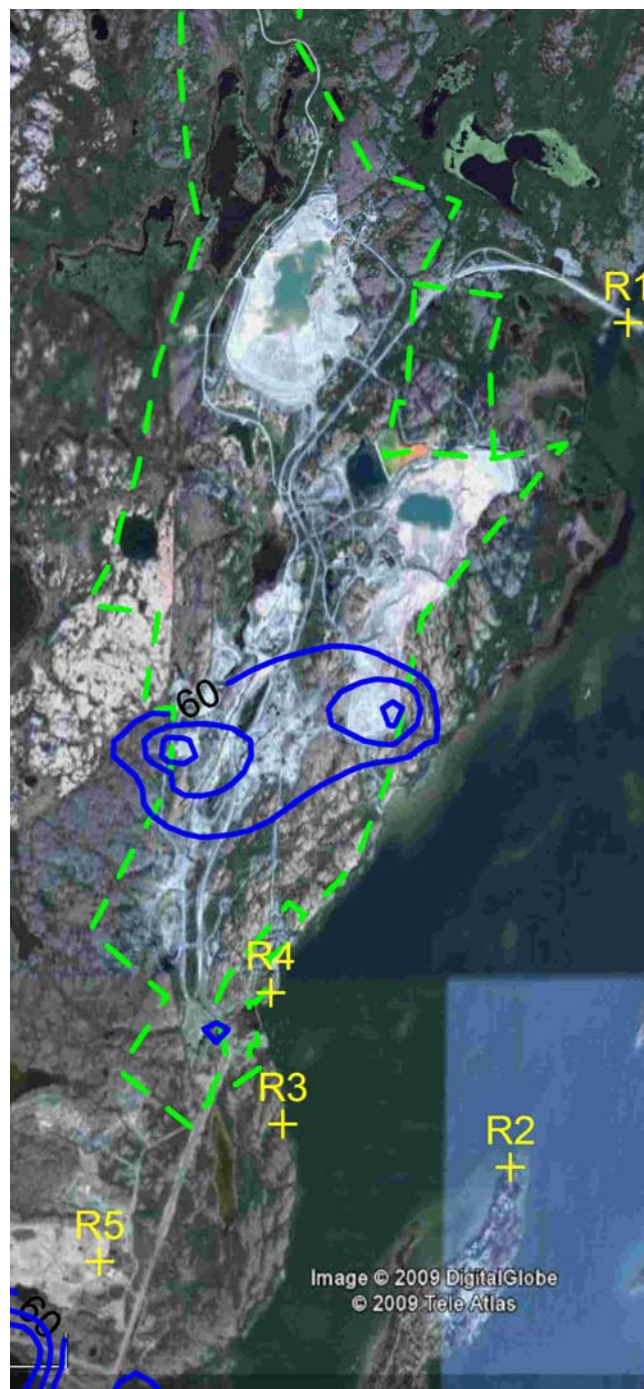
Concentration isopleths

Areas exceeding the applicable criterion

Maximum 1-hour Nitrogen
Dioxide Concentration ($\mu\text{g}/\text{m}^3$)



Maximum 24-hour Nitrogen
Dioxide Concentration ($\mu\text{g}/\text{m}^3$)

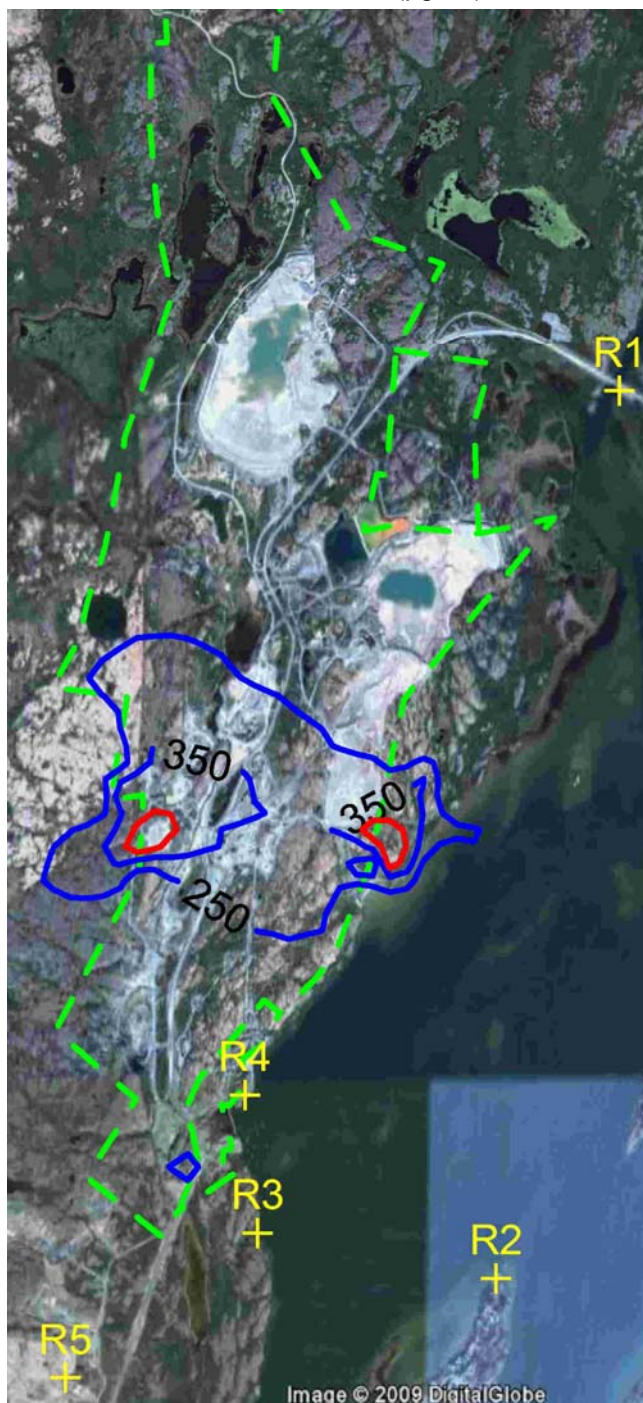


Boundary of the Site Study Area

Concentration isopleths

Areas exceeding the applicable criterion

Maximum 1-hour Sulphur Dioxide
Concentration ($\mu\text{g}/\text{m}^3$)



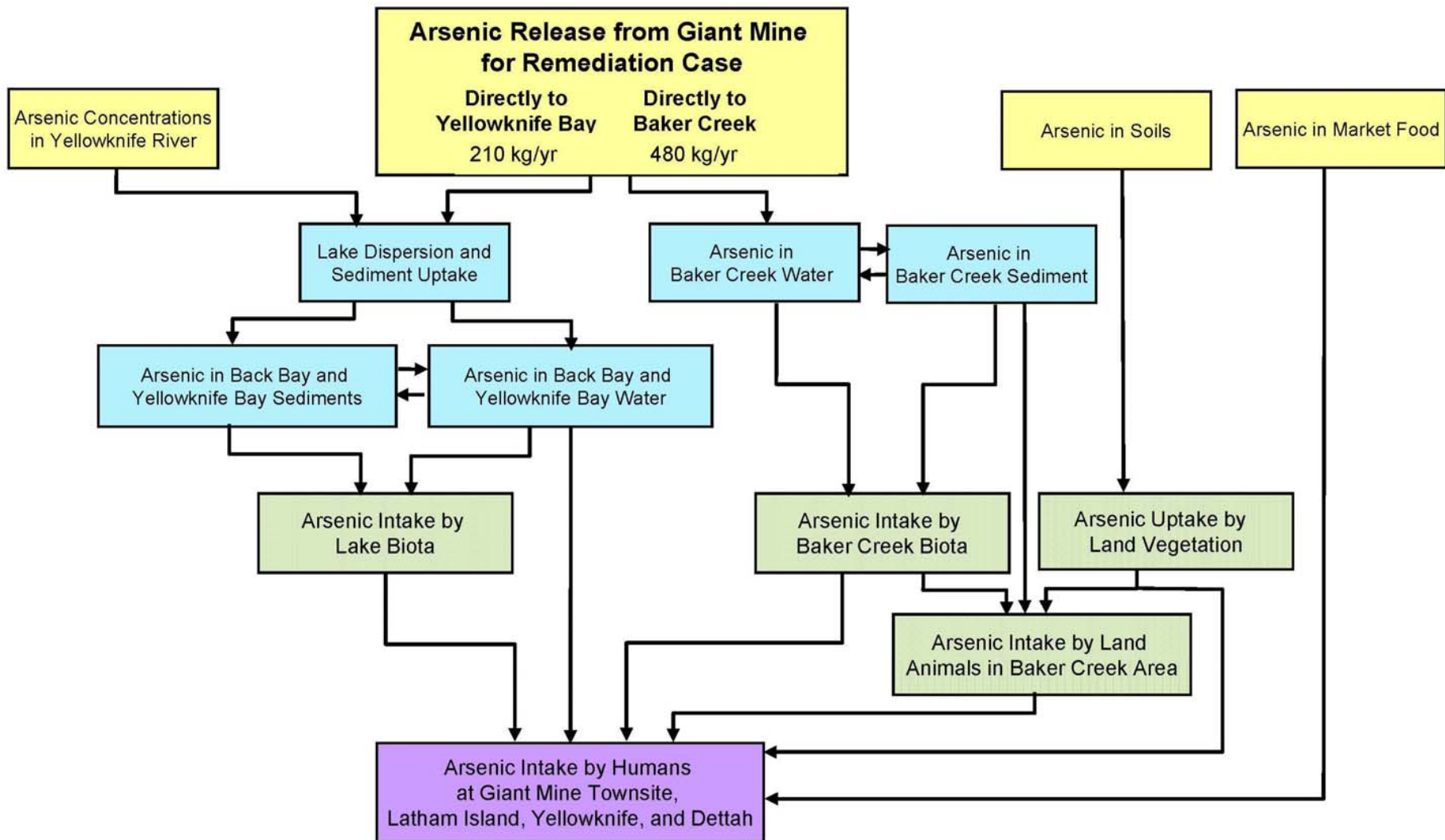
Maximum 24-hour Sulphur Dioxide
Concentration ($\mu\text{g}/\text{m}^3$)



Boundary of the Site Study Area

Concentration isopleths

Areas exceeding the applicable criterion



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Job No: 350047-004
Filename:



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Affairs Canada
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et du Nord Canada

GIANT MINE

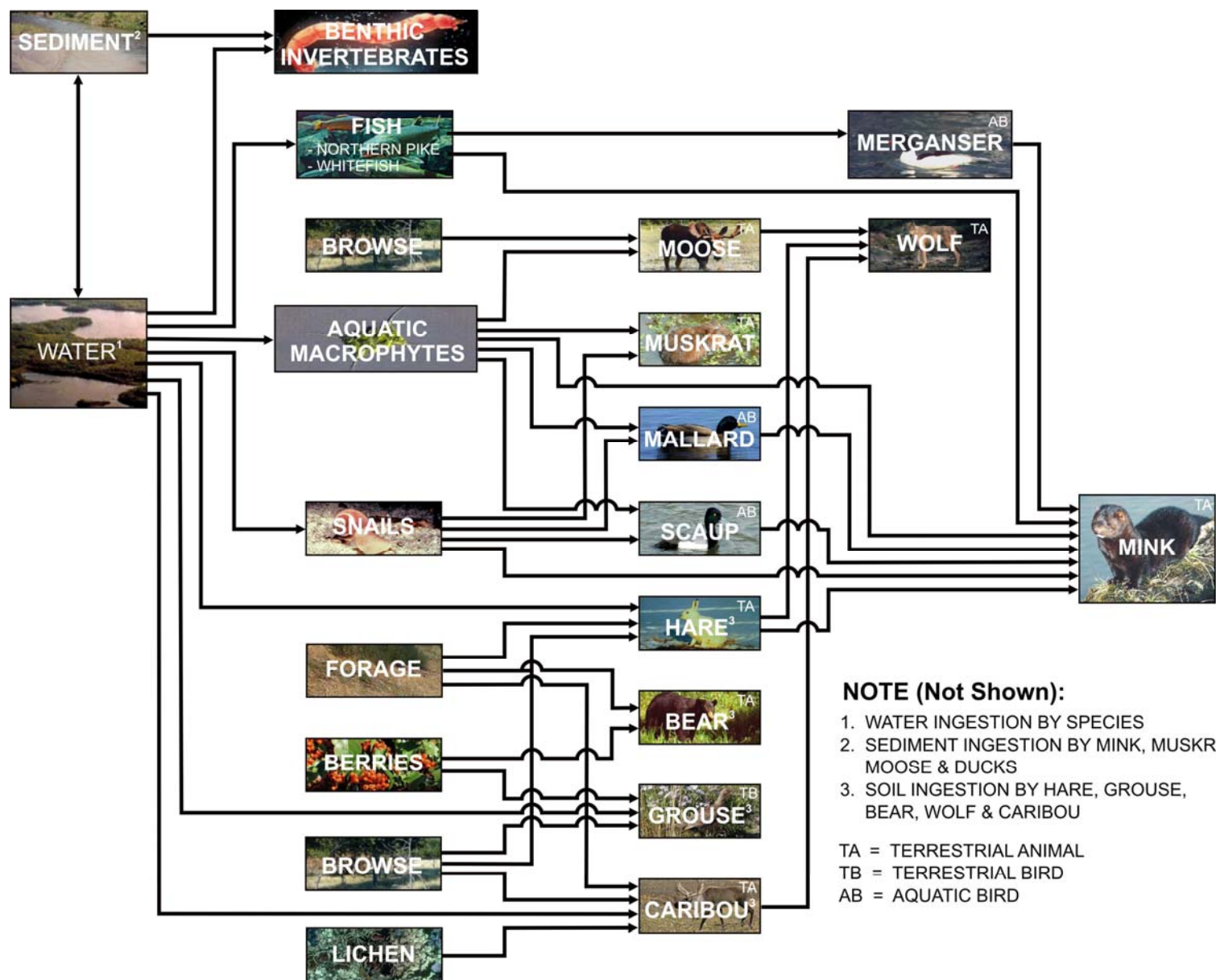
Developer's Assessment Report

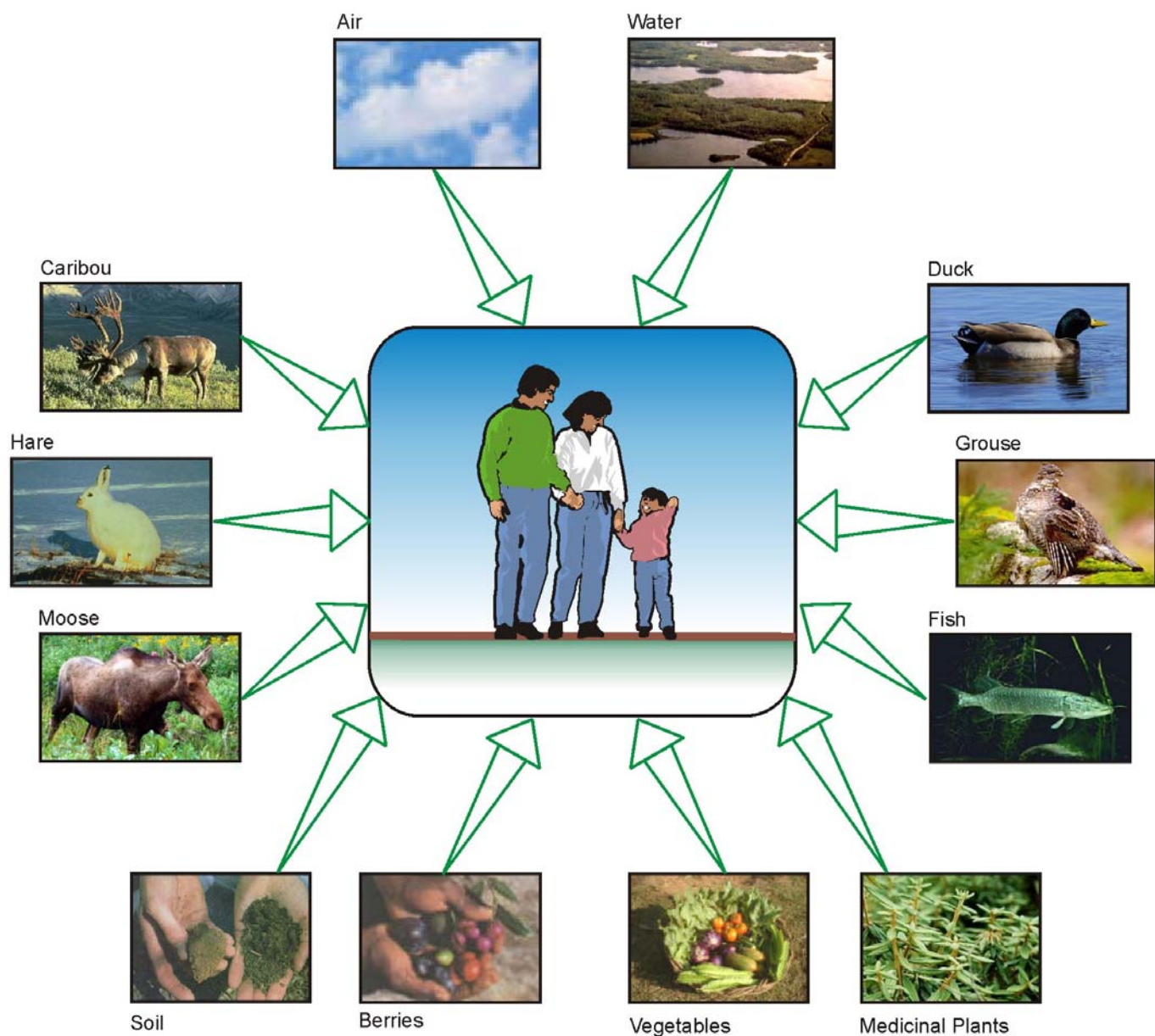
**Steps in Risk Assessment
Calculations**

Date:
October 2010

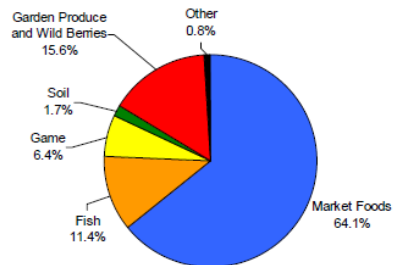
Approved:
BEH

Figure: **8.9.1**



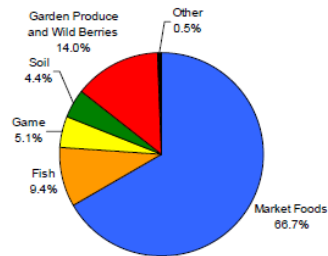


Receptor 1a - Giant Mine Townsite (Adult)



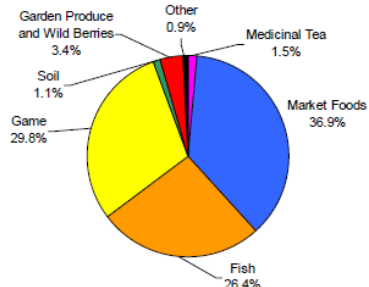
Total Arsenic Intake = 8.8×10^{-4} mg/kg-d
Other includes: water and inhalation

Receptor 1c - Giant Mine Townsite (Child)



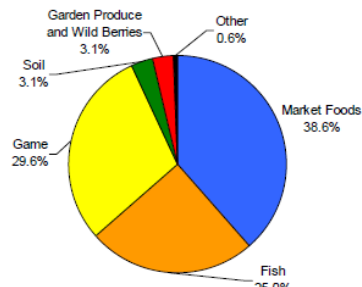
Total Arsenic Intake = 1.6×10^{-3}
Other includes: water and inhalation

Receptor 2a - Latham Island (Adult)



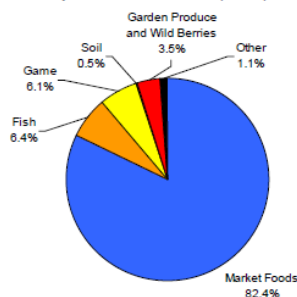
Total Arsenic Intake = 7.7×10^{-4} mg/kg-d
Other includes: water and inhalation

Receptor 2c - Latham Island (Child)



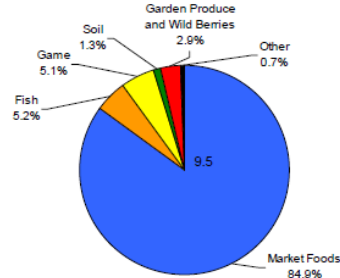
Total Arsenic Intake = 1.3×10^{-3} mg/kg-d
Other includes: water and inhalation

Receptor 3a - Yellowknife (Adult)



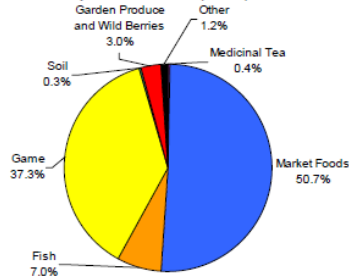
Total Arsenic Intake = 6.7×10^{-4} mg/kg-d
Other includes: water and inhalation

Receptor 3c - Yellowknife (Child)



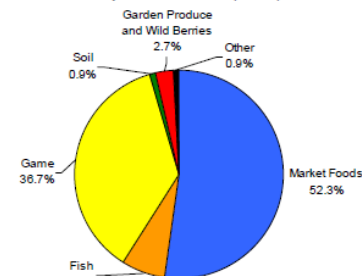
Total Arsenic Intake = 1.3×10^{-3} mg/kg-d
Other includes: water and inhalation

Receptor 4a - Dettah (Adult)



Total Arsenic Intake = 5.6×10^{-4} mg/kg-d
Other includes: water and inhalation

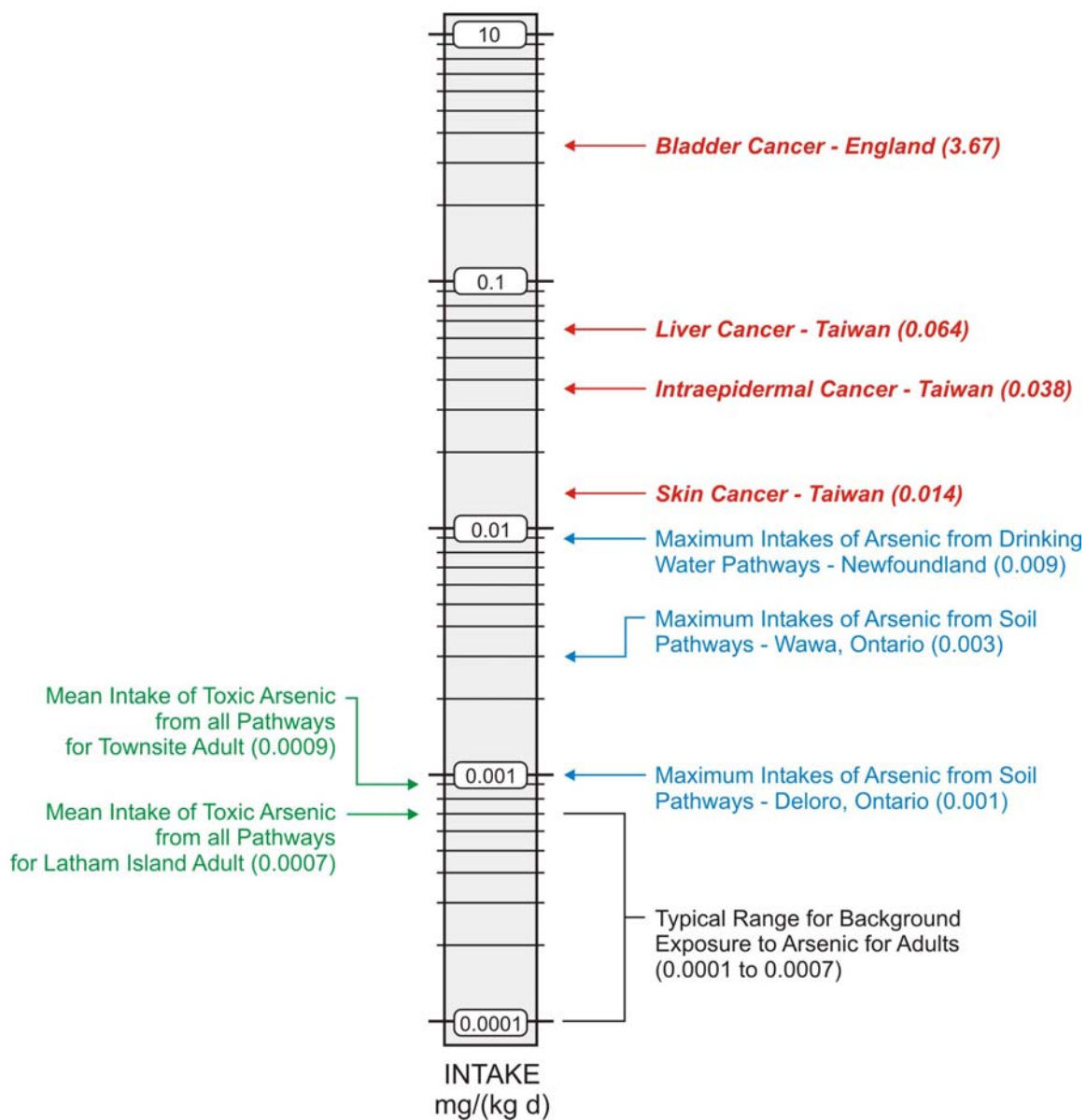
Receptor 4c - Dettah (Child)

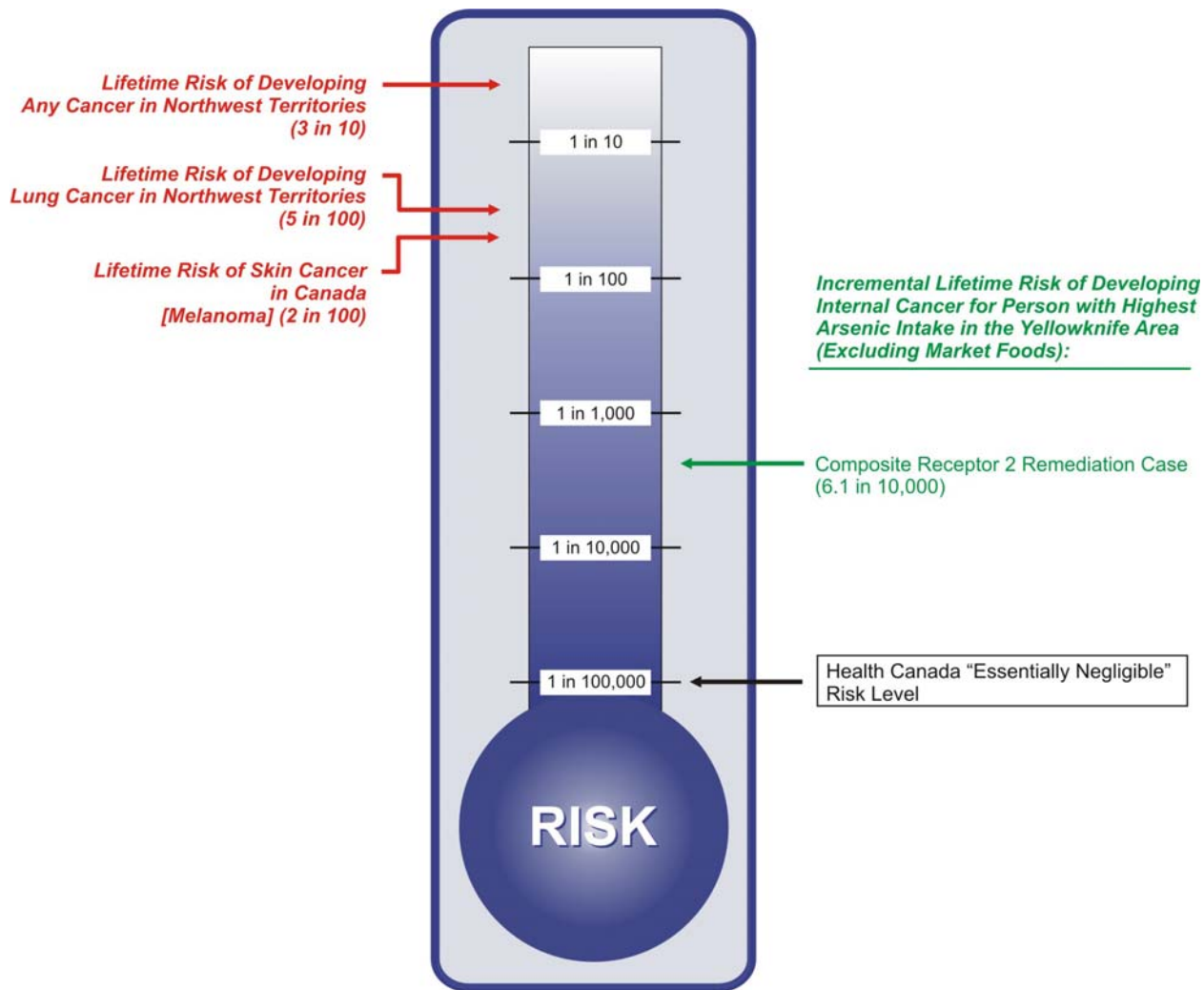


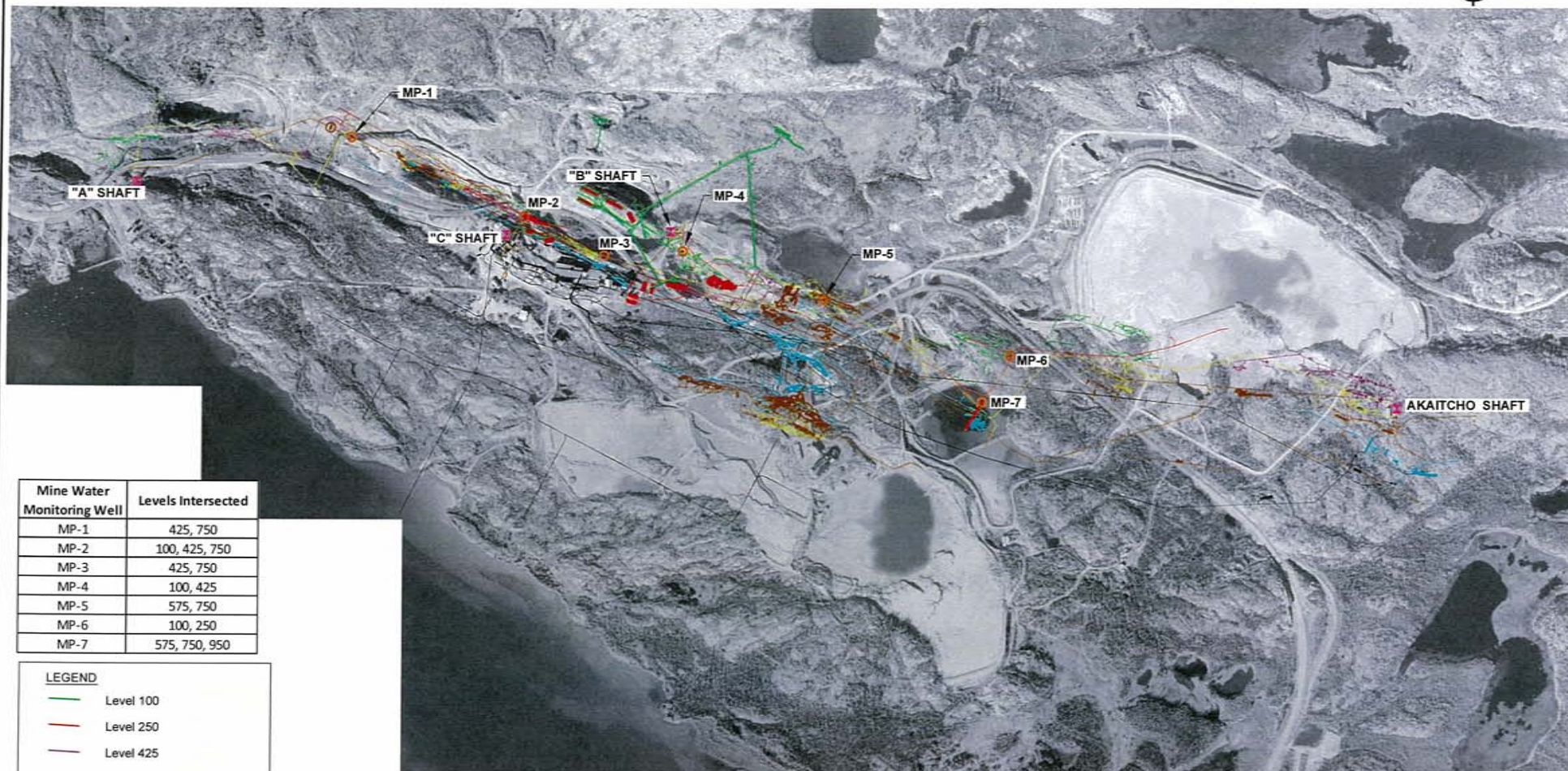
Total Arsenic Intake = 1.0×10^{-3} mg/kg-d
Other includes: water and inhalation

YELLOWKNIFE BAY AREA INTAKES

INTAKES RELATING TO CANCER INCIDENCE INTAKES IN COMMUNITIES WITH HIGH LEVELS OF ARSENIC







Mine Water Monitoring Well	Levels Intersected
MP-1	425, 750
MP-2	100, 425, 750
MP-3	425, 750
MP-4	100, 425
MP-5	575, 750
MP-6	100, 250
MP-7	575, 750, 950

LEGEND

- Level 100
- Level 250
- Level 425
- Level 575
- Level 750
- Level 950
- MP-2 Monitoring Well Location
- "A" SHAFT Monitoring Well in Shaft
- Arsenic Chamber



NOTES:

- 2003 aerial survey base map
- Levels shown in black below proposed mine water monitoring wells.



SRK JOB NO.: 1CP001.037

FILE NAME: Location of Long Term UG Monitoring System.dwg



Indian and Northern
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et du Nord Canada

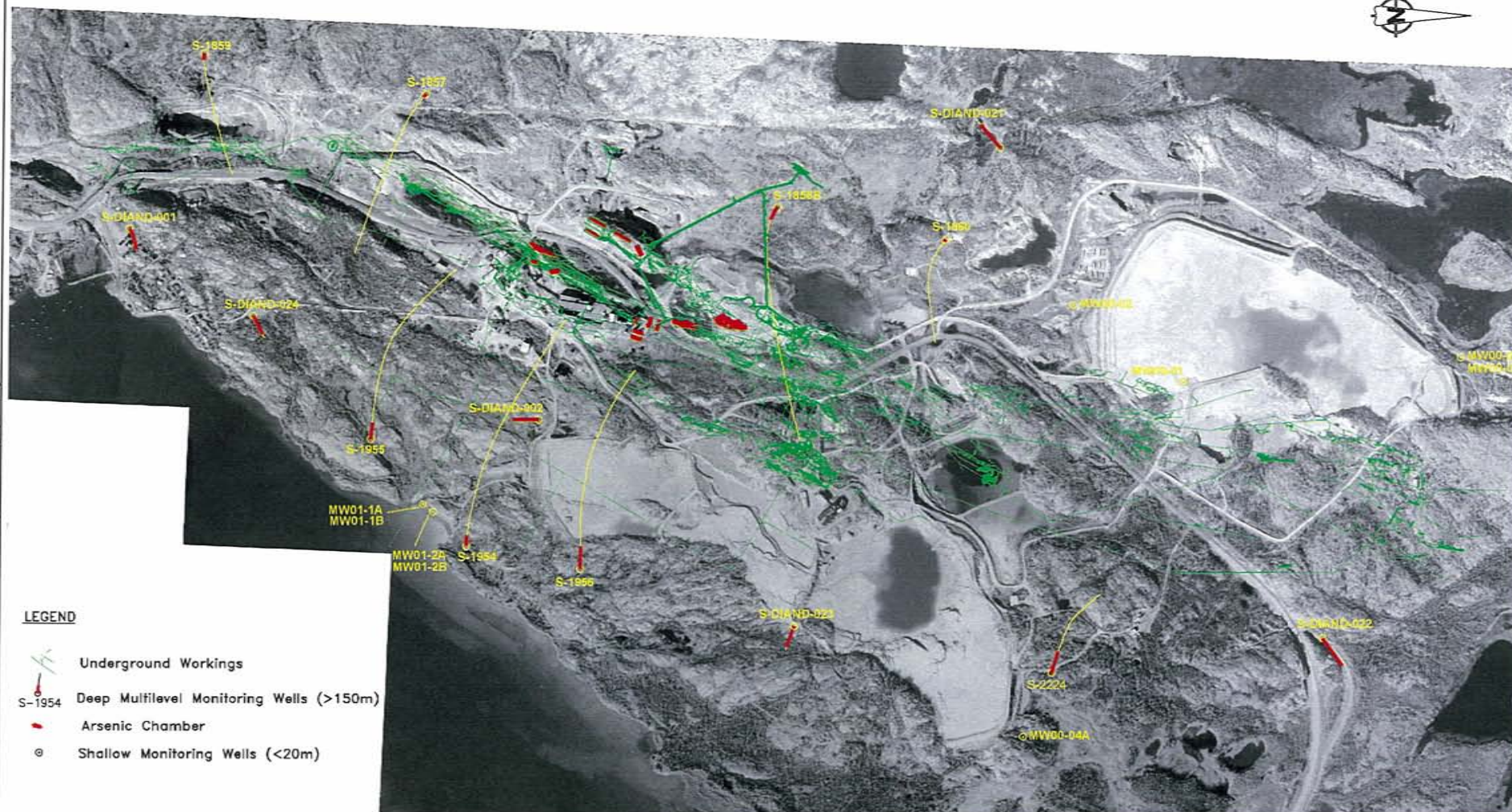
Developer's Assessment Report

Location of Long-term
Mine Workings Monitoring System

DATE: Apr. 2010 APPROVED: MDR FIGURE: 14.2.1

GIANT MINE

J:\01_SITES\GANT\Shared\01_Aerial Drawings\Groundwater\Location of Long Term Underground Monitoring System.dwg



LEGEND

- Underground Workings
- S-1954 Deep Multilevel Monitoring Wells (>150m)
- Arsenic Chamber
- Shallow Monitoring Wells (<20m)

0 100 200 300 400 500 Metres

NOTES:
2003 aerial survey base map

SRK Consulting
Engineers and Scientists

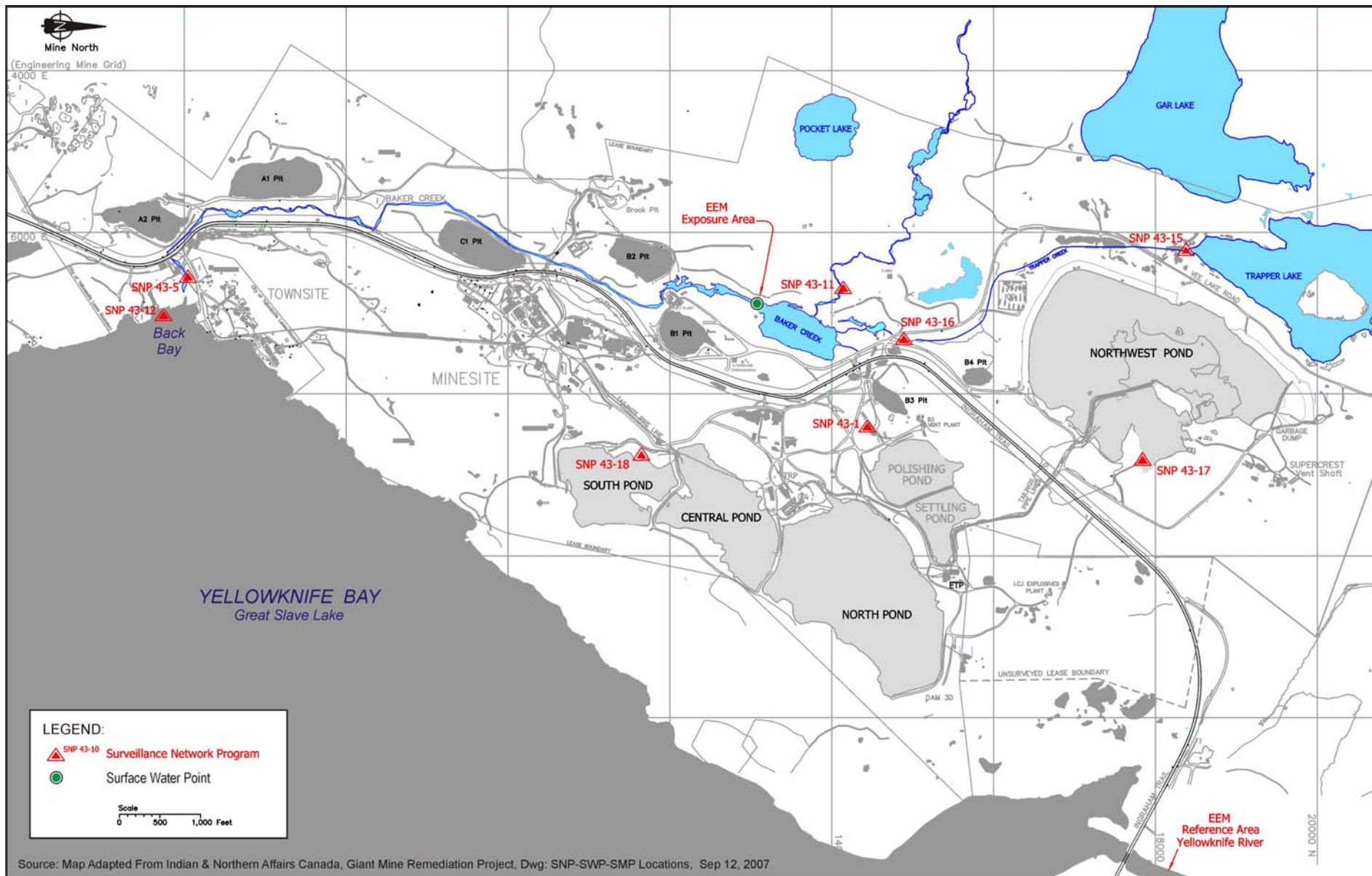
**Indian and Northern
Affairs Canada**

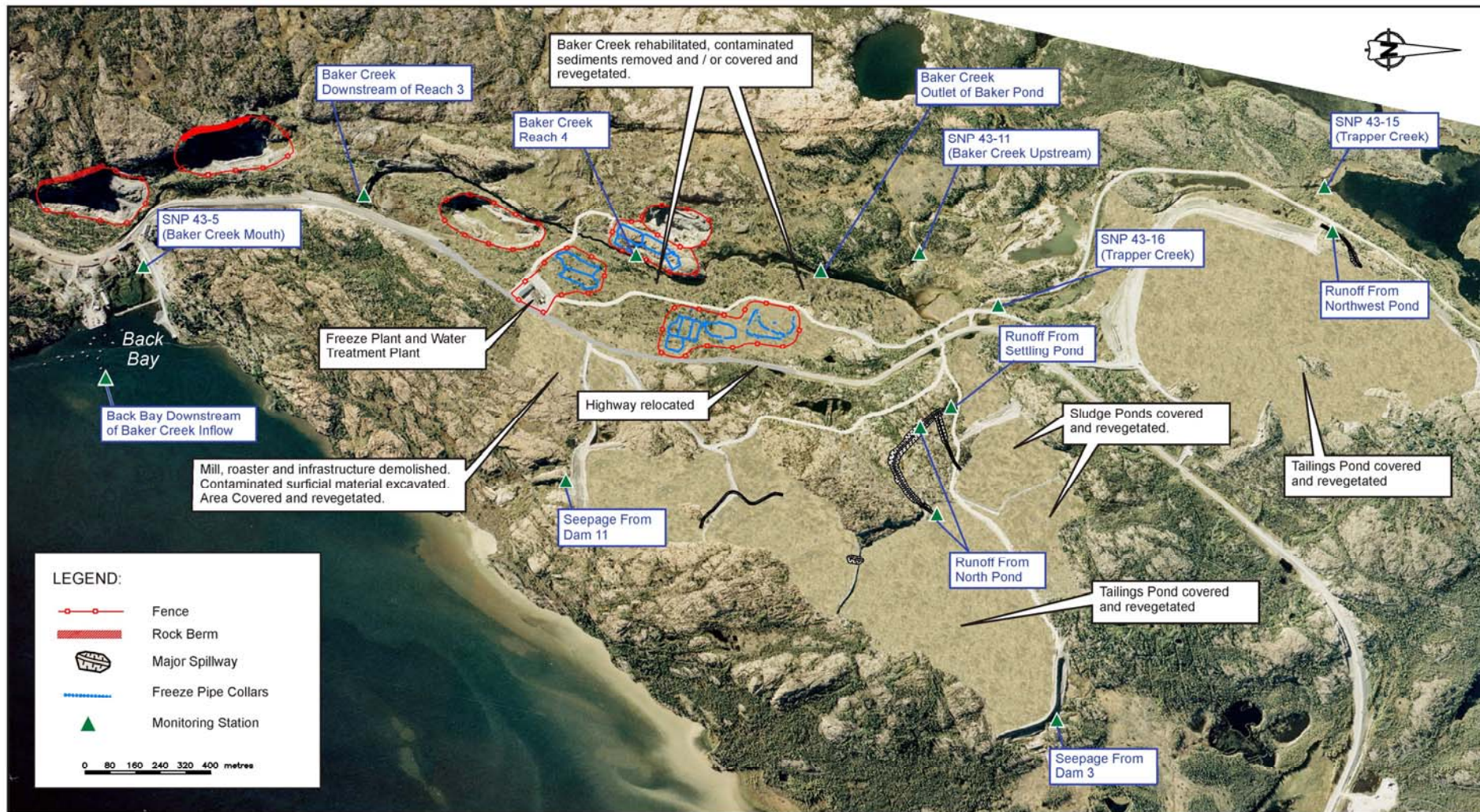
Giant Mine Remediation Plan

Location of Long-term Peripheral
Groundwater Monitoring System

PROJECT NO. 1C1001.013	DATE Jan. 2006	APPROVED MDR	FIGURE 1433
---------------------------	-------------------	-----------------	----------------

422





SOURCE: Map Adapted From Indian & Northern Affairs Canada, Giant Mine Remediation Project, Figure 6.1.1, Jan 2006



Job No: 350047-004
Filename:



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Affairs Canada
Affaires indiennes
et du Nord Canada

GIANT MINE

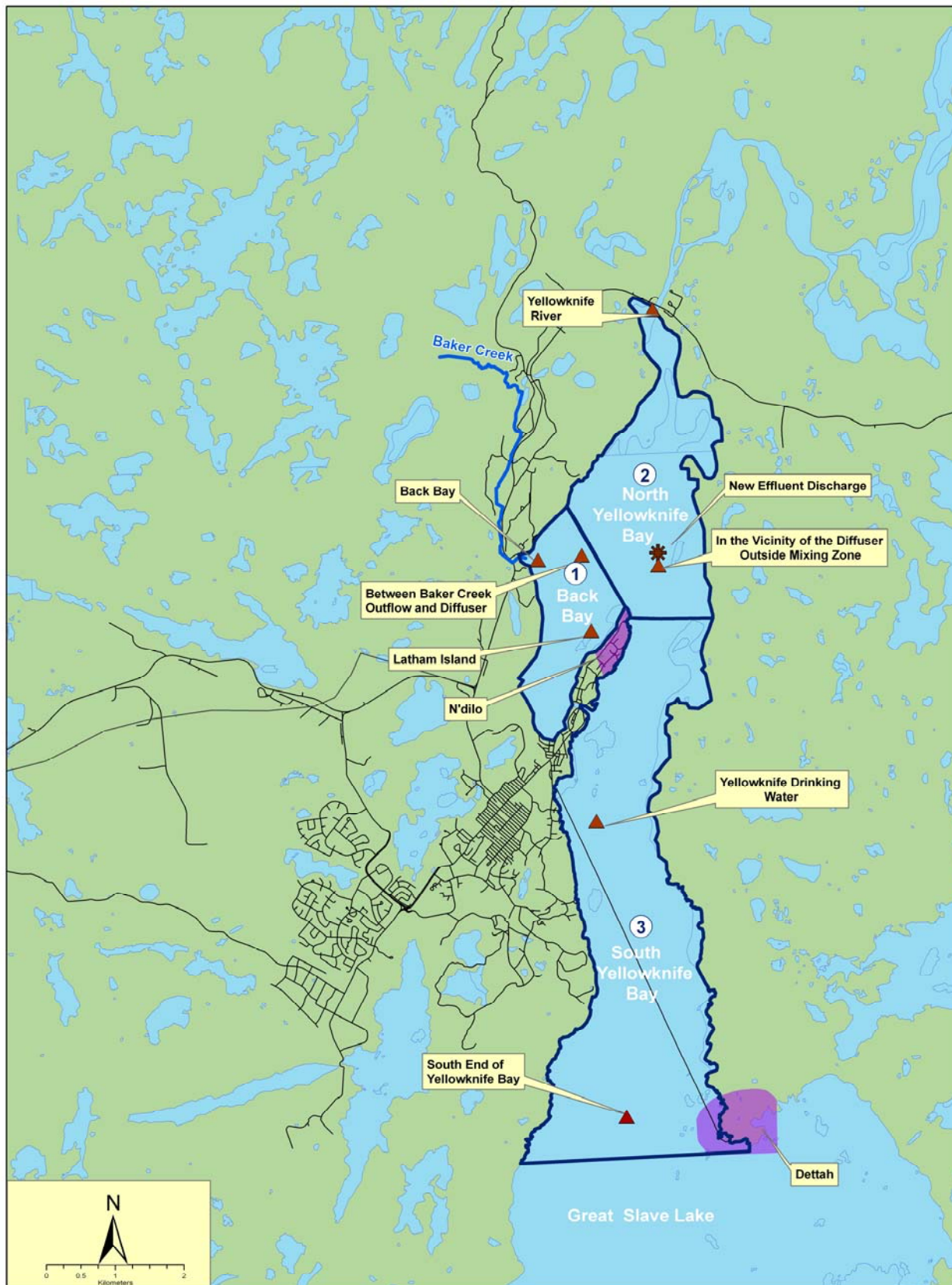
Developer's Assessment Report

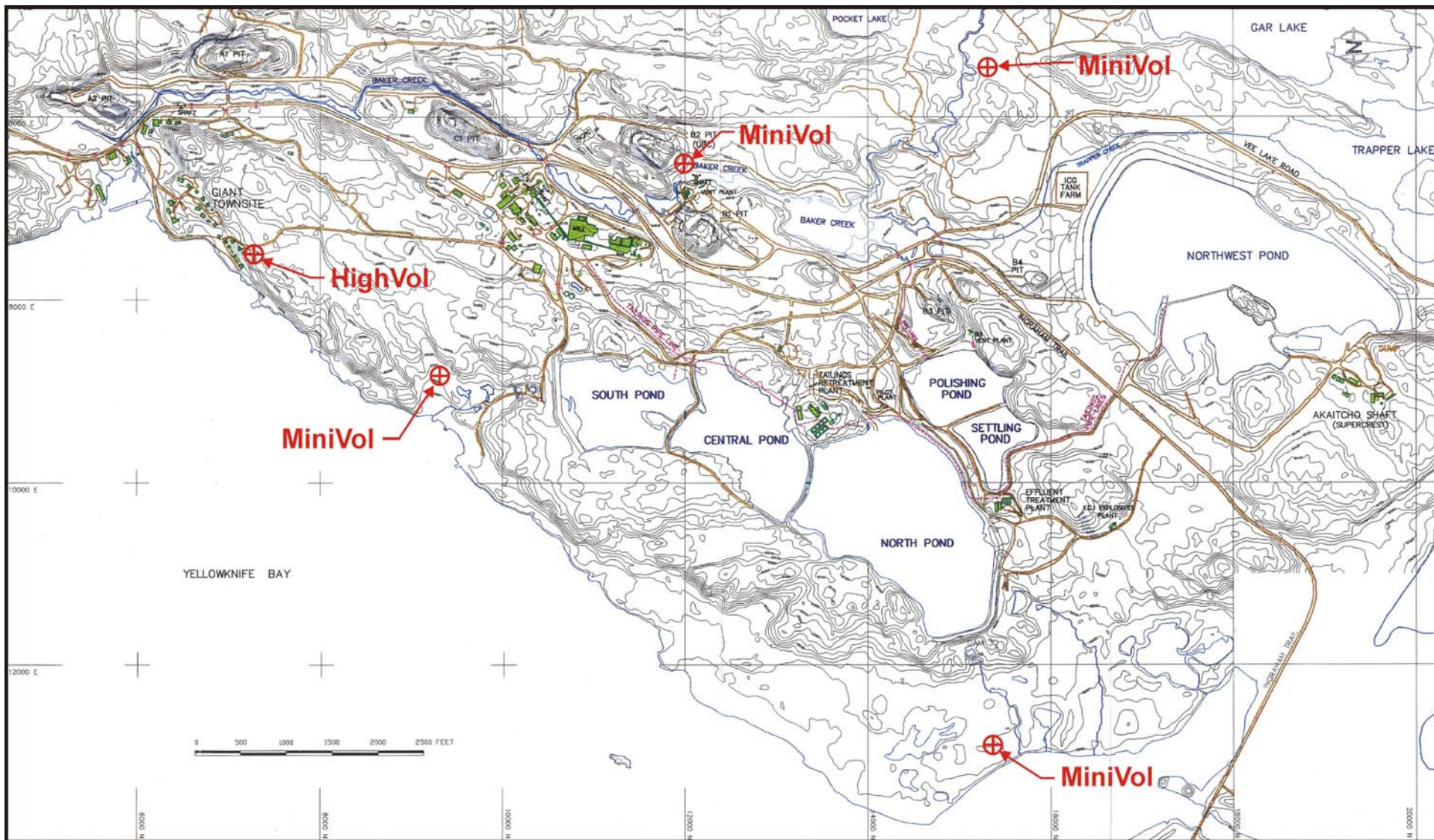
**Proposed Baker Creek Water
Quality Monitoring Stations**

Date:
October 2010

Approved:
TB

Figure: **14.2.4**





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Developer's Assessment Report

Proposed Long-Term Air Quality Monitoring Stations

Job No: 350047-004

Filename:

GIANT MINE

Date:
October 2010

Approved:
TB

Figure: **14.2.6**