Water Licence Application
Supplementary Questionnaire
for Exploratory Drilling

SECTION 1 :

GENERAL

1. Applicant COGEMA RESOURCES INC.
(Company, corporation, owner)
P.O. Box 9204, Saskatoon, SK S7K 3X5
(Postal address)
(306) 244-2554 (306) 343-4632
(Telephone number) (Fax)
(E-Mail)

Corporate Address (If different from above)

(Corporate Office Address)

(Telephone number) (Fax)

(E-Mail)

Project Name SISSONS

Location 80 KM West of Baker Lake

Closest Community Baker Lake

Latitude/Longitude 64° 00'N 97° 50'W

Show the location of the project on a general location map.

2. Environmental Manager Liz Quarshie (306) 244-2554
(Name) (Telephone No.)

or Project Manager Brian Reilly
(Title)

3. Indicate the status of the exploration activity on the date of application. (Check the appropriate space.)

Design	
Under construction	
In operation	X
Suspended	
Care and Maintenance	
Abandoned	

4. If a change in the status of the exploration activity is expected, indicate the nature and anticipated date of such change.

No change in status expected.

5. Indicate the present (or purposed) schedule for the exploration activity.

Hours per week	168 (drilling)
Days per week	7
Weeks per year	7
Number of employees	24
Number of Inuit employees	5

6. Estimate the term (life) of the exploration activity.

Unknown (Months / Year)

7. How will the project effect the traditional uses on Inuit Owned Lands?

Drilling will be conducted on BL-22/66A for approximately two weeks in July. Hunting, fishing, and other traditional uses which may take place on this parcel of land are believed to be minimally affected.

8. Have the Elders been consulted on effects to the traditional use on Inuit Owned Land? If so, list them. If not, why not?

William Noah – Baker Lake

Jacob Ikinilik – Baker Lake

Barnabas Peryour – Baker Lake

9. Has the proponent consulted Inuit Organizations in the area? If so, list them.

KIA

NTI

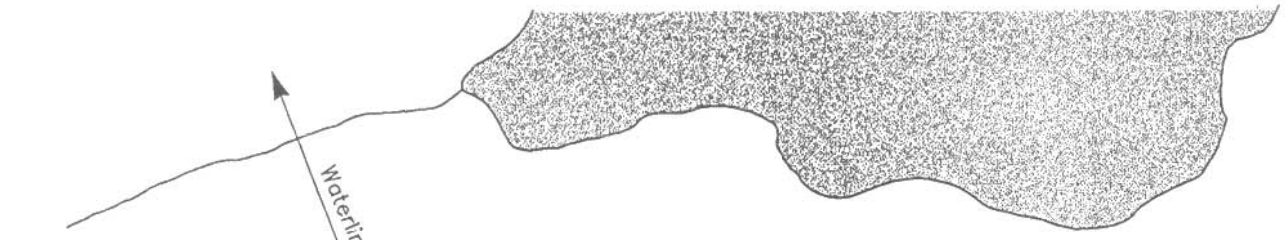
10. Has the proponent consulted surrounding communities on traditional water use areas? If so, list them. If not, why not?

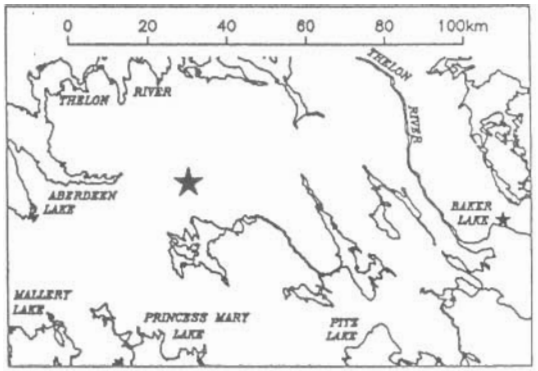
Baker Lake

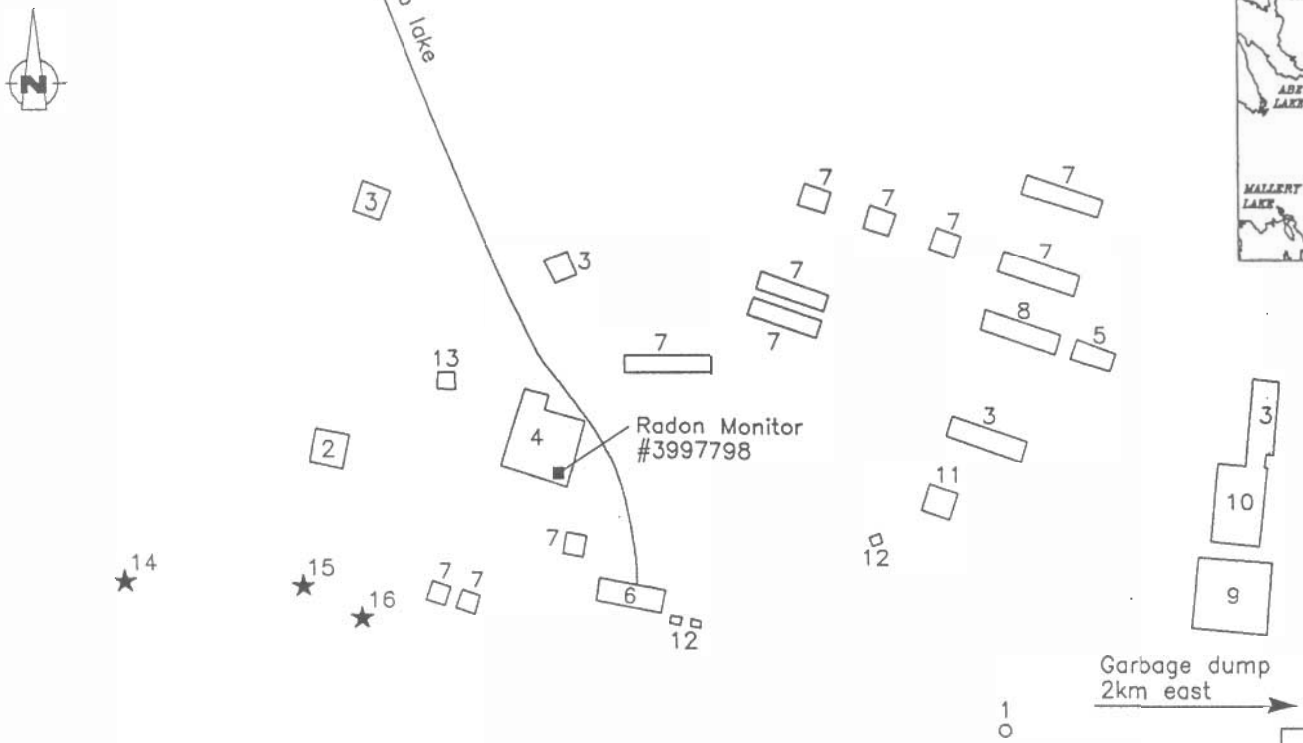
11. Attach a detailed map drawn to scale showing the relative locations (or proposed locations) of the exploration activity, Sewage and solid waste facilities, and containment areas. The plan should include the water intake and pumphouse, fuel and chemical storage facilities. Ore and waste rock storage piles, piping distribution systems, and transportation access routes around the site. The map also should include elevation contours, water bodies and an indication of drainage patterns for the area.

12. If applicable, provide a brief history of property development which took place before the present company gained control of the site. Include shafts, audits, mills (give rated capacity, etc.) waste dumps, chemical storage areas, tailings disposal areas and effluent discharge locations. Make references to the detailed map.

N/A







LEGEND

1. Steel drums for burning garbage
2. Helicopter landing pad
3. Equipment
4. Kitchen/dining
5. Radio
6. Showers/dry
7. Personal cabins
8. Office
9. Drill core racks
10. Core shack
11. General purpose cabin
12. Outhouse
13. Electrical generator
14. Fuel cache – empty drums
15. Fuel cache – jet B drums
16. Fuel cache – diesel drums

Scale Approx. 1:1500

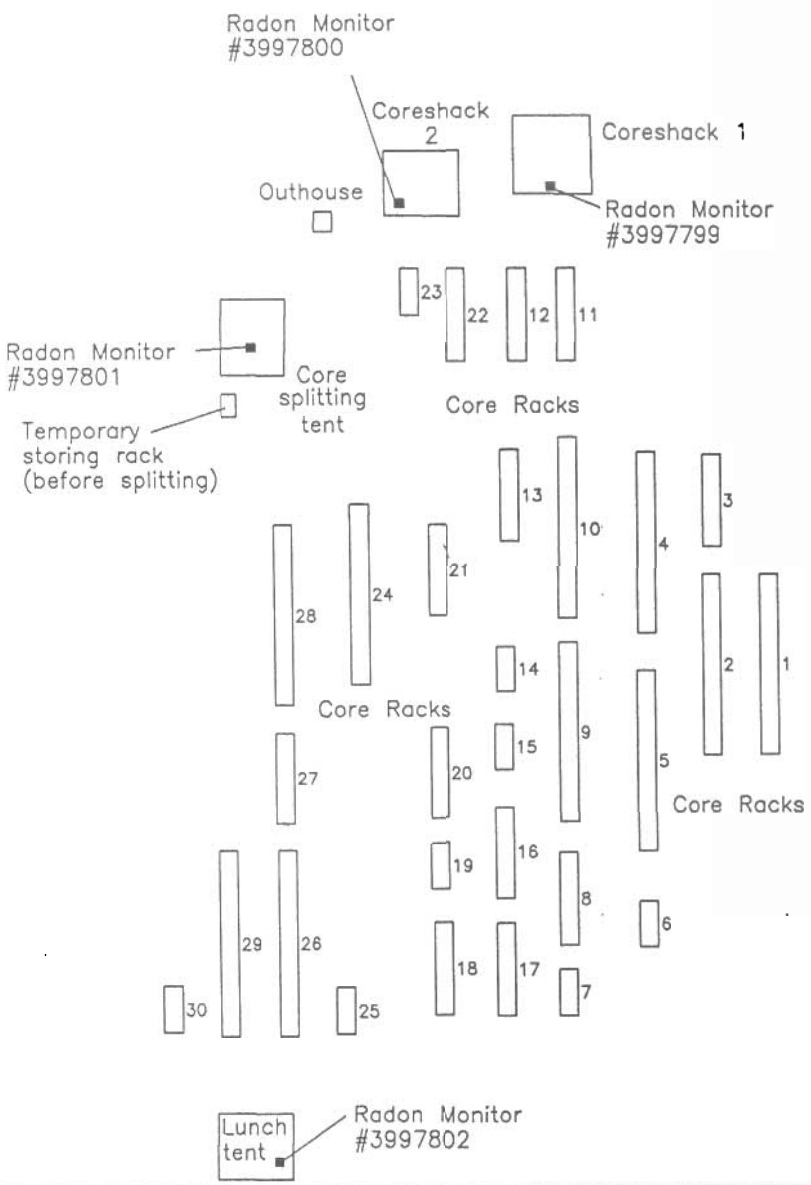
COGEMA Resources Inc.

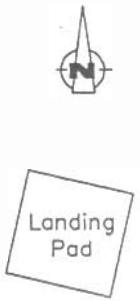
SISSONS PROJECT

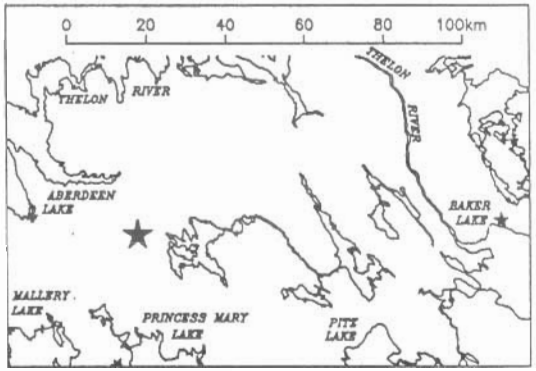
Plan of Kiggavik Camp Radon Detector Locations

By: B. Reilly	Date:Feb/97
Report:96-CND-93-12	Fig.: 6

9693-932







■ Radon detector

Scale Approx. 1:500

COGEMA Resources Inc.

SISSONS PROJECT

Plan of Andrew Lake Core Shack Radon Detector Locations

By: B. Reilly	Date:Feb/97
Report:96-CND-93-12	Fig.: 7

13. Give a short description of the proposed or current freshwater intake facility, the type and operating capacity of the pumps used, and the intake screen size.

Fresh Water:

Camp Facilities: Beam pump with Peter, 1 cylindre Diesel Motor
Output 750 litres/hour, 24 hours/day
Intake screen size: 2mm

Drilling: Beam pump with Peter, 1 cylinder, Diesel Motor
Output 1700 litres/hour, 24 hours/day
Intake screen size: 2mm

14. At the rate of intended water usage for the exploration activity, explain water balance inputs and outputs in terms of estimated maximum draw down and recharge capability of the water source from fresh water will be drawn.

For Camp Facilities: Past years of usage of water showed no no effect on water level from intake source.

For drilling purpose: The volume of water used in drilling never showed imbalance of inputs and outputs terms.

Based on previous exploration activity in the area, minimal draw down of surface water sources is anticipated at the rate of the anticipated water usage.

15. Will any work be done that penetrates regions of permafrost?

Yes

16. If "YES"above, is the permafrost continuous or discontinuous ?

Continuous

17. Were (or will) any old workings or water bodies (be) dewatered in order to conduct the exploration activity ?

No.

18. If "YES" above, indicate the name of the water body, the total volume of water to be discharged and the chemical characteristics of the water.

Water body (if unnamed give Latitude/Longitude)_____
Total volume _____ cubic metres
Receiving Watercourse _____
Dewatering flow rate into above _____ cubic metres / sec

Chemical characteristics of discharge:

T/Pb	_____ mg/L	Total Ammonia	_____ mg/L
T/Cu	_____ mg/L	Suspended solids	_____ mg/L
T/Al	_____ mg/L	Specific conductivity	_____ uhmo/cm
T/HCN	_____ mg/L	pH	_____
T/Hg	_____ mg/L		
T/Zn	_____ mg/L		
T/Cd	_____ mg/L		
T/As	_____ mg/L		
T/Ni	_____ mg/L		
T/Mn	_____ mg/L		

19. Was (or will) the above discharge (be) treated chemically ?

N/A

20. If "YES" above, describe the applied treatment.

N/A

21. Briefly describe what will be done with the camp sewage.

Kitchen water (grey water) runs fromthe kitchen, west to a sump area and is allowed to seep and evaporate, Water from the dry (shower and wash facilities) runs south to a small swampy area and seeps and evaporates.Sewage from the camp area is placed in

heavy plastic/rubber garbage bins. These bins are flown to the dump area 10 km to the east and burned with diesel fuel. Sewage from the outhouse at Andrew Lake is buried as required.

SECTION 2 :

GEOLOGY AND MINERALOGY

22. Briefly describe the physical nature of the mineralization, including known dimensions and approximate shape.

Two ore deposits are located on the Sissons property. The Andrew Lake deposit consists of three ore lenses with total dimensions of approximately 450 m length x 150 m width x 200 m thickness. Mineralization is intersected at approximately 100 m depth. The End grid deposit is chiefly composed of two ore lenses. The north pod dimensions are approximately 40m x 15m x 150m and the south pod measures 20m x 15m x 40m. Mineralization is intersected at the End grid deposit at approximately 200m depth. Mineralization in both deposits is predominantly fracture-controlled in steeply dipping structures.

23. Briefly describe the host rock in the general vicinity of the mineralization (from the surface to the mineralized zone.)

Meta Grey Wacke is the dominant host rock at the Andrew Lake and the End grid deposits. Metavolcanics generally lie below the metagreywacke at the Andrew Lake deposit, and gneissic rocks are found at the base of the deposit. Granitoid rocks intrude at various depths throughout the deposit. Metavolcanics, gneissic rocks, and granitoid rocks host mineralization.

24. Provide a geological description of the mineralized zone. (If possible, include the percentage of metals.)

Andrew Lake Deposit: 4.335 Mt 0.47% Uranium

End Grid Deposit: 6.767 Mt 0.23% Uranium

25. Describe the geochemical tests which have been (or will be) performed on the ore, host rock, and waste rock to determine their relative acid generation and contaminant leaching potential. Outline methods used (or to be used) and provide test results in an attached report (ie. static tests, kinetic tests.)

N/A

26. Estimate the percentage of sulphide in the mineralization:

pyrite	< 1%
pyrrhotite	
pyrite / pyrrhotite mixture	
arsenopyrite	

30. Outline the water usage (or proposed water usage) in the exploration activity, indicate the source and volume of water for each use.

	Source	Use	Volume (m^3 / day)
1.	Lake 200m N of camp	camp	18,~~000~~ 18.0
2.	Nearby lake/stream	drilling	40,800 40.8

31. If applicable, indicate or estimate the volume of natural ground water presently gaining access to the mine workings.

N/A m^3 / day

32. If applicable, outline methods used underground or on surface to decrease mine water flow. (For example: recycling)

N/A

33. List the brand names and constituents of the drill additives to be used.

The drilling mud used by the contractor (Bradley Bros. Ltd. of Rouyn-Noranda, QC) consists of a half and half mixture of 133X and OBC manufactured by Poly-Drill Systems of Calgary, Alberta, or a half and half mixture of the same product manufactured by West Coast Drilling Supplies of Vancouver, BC. The drilling mud is a non hazardous substance which is not known to be harmful to acquatic life at low concentrations.

SECTION 3 :

EXPLORATION OPERATION

27. Check off the type (or proposed type) of exploration operation that will be used on the property and briefly describe the method in more detail.

a) Reverse circulation to obtain bulk sample _____
b) Trenching _____
c) Conventional open pit _____
d) Decline _____
e) Conventional underground _____
f) Strip mining activity _____
g) Other Exploration activity (please explain) Drilling

The diamond drill rig functions with a diesel motor, which is fueled from 205 litre drums by hand pump. Water for drilling is obtained from a nearby lake or stream using a supply pump, which is also fueled from the 205 litre drums by hand pump. Drill moves are performed using a helicopter.

28. Indicate the size and number of samples that will be obtained.

_____ tonnes
_____ number of samples

Please note if smaller samples are to be taken from different areas (note location) to form one large bulk sample.

Split core samples will be taken only from mineralized core to be assayed. The number of samples depends on the results of the exploration drilling.

29. Indicate the present or proposed average rate of exploratory production from all mineralized sources on the property:

N/A _____ tonnes ore / day

SECTION 4 :

THE MILL OR PROCESSING PLANT N/A

34. Is there (or will there be) a portable mill processing plant be operating on the property in conjunction with the exploration activity ?

_____ Yes _X_ No

35. If "yes" indicate the proposed point of discharge for the mill or process plant water and the volume of the discharge.

Point of discharge _____

Volume of discharge _____ m^3 / day

36. Attach a copy of the portable mill or processing plant flow sheet. Indicate the points of addition of all the various reagents (chemicals) that are (or will be) used.

37. Indicate the proposed rate of milling.

_____ not applicable (check) or _____ tonnes / day

38. List the types and quantities of all reagents used in the mill or processing plant (in kg/tonne ore milled.)

_____
_____
_____
_____
_____
_____
_____
_____
_____
_____

Reagent: _____ Amount in kg/tonne ore milled: _____

39. If applicable, is the (proposed) milling circuit based on autogenous grinding ?

Yes _____ No _____ Partially _____

40. Based on present production or bench test results, describe the chemical and physical characteristics of liquid mill or processing plant wastes directed to the tailing deposition area.

T/Cu	_____ mg/L	Total Ammonia	_____ mg/L
T/Pb	_____ mg/L	Suspended solids	_____ mg/L
T/Zn	_____ mg/L	Specific conductivity	_____ uhmo/cm
T/Ag	_____ mg/L	pH	_____
T/Mn	_____ mg/L	Alkalinity	_____ $CaCo_3$/L
T/Ni	_____ mg/L	Hardness	_____ mg/L
T/Fe	_____ mg/L	Total cyanide	_____ mg/L
T/Hg	_____ mg/L	Oil and Grease	_____ mg/L
T/As	_____ mg/L		
T/Cd	_____ mg/L		
T/Cr	_____ mg/L		
T/Al	_____ mg/L		

41. Provide a geochemical description of the solid fraction of the tailings.

Cu	_____ mg/g	Al	_____ mg/g
Pb	_____ mg/g	Fe	_____ mg/g
Zn	_____ mg/g	Hg	_____ mg/g
Ag	_____ mg/g	Ni	_____ mg/g
Mn	_____ mg/g	As	_____ mg/g
Cr	_____ mg/g	CN	_____ mg/g
Cd	_____ mg/g		

SECTION 5 :

THE CONTAINMENT AREAS N/A

42. What is the (Proposed) method of disposal of the mine water, mill or process plant tailings (ie. sump, subaqueous, surface tailings pond, settling pond) ?

43. Attach detailed scale plan drawings of the proposed (or present) containment area. The drawings must include the following:

a. a. details of pond size and elevation;

a. a. details of all retaining structures (length, width, height, meterails of construction, etc.);

a. a. details of the drainage basin;

a. a. details of all decant, siphon mechanisms etc., including water treatment plant facilities;

a. a. details with regard to the direction and route followed by the flow of wastes and / or waste water from the area; and

a. a. indicate of the distance to nearby major watercourses;

44. Justify your choice of location for the containment area design by rationalising rejection of other options. Consider the following criteria in your comparisons: subsurface strata permeability, abandonment, recycling/reclaiming waters, and assessment of runoff into basins. Attach a brief summation.

45. The average depth of the existing or proposed containment area is dependent on the volume of water encountered metres.

46. Indicate the total capacity for the existing or proposed containment area by using water balance and stage volume calculations and curves. (Attach a description of inputs and outputs along with volume calculations.)

47. Has any evaporation and/or precipitation data been collected at the site ? _____ if so, please include the data.

48. Will the present or proposed containment area contain the entire production from the mill or processing plant complex for the life of the project ?

49. Will the proposed tailings deposition area engulf or otherwise disturb any existing watercourse?

50. If "Yes", attach all pertinent details (Name of watercourse, present average flow, direction of flow, proposed diversions, etc.)

51. Describe the proposed or present operation, maintenance and monitoring of the containment area.

SECTION 6 :

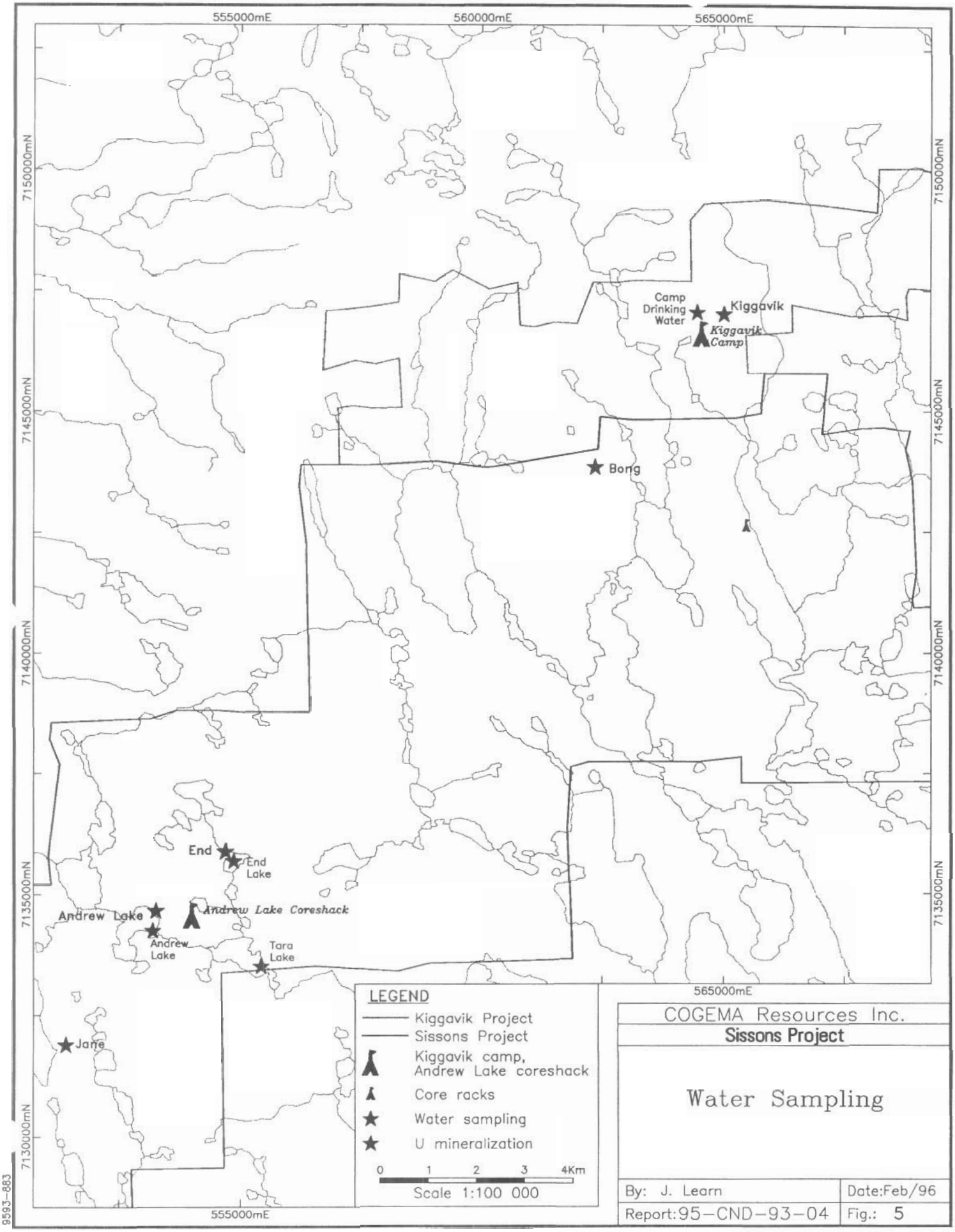
N/A

WATER TREATMENT

52. If applicable, will the minewater, mill or process plant water be chemically treated before being discharged to the containment area ? If so, explain the treatment process (Attach flow sheet if available.

53. Will (treated) effluent be discharged directly to a natural waterbody or will polishing or settling ponds be employed ? Describe location, control structures, and process of water retention and transfer. Attach any relevant design drawings.

54. Name the first major watercourse the discharge flow enters after it leaves the area of company operations.


555000mE
560000mE
565000mE
7150000mN
7145000mN
7140000mN
7135000mN
7130000mN
Camp Drinking Water
Kiggavik
Kiggavik Camp
Bong
End
End Lake
Andrew Lake
Andrew Lake Coreshack
Andrew Lake
Tara Lake
Jane
LEGEND
Kiggavik Project
Sissons Project
Kiggavik camp, Andrew Lake coreshack
Core racks
Water sampling
U mineralization
0 1 2 3 4Km
Scale 1:100 000
COGEMA Resources Inc.
Sissons Project
Water Sampling
By: J. Learn
Date:Feb/96
Report:95-CND-93-04
Fig.: 5
9593-883

SRC Group: 95-3235

SASKATCHEWAN RESEARCH COUNCIL
ANALYTICAL SERVICES

Cogema/Cluff Mining 12-Oct-95 09:35

SAMPLE	CLIENT DESCRIPTION
14723	ANDREW LAKE AUG 19/95 *WATER*
14724	END LAKE AUG 19/95 *WATER*
14725	TARA LAKE AUG 19/95 *WATER*

ANALYTE	UNITS	14723	14724	14725
MAJOR CONSTITUENTS				
Cl, ion chrm	mg/L	1.4	1.3	1.3
K, flame	mg/L	0.4	0.2	0.2
Na, flame	mg/L	0.6	1.1	1.0
SO4, ion chrm	mg/L	0.4	0.5	0.4
Tot. Alkalinity	mg/L	12	15	13
TRACE CONSTITUENTS				
Hg, by A.A.	ug/L	<0.05	<0.05	<0.05
Se, hydride gen	mg/L	<0.001	<0.001	<0.001
TRACE METALS				
Al, ICP-AES	mg/L	0.37	0.32	0.16
As, hydride gen	ug/L	<0.5	<0.5	<0.5
Ba, ICP-AES	mg/L	0.048	0.035	0.051
Be, ICP-AES	mg/L	<0.001	<0.001	<0.001
Ca, ICP-AES unt	mg/L	2.6	3.1	3.4
Cd, ICP-AES	mg/L	<0.001	<0.001	<0.001
Co, ICP-AES	mg/L	<0.001	0.001	0.002
Cr, ICP-AES	mg/L	0.002	0.002	0.002
Cu, ICP-AES	mg/L	0.003	0.002	0.002
Fe, ICP-AES	mg/L	0.41	0.94	0.77
Mg, ICP-AES unt	mg/L	0.9	1.1	1.1
Mn, ICP-AES	mg/L	0.006	0.034	0.022
Mo, ICP-AES	mg/L	<0.005	<0.005	<0.005
Ni, ICP-AES	mg/L	<0.001	<0.001	<0.001
Pb, ICP-AES	mg/L	<0.005	<0.005	<0.005
Sr, ICP-AES	mg/L	0.042	0.021	0.041
V, ICP-AES	mg/L	<0.01	<0.01	<0.01
Zn, ICP-AES	mg/L	0.005	<0.005	0.011
PHYSICAL PROPERTIES				
Solids, T.Susp.	mg/L	8	12	42
Sp. Conduct.	uS/cm	31	34	33
pH of water	pH units	7.01	7.04	7.02
RADIONUCLIDES				
Pb 210, total	Bq/L	<0.02	0.05	<0.02
Po 210, total	Bq/L	0.02	0.04	0.02
Ra 226, total	Bq/L	0.02	0.03	0.01
Th 230, total	Bq/L	0.05	0.04	<0.01
U, total	ug/L	2.2±0.7	1.8±0.7	<0.5

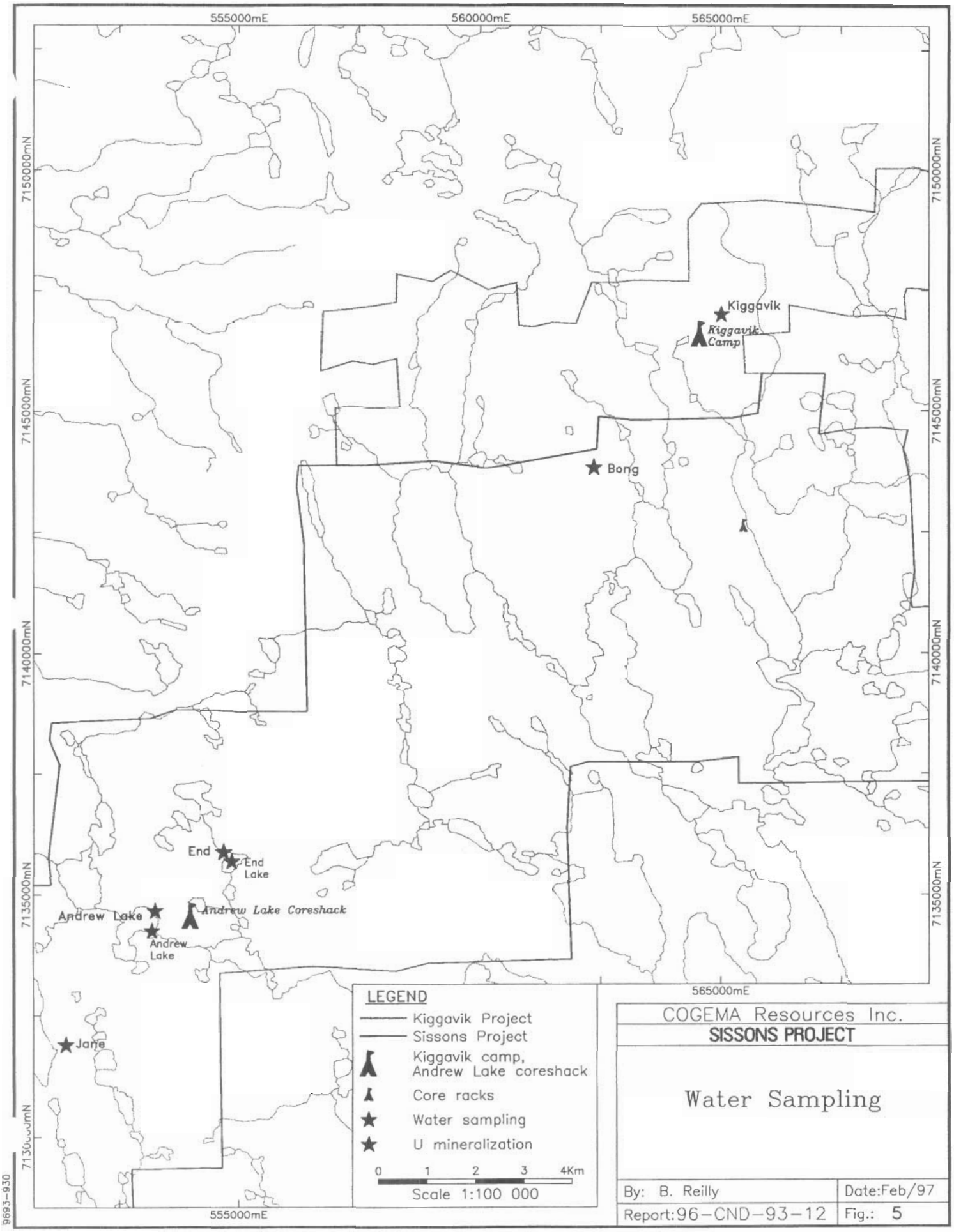
SRC Group: 95-3235

SASKATCHEWAN RESEARCH COUNCIL
ANALYTICAL SERVICES

Cogema/Cluff Mining 12-Oct-95 09:35

SAMPLE CLIENT DESCRIPTION
14726 DRINKING WATER (NO DATE) *WATER*

ANALYTE	UNITS	14726
MAJOR CONSTITUENTS		
Cl, ion chrm	mg/L	0.3
K, flame	mg/L	0.2
Na, flame	mg/L	0.3
SO4, ion chrm	mg/L	0.8
Tot. Alkalinity	mg/L	11
TRACE CONSTITUENTS		
Hg, by A.A.	ug/L	0.38
Se, hydride gen	mg/L	<0.001
TRACE METALS		
Al, ICP-AES	mg/L	0.084
As, hydride gen	ug/L	<0.5
Ba, ICP-AES	mg/L	0.073
Be, ICP-AES	mg/L	<0.001
Ca, ICP-AES unt	mg/L	2.3
Cd, ICP-AES	mg/L	<0.001
Co, ICP-AES	mg/L	<0.001
Cr, ICP-AES	mg/L	0.002
Cu, ICP-AES	mg/L	0.013
Fe, ICP-AES	mg/L	0.55
Mg, ICP-AES unt	mg/L	0.8
Mn, ICP-AES	mg/L	0.014
Mo, ICP-AES	mg/L	<0.005
Ni, ICP-AES	mg/L	<0.001
Pb, ICP-AES	mg/L	0.011
Sr, ICP-AES	mg/L	0.021
V, ICP-AES	mg/L	<0.01
Zn, ICP-AES	mg/L	0.086
PHYSICAL PROPERTIES		
Solids, T.Susp.	mg/L	2
Sp. Conduct.	uS/cm	23
pH of water	pH units	7.03
RADIONUCLIDES		
Pb 210, total	Bq/L	0.02
Po 210, total	Bq/L	0.02
Ra 226, total	Bq/L	0.02
Th 230, total	Bq/L	0.02
U, total	ug/L	2.2±0.7


555000mE
560000mE
565000mE
7150000mN
7145000mN
7140000mN
7135000mN
Kiggavik
Kiggavik Camp
Bong
End
End Lake
Andrew Lake
Andrew Lake Coreshack
Andrew Lake
Jane
LEGEND
Kiggavik Project
Sissons Project
Kiggavik camp, Andrew Lake coreshack
Core racks
Water sampling
U mineralization
0 1 2 3 4Km
Scale 1:100 000
COGEMA Resources Inc.
SISSONS PROJECT
Water Sampling
By: B. Reilly
Date:Feb/97
Report:96-CND-93-12
Fig.: 5
9693-930

S.C Group: 96-3301

SRC ANALYTICAL

Cogema/Cluff Mining 09-Oct-96 14:21

SAMPLE CLIENT DESCRIPTION
14804 SW-96-109 257' AUG 12/96 (DRILL RETURN) *WATER*
14805 ANDREW LAKE AUG 17/96 (ORE LAKE) *WATER*
14806 END LAKE AUG 17/96 (ORE LAKE) *WATER*

ANALYTE	UNITS	14804	14805	14806
MAJOR CONSTITUENTS				
Calcium	mg/L	3.9	15	3.8
Chloride	mg/L	4.8	38	1.6
Potassium	mg/L	11	2.0	0.6
Magnesium	mg/L	4.4	4.2	1.3
Sodium	mg/L	2.2	1.7	0.6
Sulfate	mg/L	0.3	0.6	0.5
Total alkalinity	mg/L	42	8	13
TRACE CONSTITUENTS				
Mercury	ug/L	0.10	<0.05	<0.05
Selenium	mg/L	Not req	<0.001	<0.001
TRACE METALS				
Aluminum	mg/L	750	0.062	0.49
Arsenic	mg/L	0.026	Not req	Not req
Arsenic	ug/L	Not req	<0.5	<0.5
Barium	mg/L	0.87	0.036	0.20
Beryllium	mg/L	0.038	<0.001	<0.001
Cadmium	mg/L	0.010	<0.001	<0.001
Cobalt	mg/L	0.56	<0.001	<0.001
Chromium	mg/L	1.9	<0.001	0.001
Copper	mg/L	0.35	<0.001	<0.001
Iron	mg/L	240	0.17	0.20
Manganese	mg/L	0.97	0.005	0.007
Molybdenum	mg/L	0.004	<0.001	<0.001
Nickel	mg/L	3.0	<0.001	<0.001
Lead	mg/L	0.43	<0.002	<0.002
Selenium	mg/L	<0.003	Not req	Not req
Strontium	mg/L	0.26	0.024	0.13
Vanadium	mg/L	0.45	<0.001	<0.001
Zinc	mg/L	0.83	<0.005	<0.005
PHYSICAL PROPERTIES				
Total suspended solids	mg/L	8000	6	2
Specific conductivity	uS/cm	84	141	35
pH	pH units	7.78	6.49	6.90
RADIONUCLIDES				
Lead-210	Bq/L	9.0	<0.02	0.06
Polonium-210	Bq/L	7.0	0.005	0.01
Radium-226	Bq/L	18	0.01	0.09
Thorium-230	Bq/L	9.5	<0.01	0.04
Uranium	ug/L	819±16	<0.5	2.9±0.7

SECTION 8 :

ENVIRONMENTAL ASSESSMENT AND SCREENING

59. Has this project ever undergone an initial environmental review? If Yes, By whom and when.

Yes. NIRB 1997

60. Has any baseline data collection and evaluation been undertaken with respect to the various biophysical components of the environment potentially affected by the project (eg. Wildlife, soils, air quality), ie. In addition to water trelated information requested in this questionnaire ?

_____ Yes No X Unknown _____

61. If "Yes" please attach copies of reports or cite titles, authors and dates.

62. If no, are such studies being planned ? No

Briefly describe the proposals.

63. Has authorization been obtained or sought from the Department of Fisheries and Oceans for dewatering or using any waterbodies for containment of waste?

No.

64. Has a socio-economic impact assessment or evaluation of this project been undertaken ? (this would include a review of any public concerns, land, water and cultural uses of the area, implications of land claims, compensation, local employment opportunities, etc.)

Yes _____ No X Unknown _____

65. If "Yes" please describe the proposal briefly.

66. If "No" is such a study being planned ? Yes _____ No X

67. Describe any cumulative impacts the project may create?

-Small accumulation of sand from drill cuttings at each drill site

-Disturbance of tundra at Kiggavik camp and Andrew Lake core shack due to presence of tents/cabins and walkways.

68. Does the project alter the quantity or quality or flow of waters through Inuit Owned Lands?

No.

69. If yes, has the applicant entered into an agreement with the Designated Inuit Organization to pay compensation for any loss or damage that may be caused by the alteration.

70. If no compensation arrangement has been made, how will compensation be determined?