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Nation River 840225

EXTRACTION:	HOT HNO3			HF, HNO3, HCL, H2SO4
METHOD:	FLUORIMETRIC		FLUORIMETRIC	
	WATER	SILT		SILT
FRACTION USED:		-80	HMS	HMS
	U PPb	PPm	PPm	PPm
GL-76-46 1	0.3	18	86	225
"2	0.4	10	29	110
" 3	0.4	8	86	280
" 4	0.3	8	72	190
"5	0.2	5	90	290
" 6	0.1	5	90	280
"7	0.2	12	16	110
" 35	0.5	9	40	70
" 36	0.7	25	55	70
" 38	1.6	24	45	85
" 01	0.5	3	56	220
" 02	0.5	6	89	278
" 03	0.7	22	26	205
" 04	0.6	7	95	380
" 05	1.0	19	96	90
" 025	2.7	19	75	180
" 026	2.1	18	43	110
" 027	1.5	14	5	12
" 007	0.5	10	40	220

# TABLE 3

## GEOCHEMICAL RESULTS OF FOLLOW-UP SURVEY

# 72 SAMPLE SITES

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	THRESHOLD	MEAN	
WATER	1.2 PPb	0.5 PPb	
SILT -80	34.2 PPm	12.6 PPm	
SILT HMS	80.2 PPm	27.6 PPm	
AREA "A"	ANOMALOUS	>MEAN	≤ MEAN
Water PPb			х
SILT (- 80 PPm (HMS PPm	х		х
AREA "B"			
Water PPb	x		
SILT (- 80 PPm (HMS PPm	x		x
AREA "C"			
Water PPb	x		
SILT (- 80 PPm (- HMS PPm		X X	

SHEET 1

NATION RIVER - U446 1977 PROGRAM

GAM 1 Analyzer External Sensor GSA-61 Hewlett Packard Recorder Airborne Radiometrics Soil Sampling Silt Sampling Scintillometer Prospecting BGS 1SL Scintrex Rock type sampling Ph determination

Prospect northern half of the most westerly granitic stock and adjacent sediments as indicated on accompanying map with handheld BGS 1SL Scintrex scintillometer. Silt samples from all drainages originating in above area, as crossed along traverse at  $\sim$  4500' elevation.

Soil samples at ~ 4500' elevation B Horizon Minimum 500' spacing 2 soil profiles Lab. treatment for both silt and soil samples -80 fraction Extraction - hot HNO3 Uranium PPm Fluorimetric analysis Retain pulp and rejects

Helicopter Borne GAM 1 along flight lines following 4500', 4600', 4700' contours 100' separation 35 m.p.h.

Instrument settings: Total count mode Time constant 1 second Chart speed 1 cm/30 sec.

#### AREA "A"

Traverse along 4500' contours Silt sampling all drainages and soil sampling and treatment as outlined on Sheet 1.

Prospect outcrops within and above Area "A" with handheld scintillometer.

Helicopter borne radiometric survey along contours 4200', 4300', 4500: Similar method to that outlined on Sheet 1.

#### AREA "B"

Silt sampling, soil sampling, prospecting as outlined on Sheet 1 along contours 4800', 5000'.

Helicopter borne radiometric survey as outlined on Sheet 1 along contours 4800', 5000'.

## AREA "C"

Traverses along 2 north south lines 1000' apart near the eastern boundary of Area "C".

Silt sampling, soil sampling, prospecting as outlined in Sheet 1 on above traverses.

Helicopter borne radiometric survey as outlined on Sheet 1; following 2½ mile along north, south flightlines, 1000' spacing, from the eastern boundary of Area "C" to the height of land approximately 1 mile to the east, and from the Phillips main logging road on the north.

Depending on prospecting results field adjustments could be made to this program.

G. W. Laforme May 19, 1977.

