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Subject: A brief study of geochemical results based on the Federal - Provincial Uranium Reconnaissance Program 1976 survey in the West Kettle River area.

Grouping of samples:

The geochemical silt and surface water samples values (uranium content) were divided in 4 groups according to geologic environments*. The results of each group were treated statistically to obtain the arithmetic mean ($\bar{x}$) and the standard deviation (s). A summary table of thresholds, 8 histograms, and a map of anomalies are appended.

Thresholds

The mean was chosen as the threshold, the interval from $\bar{x}$ to $\bar{x}+s$ as possibly anomalous, from $\bar{x}+s$ to $\bar{x}+2s$ as probably anomalous,

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* Samples collected in heavy overburden areas were too few to include as a group in this study.

a) two miles north of Larmi.
b) Lassie Lake area.
c) upper Christian valley.
d) Hydraulic Lake area.

Two of the 4 prime targets have been found to contain significant uranium deposits. The Lacana deposit 1.5 miles northeast of Lassie Lake measures 1500 ft long x 400 ft wide x 27 ft. deep, grading .1% (2lb) U_3O_8 per ton (2 000 000 lbs U_3O_8 indicated). A similar deposit on the Tyee property at Hydraulic Lake contains 1.7 million lbs U_3O_8.

The following approximation describes the depositional environment:

a) as paleo stream channel in a late Tertiary basin (granitic)
b) up to 100 ft of poorly sorted, semi consolidated conglomerate thinning against the sides of the paleo channel
c) basalt cover up to 500 ft thick; the average thickness of the conglomerate and the basalt is about 200 ft.
d) overburden from 0 ft. to about 100 ft.
e) the main uranium mineral is autunite found in lenticular deposits in the conglomeratic section.
f) most drill holes are from 100 ft to 300 ft, ending in well-weathered granitic basement.

Yours very truly,

T.E. Kalnins

T. E. Kalnins, P. Eng.

URANIUM IN SEDIMENTS* AND SURFACE WATERS**

TABLE OF THRESHOLDS

LITHOLOGY. MODIFIED FROM H.W. LITTLE, MAPS 6-1957, 15-1961. OPEN FILE EGSC 5-1976 (409)	NUMBER SAMPLES SEDIM.	NUMBER SAMPLES WATER	AVERAGE PH	RANGE OF VALUES SEDIMENT	RANGE OF VALUES WATER	ARITHMETIC MEAN SEDIM	ARITHMETIC MEAN WATER	STANDARD DEVIAT SEDIM	STANDARD DEVIAT WATER	CLASSES OF VALUES SEDIMENT	CLASSES OF VALUES WATER
TERTIARY. Plateau basalts, volcanic flow rocks with interbedded sedimentary rocks. Units 6 and 7	43	48	7.6	1.3-19.2 5 values >20 excluded from calc.	.02-1.6	6.1	.36	3.9	.34	<6 background. ≥6 to <10 possibly anom. ≥10 to <14 probably anom. ≥14 anomalous.	<.4 background. ≥.4 to <.7 possibly anom. ≥.7 to <1.0 probably anom. ≥1.0 anomalous.
MESOZOIC, TERTIARY. Tertiary Coryell alkalic plutonic rocks, porphyritic granite and rhyolite. Jurassic–Cretaceous Nelson and Valhalla granitic plutonic rocks. Units 4 and 5	95	95	7.3	2.9-28.3 used in calc. Total range is: 1.3-104	.02-5.1 .02-10.2	9.2	.40	6.0	.40	<9 background. ≥9 to <15 possibly anom. ≥15 to <21 probably anom. ≥21 anomalous.	<.4 background. ≥.4 to <.8 possibly anom. ≥.8 to <1.2 probably anom. ≥1.2 anomalous
PALEOZOIC. Basaltic and andesitic lavas, greenstone, tuff, quartzite, limestone, argillite, slate, schist, sandstone, and conglomerate.	28	28	7.6	2.5-7.1 one value 17.3.	.02-1.7	4.2	.48	1.3	.40	<4 background. ≥4 to <5.5 possibly anom. ≥5.5 to <7 probably anom. ≥7 anomalous.	<.5 background. ≥.5 to <.9 possibly anom. ≥.9 to <1.3 probably anom. ≥1.3 anomalous.
PROTEROZOIC (SHUSWAP TERRANE) Gneiss, minor schist, limestone, marble, dolomite, slate, phyllite, quartzite, argillite; pegmatites.	123	127	7.3	2.2-16.1 nine values 23.3-76.3 omitted from calc.	.02-1.9 one 2.8	5.3	.25	2.9	.30	<5 background. ≥5 to <8 possibly anom. ≥8 to <11 probably anom. ≥11 anomalous.	<.25 background. ≥.25 to <.5 possibly anom. ≥.5 to <.8 probably anom. ≥.8 anomalous.

* in parts per million (ppm)
** in parts per billion (ppb).

Colour code: background: white; possibly anomalous: yellow; probably anomalous: orange; anomalous: red

and values equal to or greater than $\bar{x} + 2s$ as anomalous. The calculated values of central tendency were rounded for convenience.

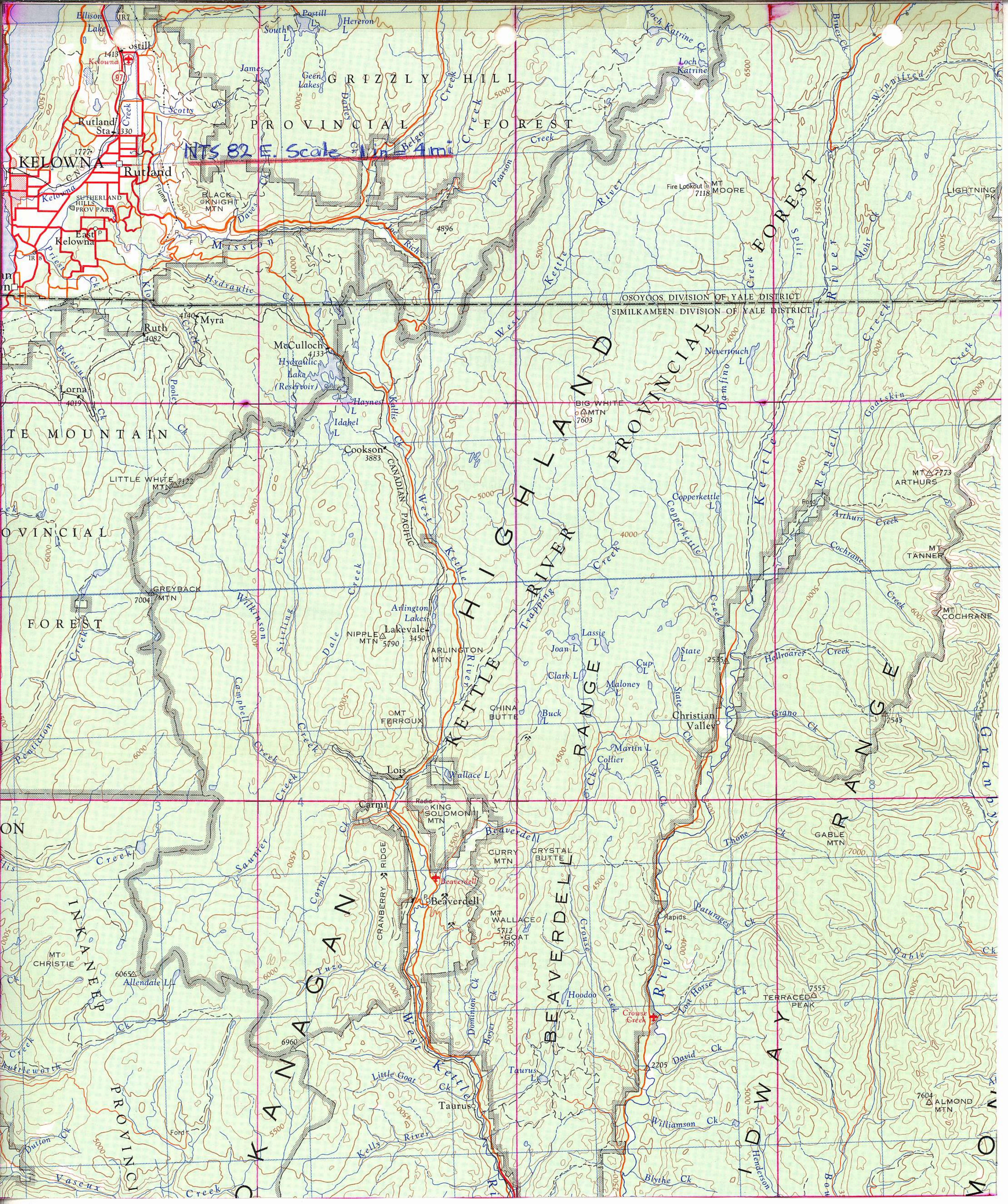
pH of samples.

The average pH of the geologic environments range from 7.3 for the Proterozoic metamorphic rocks and Mesozoic intrusions to 7.6 for the Paleozoic and Tertiary rocks. This is an alkaline environment in which the uranium content is expected to be relatively high, mobile, and dispersed. For comparison, survey results conducted by Barrier Reef Resources Ltd. in the Neechako area indicate lower pH (6.6) and uranium content.

Anomalies.

Geochemists have found that only a fraction of the reconnaissance geochemical variations is due to the influence of potentially economic uranium deposits. The majority of variations is due to the compositional differences in the rocks. However, these areas are potential sources for secondary leaching, dispersion and concentration of uranium. This information must be integrated into the total appraisal of the geologic situation suitable for uranium concentration.

The survey results in the Beaverdell type-area indicate that the intrusive rocks are the chief source of uranium. The general anomalous trend appears to be north northwesterly and northeasterly. Indicated prime targets for basal-type uranium concentration are the typical geologic situations nearby:



NTS 82 E. Scale 1in = 4mi
KELOWNA
Rutland
East Kelowna
GRIZZLY HILL
PROVINCIAL FOREST
BLACK KNIGHT MTN
SUTHERLAND HILLS PROV PARK
Mission Ck
Hydraulic Ck
Myra
Ruth
McCulloch
Hydraulic Lake (Reservoir)
Lorna
Loch Katrine
Fire Lookout MT MOORE 7118
LIGHTNING PK
OSOYOOS DIVISION OF YALE DISTRICT
SIMILKAMEEN DIVISION OF YALE DISTRICT
Nevertouch L
BIG WHITE MTN 7603
KETTLE HIGHLAND
PROVINCIAL FOREST
Cookson 3883
CANADIAN PACIFIC
LITTLE WHITE MTN 7122
MOUNTAIN
PROVINCIAL
FOREST
GREYBACK MTN 7004
MT ARTHURS 7773
MT TANNER
MT COCHRANE
Copperkettle L
Arlington Lakes
Lakevale
NIPPLE MTN 5790
ARLINGTON MTN
Trapping
RIVER
Lassie L
Joan L
Clark L
Maloney L
Cup L
State L
Christian Valley
CHINA BUTTE
Buck L
MT FERROUX
Lois
Wallace L
Martin L
Collier L
RANGE
Carmi
KING SOLOMON MTN
CURRY MTN
CRYSTAL BUTTE
CRANBERRY RIDGE
Beaverdell
MT WALLACE 5712
GOAT PK
BEAVERDELL RANGE
GABLE MTN
TERRACED PEAK 7555
Crouse Creek
Hoodoo L
Taurus L
Taurus
Little Goat Ck
West Kettle River
OKANAGAN
INKANEEP
MT CHRISTIE
Allendale L
PROVINCI
Kelly River
Williamson Ck
David Ck
Blythe Ck
ALMOND MTN 7604
IDWAY RANGE
Henderson
Vaseux Creek

NATIONAL GEOCHEMICAL RECONNAISSANCE MAP 5-1976
OPEN FILE 409
Thresholds revised by T.E.K. Scale 1in=4mi

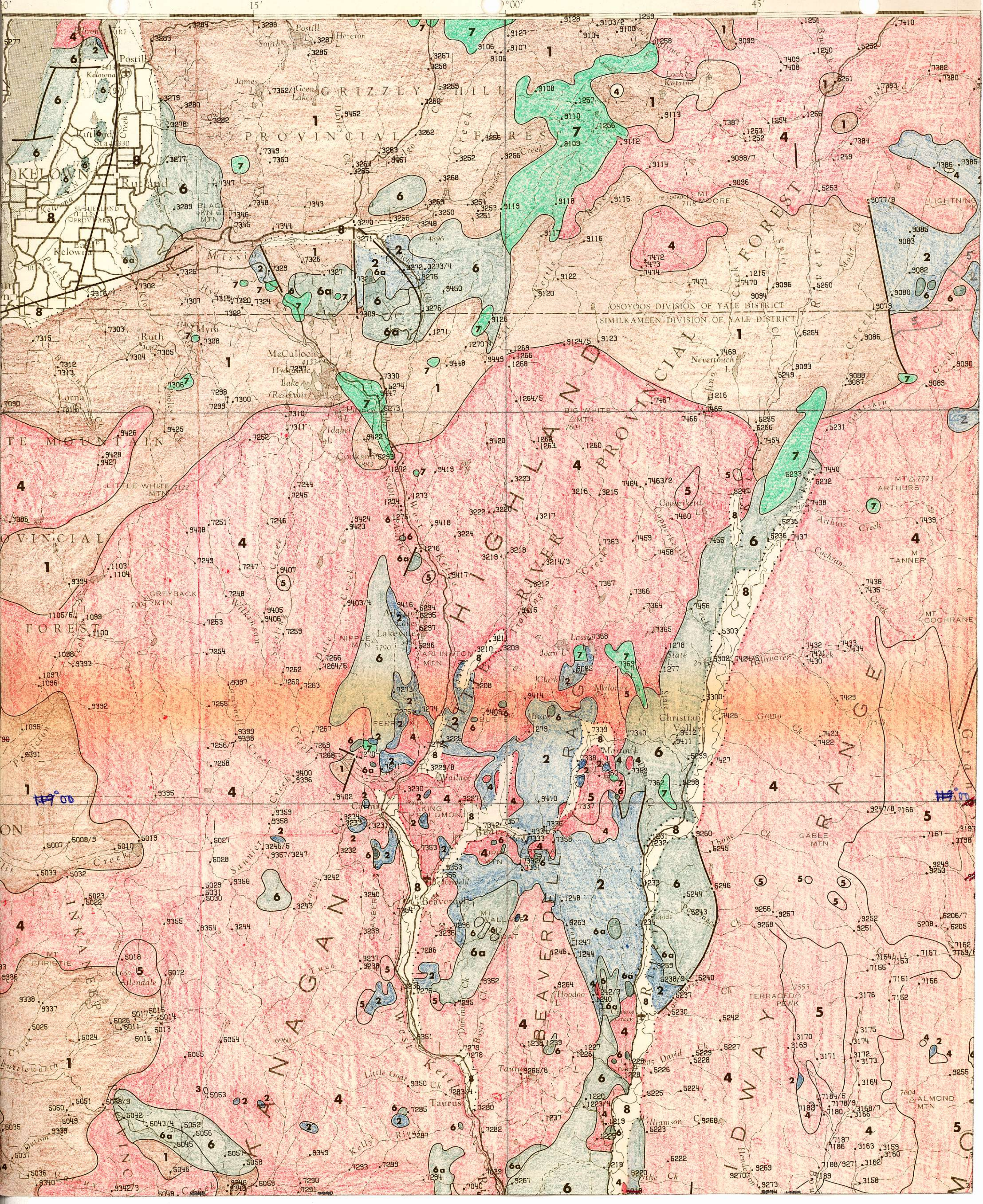
In this study the probably anomalous and the anomalous (orange and red) sediment and water values are outlined as composite anomalies

water
sediment

TYEE
1.7 M.T.

TYEE

LACANA
1 MMT
2 F/T



15'
45'
GRIZZLY HILL
PROVINCIAL FOREST
Kelowna
Rutland
Postill
McCulloch
Hydraulic
Lake
(Reservoir)
OSOYOOS DIVISION OF YALE DISTRICT
SIMILKAMEEN DIVISION OF YALE DISTRICT
BIG WHITE MTN
MT MOORE
Loch Katrine
Nevertouch L
LIGHTNING PK
LITTLE WHITE MTN
GREYBACK MTN
NIPPLE MTN
ARLINGTON MTN
KING SOLOMON MTN
Beaverdell
Carmi
Christian
MT ARTHURS
MT TANNER
MT COCHRANE
GABLE MTN
TERRACED PEAK
ALMOND MTN
MT CHRISTIE
Allendale
Hoodoo
Taurus
Little Goat
Idabel L
Cookson
Joan L
Lassie L
Clark L
Arthurs Creek
Cochrane
Thone Ck
Grano Ck
Kettle
West Kettle
Wilkinson
Saunier Creek
Carmi
Williamson
Hamilton
Goldstein
Wallace
Hydraulic
HIGHLAND
KETTLE RIVER
PROVINCIAL FOREST
OKANAGAN
MIDWAY RANGE
BEAVERDELL RANGE
FOREST

LEGEND

Note: This legend is common to National Geochemical Reconnaissance Map 4-1976, Open File 409; Map 5-1976, Open File 410 and Map 6-1976, Open File 411

QUATERNARY

8 Glacial, lacustrine, and fluviatile gravel, sand, silt and clay

TERTIARY

7 Plateau basalts, olivine basalts

6 Volcanic flow rocks with interbedded sedimentary rocks; 6a, conglomerate, sandstone, shale and tuff

5 CORYELL: alkalic plutonic rocks; porphyritic granite and rhyolite

JURASSIC - CRETACEOUS

4 NELSON and VALHALLA: granitic plutonic rocks

JURASSIC

3 Maffic and ultramafic intrusive rocks, pyroxinite, hornblendite serpentinite

PALEOZOIC (including UPPER PROTEROZOIC and TRIASSIC)

2 Basaltic and andesitic lavas, greenstone, tuff, quartzite, limestone and argillite; 2a, quartzite, argillite, limestone, slate, schist, phyllite, sandstone and conglomerate

PROTEROZOIC (SHUSWAP TERRANE)

1 Gneiss, minor schist, limestone, marble, dolomite, slate, phyllite; 1a, schist, quartzite, limestone, slate, argillite

Geological contact.....

Fault.....

Dyke.....

Mineral occurence..... Zn

NATIONAL GEOCHEMICAL RECONNAISSANCE MAP 5-1976
OPEN FILE 409
Thresholds revised by T.E.K. Scale 1in=4mi

In this study the 1 probably anomalous and the anomalous (orange and red) sediment and water values are outlined as composite anomalies

sediment 1
water .56

TYEE 1.7 MT.
TYEE
LACANA 1 MNT. 2 F/T

PROVINCIAL FOREST
OSOYOOS DIVISION OF YALE DISTRICT
SIMILKAMEEN DIVISION OF YALE DISTRICT

TERTIARY. Volcanic flow rocks with interbedded sedimentary rocks. Units 6 and 7.

URANIUM CONTENT IN SEDIMENTS* AND WATERS**

	No.	ppm	ppb	pH	No.	ppm	ppb	pH	No.	ppm	ppb	pH
	1218	5.0	.48	8.2	5243	—	.46	7.2				
x	1220	26.1	.60	7.8	5244	13.7	.58	7.3				
	1223	18.5	.74	7.8	5273	7.7	.38	7.8				
	1228	12.4	.26	7.4	5298	3.9	.58	8.3				
	1231	6.6	.34	8.2	5299	6.4	.38	8.2				
	1232	4.5	.26	8.4	5300	4.5	.10	8.1				
	1256	3.7	.05	7.1	5302	19.2	—	—				
	1257	3.8	.02	7.1	7285	22.6	.16	7.9	x			
	3276	4.4	.80	7.8	7327	4.2	.42	6.7				
	3277	2.0	1.60	8.5	7340	22.5	.10	8.1	x			
	3278	3.4	.16	8.0	7347	2.7	.05	8.2				
	3279	2.7	.66	8.3	7359	6.4	.42	7.7				
	3289	2.7	1.10	8.3	7456	21.6	.10	7.0	x			
	5042	4.6	.90	6.9	9108	2.2	.02	6.9				
	5043	3.0	.14	7.0	9109	4.3	.02	7.1				
	5045	6.2	.22	7.1	9110	4.8	.02	7.2				
	5052	6.9	.12	7.5	9118	1.3	.02	7.0				
	5056	3.8	.02	6.9	9119	3.7	.02	7.1				
	5057	8.2	.02	7.0	9126	5.3	.05	6.9				
	5058	5.7	.18	7.1	9260	7.8	.10	7.7				
	5220	3.8	.68	7.9	9267	10.8	1.00	7.9				
	5233	6.1	.38	7.9	9411	7.3	.42	7.2				
x	5235	43.4	.74	8.1	9412	8.1	.35	7.5				
	5236	6.9	.42	7.8	9447	7.2	.16	6.8				
					9450	7.2	.66	7.5				

* in parts per million (ppm)
** in parts per billion (ppb)

Omit ppm values > 20 from calc.

TERTIARY volcanic flow rocks with interbedded sedimentary rocks.

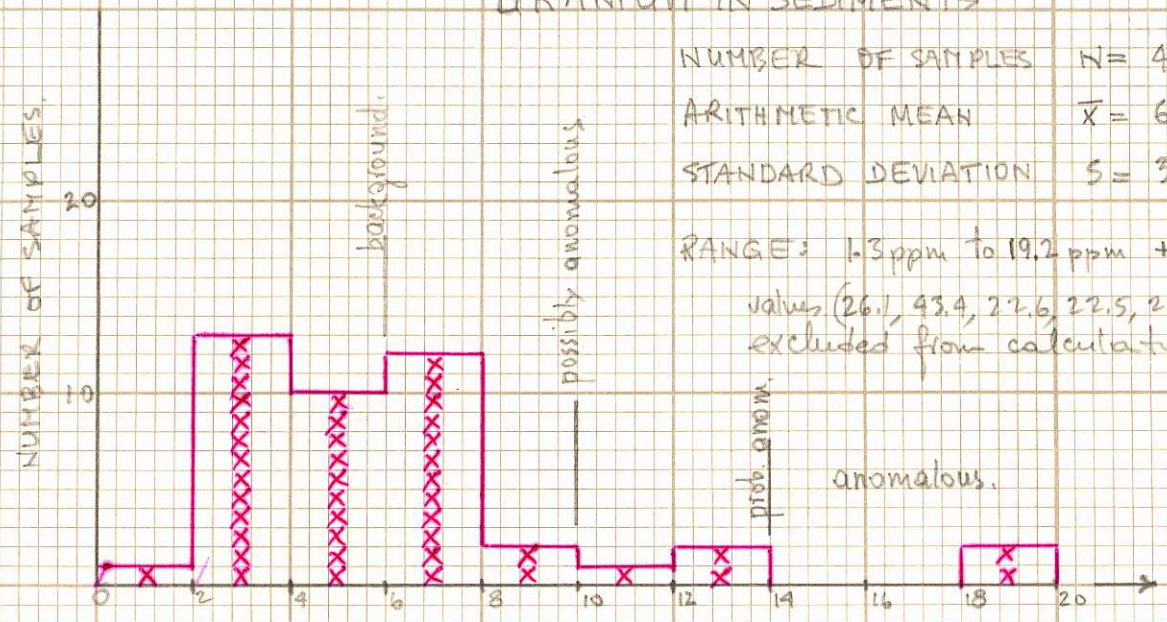
URANIUM IN SEDIMENTS

NUMBER OF SAMPLES N = 43

ARITHMETIC MEAN $\bar{X}$ = 6.1 ppm

STANDARD DEVIATION S = 3.9 ppm

RANGE: 1.3 ppm to 19.2 ppm + high values (26.1, 43.4, 22.6, 22.5, 21.6) excluded from calculations



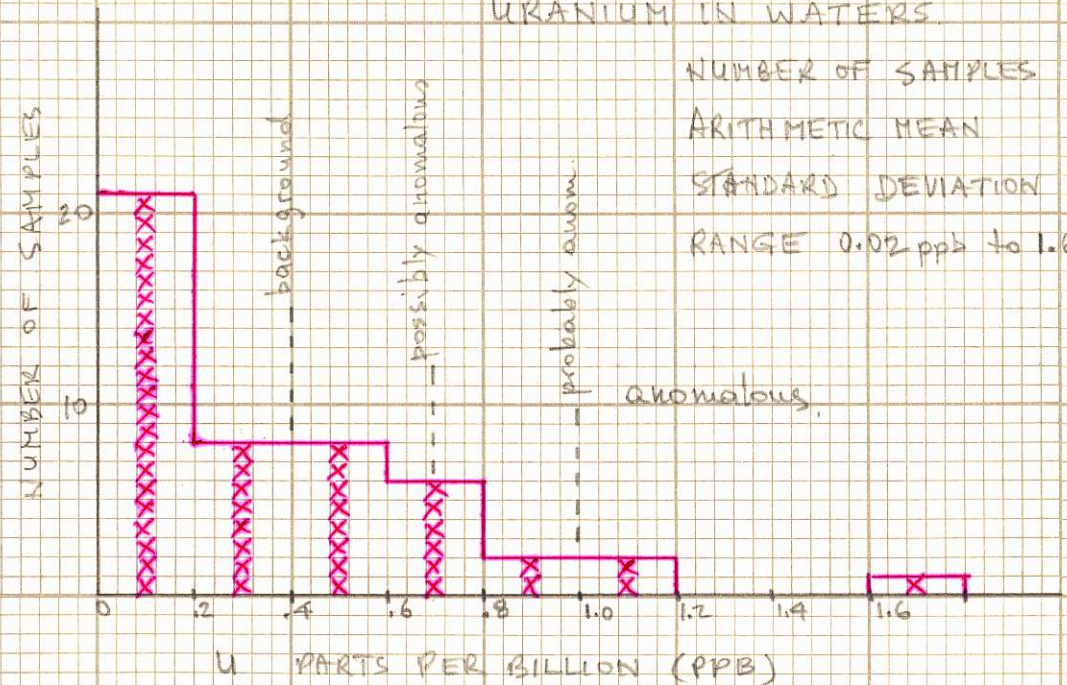
URANIUM IN WATERS

NUMBER OF SAMPLES N = 48

ARITHMETIC MEAN $\bar{X}$ = .36 ppb

STANDARD DEVIATION S = .34 ppb.

RANGE 0.02 ppb to 1.6 ppb



Av. pH = 7.6

MESOZOIC, TERTIARY. Nelson, Valhalla, and Coryell intrusions. (granitic)

No.	ppm	ppb	pH	No.	ppm	ppb	pH	No.	ppm	ppb	pH
1096	3.5	.28	7.4	1258	3.1	.18	7.0	3172	27.7	.84	7.5
1097	4.2	.12	7.0	1260	10.3	.22	7.4	3173	6.9	.02	7.4
1098	4.1	.36	6.9	1262	15.1	.42	6.3	3174	22.4	.22	7.1
1099	4.2	.16	6.5	1263	8.1	.10	6.4	3175	9.2	.24	7.0
1100	4.3	.36	6.5	1264	7.6	.22	6.7	3176	9.4	.62	7.7
1103	8.6	.50	7.1	1266	5.2	.52	6.6	3197	3.7	.12	7.3
1104	4.2	.20	6.3	1268	13.9	.22	7.3	3198	3.5	.05	7.2
1105	5.4	.43	7.0	1272	45.0	1.70	7.2	3209	11.3	7.80	7.6
1219	7.6	.82	8.0	1273	15.9	1.50	7.4	3210	8.4	1.30	7.4
1225	5.4	.16	7.9	1274	9.3	—	—	3212	69.5	2.30	7.0
1226	30.1	.56	7.6	1275	23.1	.58	7.6	3213	12.9	.22	7.0
1227	9.5	.34	7.6	1276	7.2	.42	7.4	3215	4.6	.42	6.7
1228	12.4	.26	7.4								
1229	6.2	1.00	8.1	1278	14.5	.16	7.3	3216	3.5	.12	6.8
1237	10.0	.34	7.4	1279	8.1	.32	7.3	3217	7.7	.16	6.7
1238	28.3	.12	7.5	3158	9.0	.02	7.5	3218	14.3	.32	7.2
1239	20.7	.02	7.4	3159	7.1	.02	7.5	3219	5.6	.36	6.8
1244	13.2	.44	7.9	3160	5.9	.02	7.5	3220	5.7	.10	7.6
1246	27.3	.76	7.6	3162	6.9	.16	7.2	3222	14.2	.46	7.9
								3223	9.9	.58	7.4
1249	4.6	.02	7.9	3163	9.1	.24	7.5	3224	4.1	.46	7.7
1250	3.7	.02	7.4	3164	8.9	.18	7.3	3227			
1251				3166	8.1	.05	7.8	3230	4.0	3.90	7.9
1252	3.9	.02	7.0	3167	9.7	.32	7.6	3235	4.7	.84	7.9
1253	4.9	.02	6.8	3169	10.1	.46	7.5	3236	6.7	.80	7.5
1254	4.0	.12	6.9	3170	3.5	.12	7.1	3237	13.1	3.70	7.9
1255	3.5	.02	7.0	3171	16.5	.16	7.2	3238	10.3	.14	7.4

use every third value in statistical calculations.

MESOZOIC, TERTIARY. cont'd.

No.	ppm	ppb	pH.	No.	ppm	ppb	pH.	No.	ppm	ppb	pH.
3231	3.6	1.70	8.0	5032	6.6	.56	7.2	~~5256~~			
3232	5.7	.94	7.1	5048	3.8	.22	8.0	~~5257~~			
~~3233~~	—	—	—	5053	6.1	.56	7.3	5294	10.4	.26	7.6
~~3234~~	—	—	—	5054	16.3	.30	7.2	5295	6.7	.98	7.7
3239	11.0	4.40	7.6	5055	6.8	.20	6.6	5296	19.4	.58	7.8
3240	6.0	10.20	8.0	5059	6.6	.02	7.0	5297	19.7	.64	8.0
								7039	27.1	.54	7.8
3242	4.8	.48	7.5	5222	8.5	.52	7.6	7040	28.7	.50	7.2
3243	8.7	.44	7.4	~~5223~~	~~5.8~~	~~.38~~	~~7.6~~	7086	4.0	.16	6.9
3244	6.8	.74	7.2	5224	6.5	.12	7.6	~~7094~~	4.7	.02	7.4
3245	8.1	.80	7.5	5225	5.9	.74	7.9	7151	↙		
3247	6.5	1.42	7.6	5226	3.8	.12	7.2	7152	6.2	.02	7.4
5205	4.6	.05	7.5	5227	5.1	.32	7.3	7153	7.2	.02	7.4
5206	4.2	.05	7.5	5228	3.3	.20	7.1	7154	4.1	.14	7.3
5208	3.3	.02	7.4	5229	4.6	.48	7.7	7155	6.6	.02	7.4
5012	4.4	.26	7.4	~~5230~~	~~3.7~~			7156	12.5	.05	7.2
~~5013~~	~~4.1~~	~~.34~~	~~7.5~~	~~5231~~				7157	4.6	.05	7.2
5018	4.3	.20	6.9	~~5237~~	~~4.3~~	~~.42~~	~~7.8~~	7159	5.4	.14	7.3
5019	7.2	.14	6.6	~~5238~~	~~13.7~~	~~.34~~	~~7.8~~	7167	3.2	.05	7.2
								7162	4.1	.14	7.3
								7166	3.3	.02	7.4
5022	7.2	.20	6.6	~~5240~~				7178	12.7	.20	7.6
5023	7.6	.20	7.6	5242	33.3	.26	7.5	7180	8.2	.05	7.3
5027	1.3	.05	7.1	5245	7.8	.26	7.1	7182	68.9	.66	7.5
5028	10.6	.46	7.1	5246	12.2	.68	6.8	7184	6.2	.16	7.3
5029	16.6	1.60	7.3	5247	14.2	.62	7.0	7186	10.3	.10	7.0
5030	9.4	.80	7.5	5252	7.4	.16	7.1	7187	8.0	.20	7.0
5031	19.5	.32	7.4	5253	11.1	—	—	7188	11.9	.30	7.5

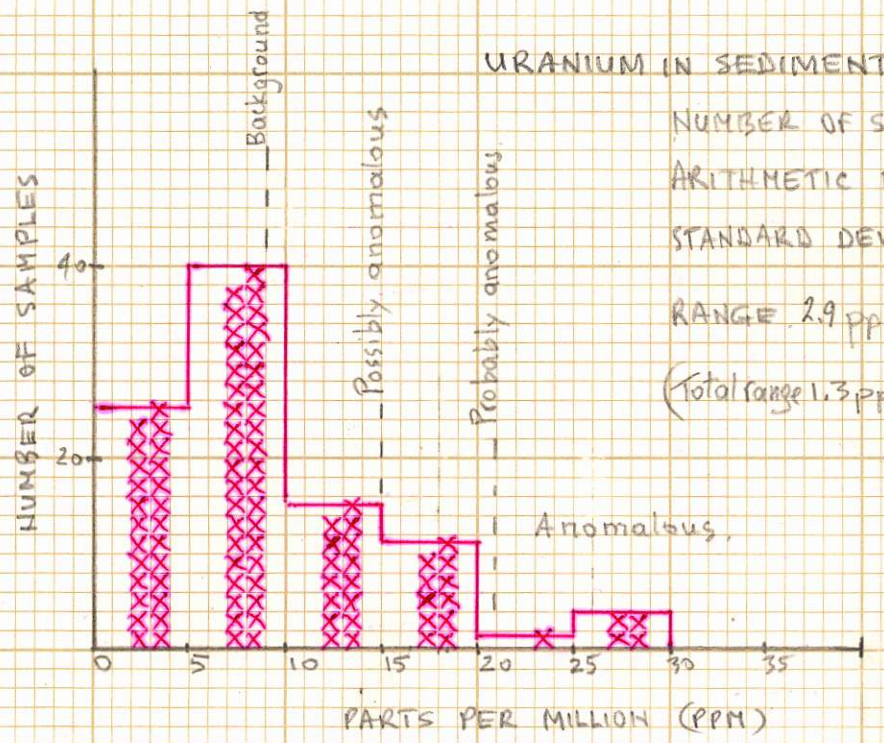
MESOZOIC, TERTIARY, cont'd

No.	ppm	ppb	pH	No.	ppm	ppb	pH	No.	ppm	ppb	pH
7189	10.3	.10	7.0	7276	6.1	-	-	7382	11.0	.10	7.2
7212	3.7	2.50	7.7								
7244	36.9	.30	7.3	7279	17.8	1.10	8.0	7383	6.7	.12	7.1
7245	14.5	.50	7.1	7280	14.1	.16	7.7	7384	11.5	.12	7.2
				7282	6.7	.88	8.0				
7246	16.0	.30	7.1	7283	8.1	.50	7.8	7387	2.9	.05	6.9
7247	6.9	.12	6.9	7286	4.2	5.00	8.3	7408	3.4	.05	7.0
7248	9.4	.12	6.9	7287	13.1	1.30	7.7	7409	7.6	.05	6.8
7249	5.0	.10	6.7	7289	17.2	.80	7.3	7410	4.1	.05	7.2
7251	6.0	.20	6.9	7290	29.3	.58	7.4	7422	8.0	.05	7.0
7252	7.3	.10	6.8	7294	104.0	.50	7.0	7423	5.2	.05	6.7
								7424	9.1	.10	6.7
7253	3.3	.10	6.8	7295	8.3	2.80	7.8	7427	10.5	.10	6.6
7254	9.9	.10	6.8	7296	3.5	1.40	8.2	7429	5.6	.10	6.4
7255	5.8	.96	6.5	7310	14.2	1.50	6.9	7430	9.9	.05	6.9
7256	16.0	.50	6.8	7311	46.0	.34	6.9	7431	5.5	.05	6.5
7258	13.2	.66	6.8	7337	7.6	.64	8.1	7432	7.9	.16	6.7
7259	19.1	.54	6.7	7353	3.8	4.80	8.2	7433	6.9	.02	6.5
7260	7.0	.16	6.7	7354	5.7	5.10	8.4	7434	4.9	.05	6.4
7262	10.9	.92	7.3	7358				7435	5.3	.05	6.5
7263	6.0	1.00	7.6	7360	17.4	.26	7.7	7436	6.4	.10	6.5
7264	2.3	.76	8.2	7363	5.7	.10	7.5	7437	5.8	.02	6.6
7266	11.4	.92	7.8	7364	18.1	.22	7.5	7438	18.1	.10	6.5
7267	3.4	1.10	8.4	7365	9.8	.10	7.3	7439	17.0	.12	6.6
7268	16.3	.66	7.6	7366	31.9	.42	6.9	7440	11.0	.50	6.5
7269	11.1	.42	7.4	7367	18.7	1.20	7.0	7455	14.3	.42	7.2
7270	5.3	.70	8.0	7368	29.1	.60	7.3	7458	12.5	.05	7.0
7272	4.1	.76	8.1	7380	6.8	.05	6.7	7459	8.2	.02	6.7

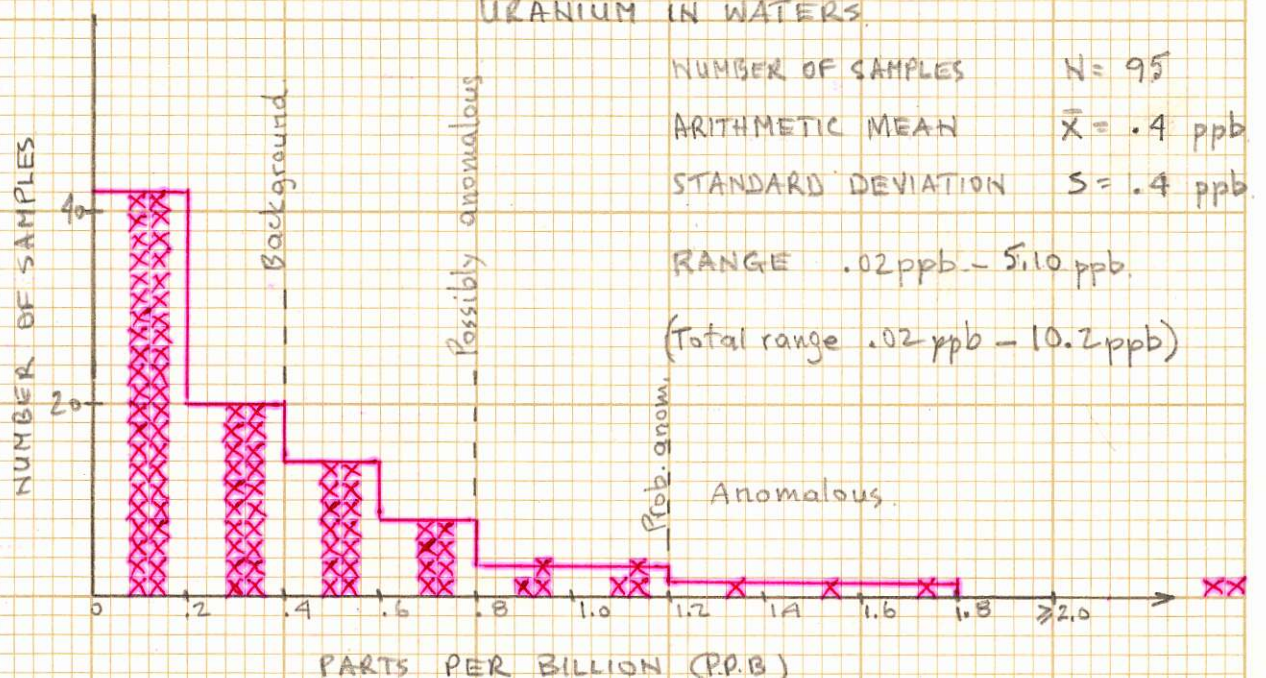
MESOZOIC, TERTIARY cont'd.

No.	ppm	ppb	pH	No.	ppm	ppb	pH	No.	ppm	ppb	pH
7460	20.6	.24	6.4	9264	15.6	.16	7.3	9403	14.2	.50	7.3
7462	6.2	.02	7.0	9265	23.6	.24	7.4	9405	7.3	.16	7.1
7464	7.1	.10	6.5	9268	6.5	.10	7.3	9406	8.6	.16	7.1
7465	7.3	.30	6.6	9269	10.2	—	—	9407	10.5	.38	7.1
7466	7.2	.02	6.7	9270	12.1	.05	7.6	9408	6.3	.10	7.0
7467	4.9	.10	6.7	9271	14.2	.20	7.4	9409	15.7	1.20	7.3
7472	7.4	.02	6.8	9273	12.6	.10	7.3	9414	13.9	.42	6.7
7473	3.9	.02	6.6	9342	3.1	.24	7.6	9415	9.0	.24	7.0
7474	5.3	.02	6.3	9349	13.2	.24	7.1	9416	8.6	.38	7.3
9077	12.3	.05	7.4	9336	4.6	.10	7.6				
9089	49.0	.70	7.0	9350	18.3	.66	7.5	9417	17.6	.20	7.3
9090	11.9	.05	7.0	9351	18.0	.92	7.5	9418	64.3	.34	7.0
9096	6.0	.02	7.0	9352	7.7	.46	7.5	9419	73.6	1.00	6.9
9097	8.0	.02	6.9	9356	8.1	.36	7.3				
9099	2.7	.05	6.5	9357	8.7	1.00	7.3	9420	25.3	.20	6.7
9112	4.3	.05	7.0	9358	11.7	—	—	9423	24.6	.62	6.9
9114	6.0	.02	6.5	9359	10.2	.66	7.5	9424	23.2	1.20	6.8
9124	8.8	.12	6.4	9355	17.7	.58	7.4	9426			
9247	3.0	.10	7.1	9354	11.9	.50	7.6	9427	4.7	.02	6.7
9249	2.9	.05	7.0	9392	7.4	.24	6.8	9428	5.1	.05	6.8
9250	3.4	.02	7.0	9393	2.5	.10	6.5				
9251	6.3	.20	7.0	9395	8.1	.38	6.6				
9252	3.6	.05	7.1	9396	6.3	.42	6.7				
9255	12.1	.12	7.8	9397	6.1	.24	6.5				
9256	14.9	.10	7.0	9398	13.1	.42	6.7				
9257	11.6	.24	7.0	9399	9.7	.34	6.4				
9258	22.0	.24	7.1	9400	8.7	.46	7.4				
				9402	4.9	.50	7.9				

MESOZOIC, TERTIARY granitic intrusions (⅓ of total samples in the area)



Av. pH. = 7.3.



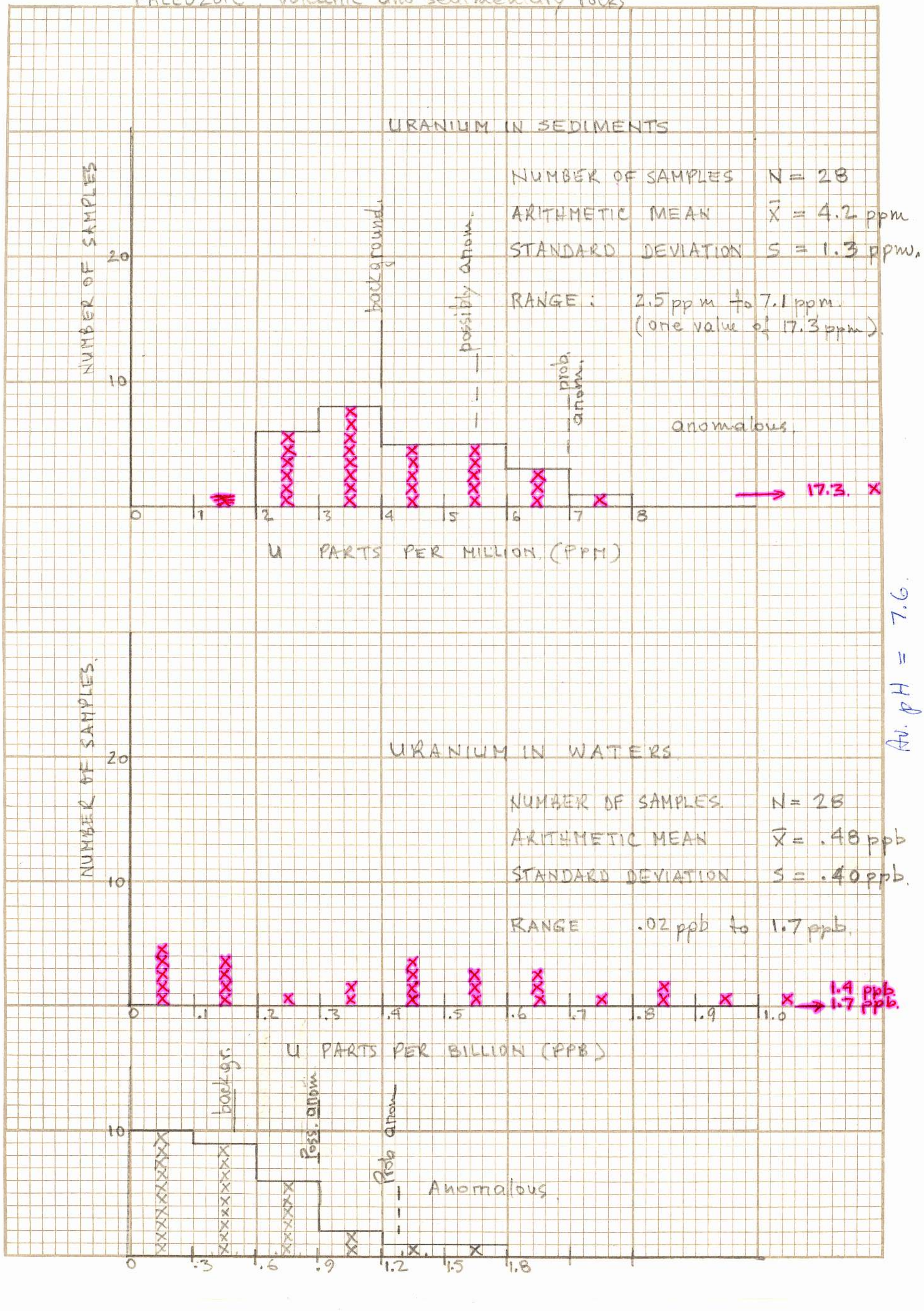
PALEOZOIC. Volcanic and sedimentary rocks Unit 2.

URANIUM CONTENT IN SEDIMENTS* AND WATERS**

No.	ppm	ppb	pH	No.	ppm	ppb	pH	No.	ppm	ppb	pH
1233	2.8	.12	8.1	9083	4.7	.02	7.4				
1234	4.2	.16	8.2	9085	5.9	.05	7.1				
1242	5.0	.60	8.0	9259	3.0	.50	7.9				
1247	6.3	.40	7.9	9263	17.3	.82	7.7	← exclude from calculations			
1248	2.8	.12	8.2	9410	5.5	1.70	8.0				
3225	6.0	.96	8.6								
3272	2.3	.32	8.3								
3273	3.2	.48	8.1								
3275	4.3	.60	7.9								
7271	2.4	1.00	8.0								
7273	7.1	.42	7.6								
7274	3.2	.50	8.0								
7275	6.4	.58	7.8								
7328	3.4	.32	7.3								
7329	2.5	.22	8.0								
7331	4.6	.64	8.0								
7332	3.2	.42	8.3								
7333	2.8	.74	8.0								
7334	5.1	.84	8.0								
7336	3.6	1.40	8.5								
7385	4.5	.10	6.9								
7386	5.9	.05	7.0								
9052	28.3	.74									
9080	3.1	.05	7.5								
9082	3.4	.05	7.7								

* in parts per million (ppm)
** in parts per billion (ppb)

PALEOZOIC Volcanic and sedimentary rocks



PROTEROZOIC. (Shuswap Terrane) Metamorphosed sedimentary rocks and pegmatites.

URANIUM IN SEDIMENTS* AND WATERS**

No.	ppm	ppb.	pH	No.	ppm	ppb.	pH.	No.	ppm	ppb	pH.
1095	6.3	.48	7.7	3268	4.5	.36	7.5	5037	3.0	1.00	7.6
1215	7.5	.02	6.5	3269	4.4	.44	7.9	5038	5.2	.05	7.7
1216.	16.1	.20	6.9	3280	4.0	.24	7.7	5046	5.6	.56	7.1
1259	2.9	.02	6.7	3282	2.7	.56	7.7	5049	10.9	.94	7.8
1269	7.1	.42	6.9	3283	2.3	.12	7.6	5050	4.1	.54	7.7
1270	5.1	.16	7.4	3284	2.2	.16	7.6	5051	6.0	.22	7.5
1271	3.7	.16	7.1	3285	2.7	.12	7.4	5249	5.1	.16	7.3
3248	2.9	.52	7.9	3287	3.3	.12	7.2	5250	4.7	.12	7.2
3250	4.7	.80	7.9	3288	2.7	.20	7.0	5251	3.3	.16	7.1
3251	3.5	.70	8.0	5007	7.5	—	—	5254	30.2	.54	7.0
3252	3.0	.10	7.5	5008	13.8	.30	7.6	5255	34.0	—	—
3253	4.1	.16	7.6	5010	6.9	.42	7.1	5256	26.5	—	—
3254	3.1	.05	7.1	5011	8.5	.14	7.3	5274	23.3	.84	7.7
3255	6.1	.05	7.0	5013	4.1	.34	7.3	7090	6.6	.22	7.4
3256	4.3	.05	6.9	5014	76.3	.18	7.3	7297 7298	3.5 14.6	.42 .10	7.9
3257	3.6	.20	7.0	5015	6.4	.28	6.6	7299	8.4	.20	7.0
								7300	6.1	.16	6.9
3258	3.3	.28	7.0	5016	24.0	.48	6.6	7302	3.7	.24	7.6
3259	2.9	.20	7.0	5017	12.6	.42	7.2	7303	3.5	.24	7.4
3260	11.5	1.90	8.0	5024	6.6	.02	7.3	7304	4.5	.12	7.3
3262	3.3	.32	7.4	5025	10.0	.24	7.3	7305	5.3	.10	7.1
3263	3.2	.16	7.6	5026	5.7	.02	7.2	7306	4.2	.02	6.9
3264	3.1	.16	7.6	5033	5.6	.05	7.0	7307	14.0	.42	7.3
3265	4.4	.12	7.5	5035	3.1	.53	7.8	7308	5.1	.10	7.1
3266	2.4	2.80	8.4	5036	4.7	.18	7.5	7309	4.0	.10	7.1
Σx^2		807.91				920.69				966.42	

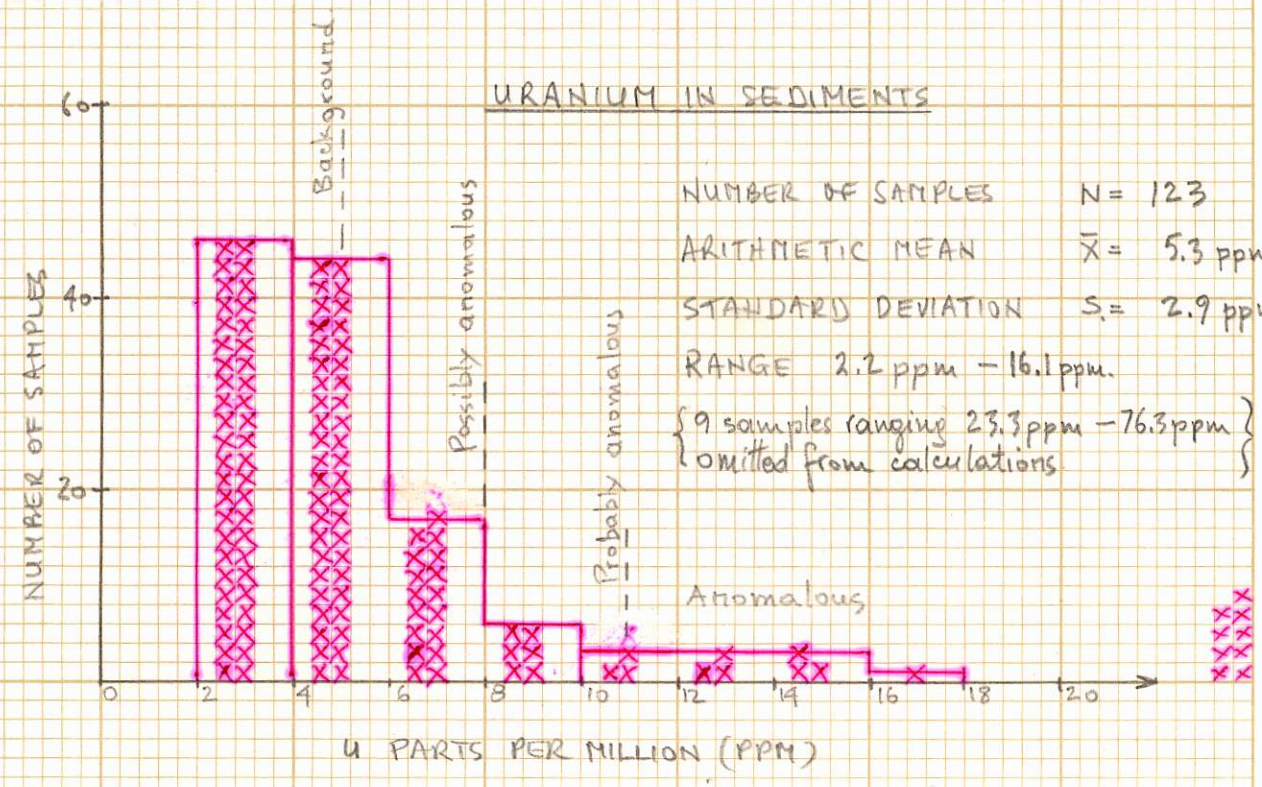
* in parts per million (ppm)
** in parts per billion (ppb)

PROTEROZOIC. cont'd.

No	ppm	ppb	pH	No.	ppm	ppb	pH	No	ppm	ppb	pH.
7312	5.3	.05	7.0	9079	3.3	.05	7.6	9339	3.1	1.60	8.0
7313	4.2	.16	7.0	9086	4.1	.05	7.6	9340	9.9	—	—
7314	2.9	.02	7.0	9087	44.4	.05	6.7	9346	5.0	.24	6.9
7315	3.8	.34	7.9	9088	3.6	.05	7.5	9348	4.4	.32	7.2
				9093	5.5	.16	6.5				
7319	5.6	1.00	7.2	9094	9.0	.05	7.2	9391	7.9	.24	7.2
7320	4.9	.84	7.6	9095	4.2	.02	7.2	9394	3.8	.05	6.8
7322	4.0	.38	7.7	~~9096~~				9422	46.0	.34	7.0
7324	4.5	.52	7.3	9100	4.5	.02	6.9	9425	4.8	.24	6.8
7325	4.3	.45	7.1	9102	2.6	.02	7.0	9448	15.8	.42	7.0
				9103	3.1	.02	7.1				
7326	3.2	.20	7.5	9104	3.9	.02	7.1	9449	6.2	.42	7.0
7330	38.2	.42	7.7	9105	6.6	.02	7.1	9452	5.1	.05	8.1
7343	3.3	.02	7.8	9106	3.2	.05	7.1		565.96		
7344	4.0	.05	7.8	9107	3.7	.02	7.0				
7345	4.0	.02	7.7	9113	4.4	.02	6.7				
7346	2.6	.32	8.3	9115	3.4	.02	7.1				
7348	3.2	.10	7.7	9116	2.3	.02	6.8				
7349	3.3	.02	7.5	~~9117~~	2.4	.02	7.1				
7350	2.9	.05	7.5	9120	3.0	.02	7.0				
7351	4.3	.10	7.1	9122	6.6	.05	7.2				
7454	7.2	1.00	7.0	9123	6.3	.05	6.7				
7468	5.2	.05	6.5	9127	4.7	.05	6.8				
7470	9.4	.10	6.8	9128	3.5	.05	6.8				
7471	4.3	.02	6.6	9337	9.9	.16	7.2				
~~7474~~				9338	13.1	.16	7.3				
	462.10				734.98						

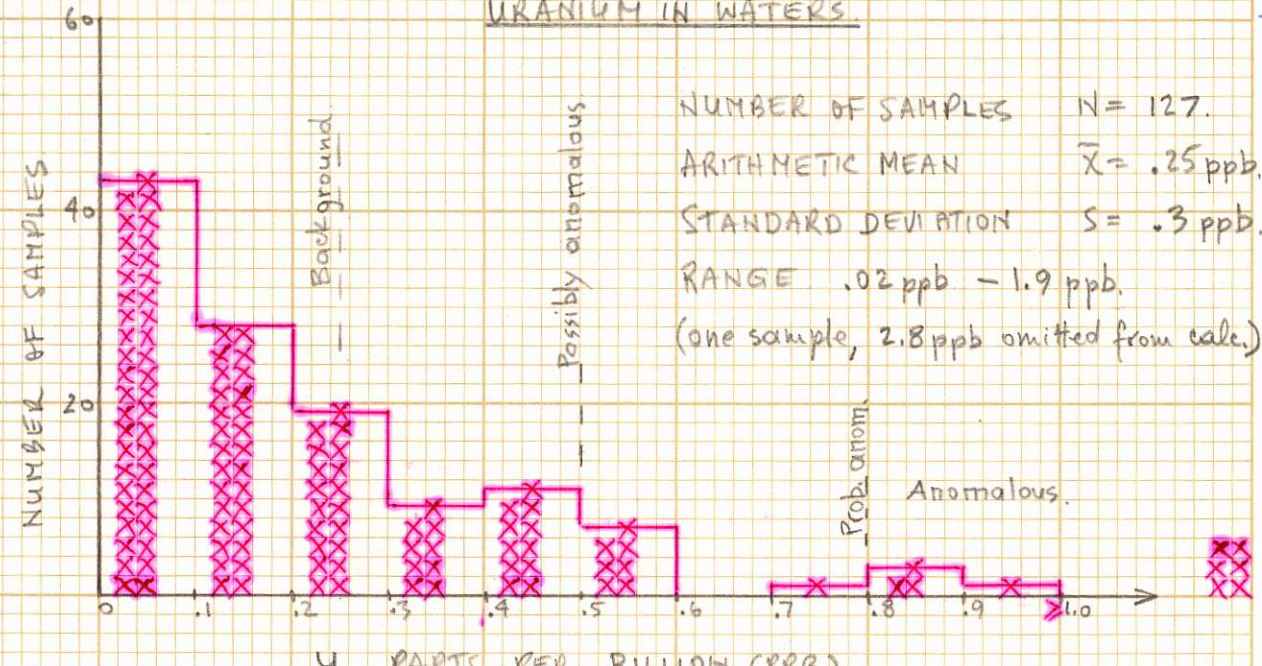
PROTEROZOIC (SHUSWAP) metamorphic rocks and derived pegmatites

URANIUM IN SEDIMENTS



NUMBER OF SAMPLES N = 123
ARITHMETIC MEAN $\bar{X}$ = 5.3 ppm.
STANDARD DEVIATION S = 2.9 ppm
RANGE 2.2 ppm – 16.1 ppm.
{9 samples ranging 23.3 ppm – 76.3 ppm omitted from calculations}

URANIUM IN WATERS.



NUMBER OF SAMPLES N = 127.
ARITHMETIC MEAN $\bar{X}$ = .25 ppb.
STANDARD DEVIATION S = .3 ppb.
RANGE .02 ppb – 1.9 ppb.
(one sample, 2.8 ppb omitted from calc.)

Av. pH = 7.3