

Data Summary Pages
for
Yathkyed Lake

Regional Geochemical Survey

A.A. and N.A.A. analyses

Compositional Analysis of Till Samples

Variable: Cobalt (ppm)

Sample preparation method: 230 mesh screen, dry

Analytical method: Flame A.A.

Analytical preparation method: HCl-HNO₃ (1:3) extraction

Detection limit: 1 ppm

No. of obs.: 71

Mode: 6

Variance: 3.11

Minimum: 2

Geometric mean: 4.71

Coefficient of variance: 0.35

Maximum: 9

Median: 5

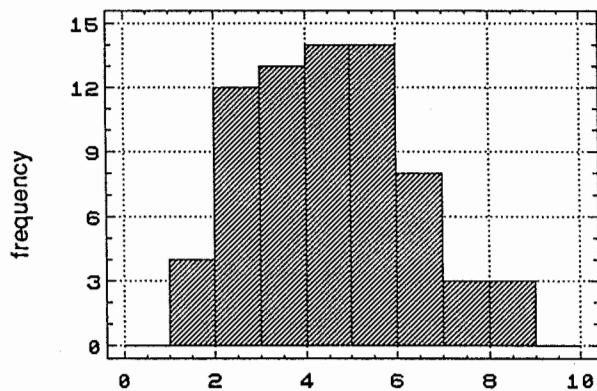
Skewness: 0.31

Mean: 5.03

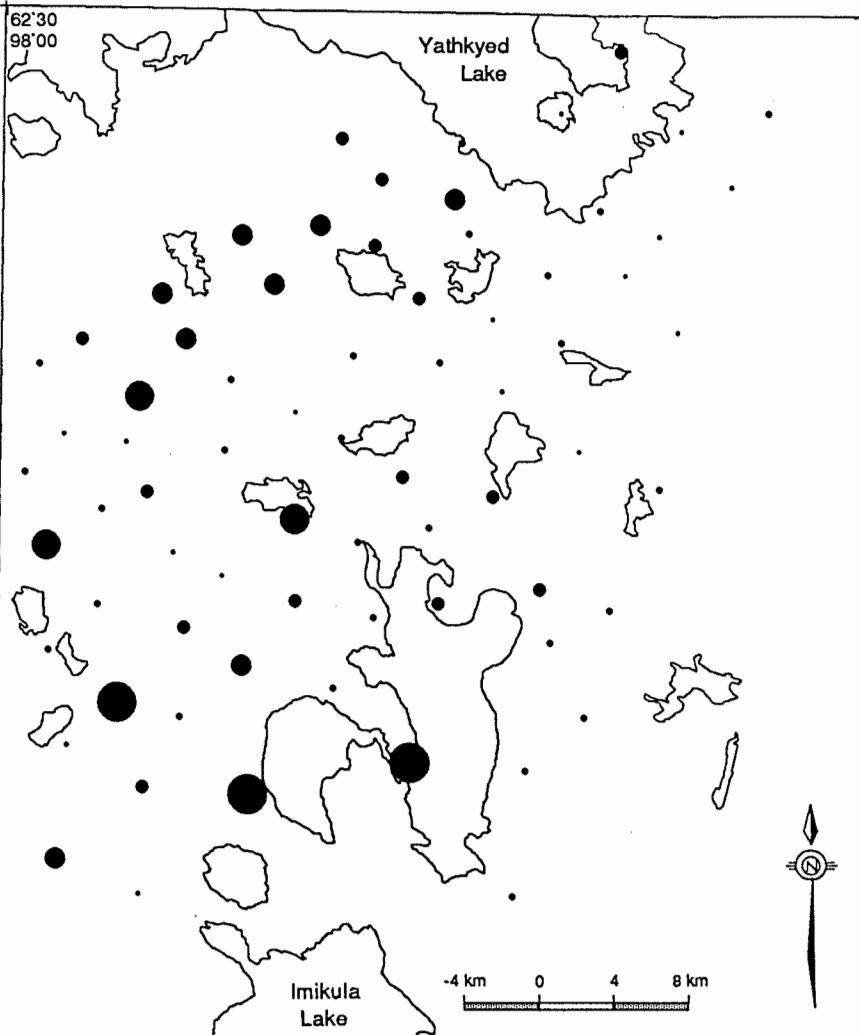
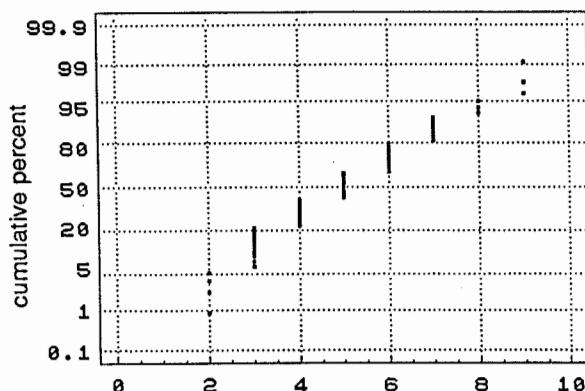
Standard deviation: 1.76

Kurtosis: -0.45

Frequency Histogram



Normal Probability Plot



Co			
SIZE	RANGE (ppm)	LOW	HIGH
•	2 - 3	16	22.5
●	3 - 5	27	60.6
○	5 - 6	14	80.3
○○	6 - 7	8	91.5
○○○	7 - 8	3	95.8
○○○○	8 - 9	3	100

62°00' N
97°05' E

Compositional Analysis of Till Samples

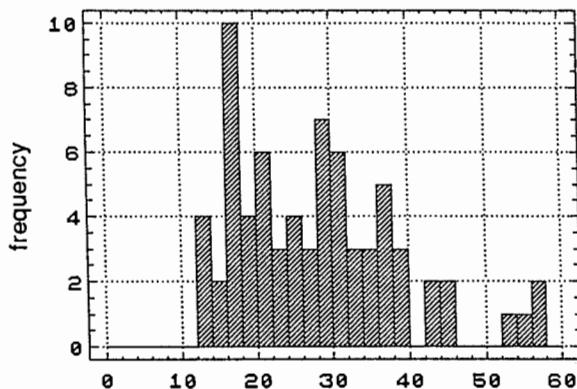
Variable: Chromium (ppm)

Sample preparation method: 230 mesh screen, dry
Analytical preparation method: HCl-HNO₃ (1:3) extraction

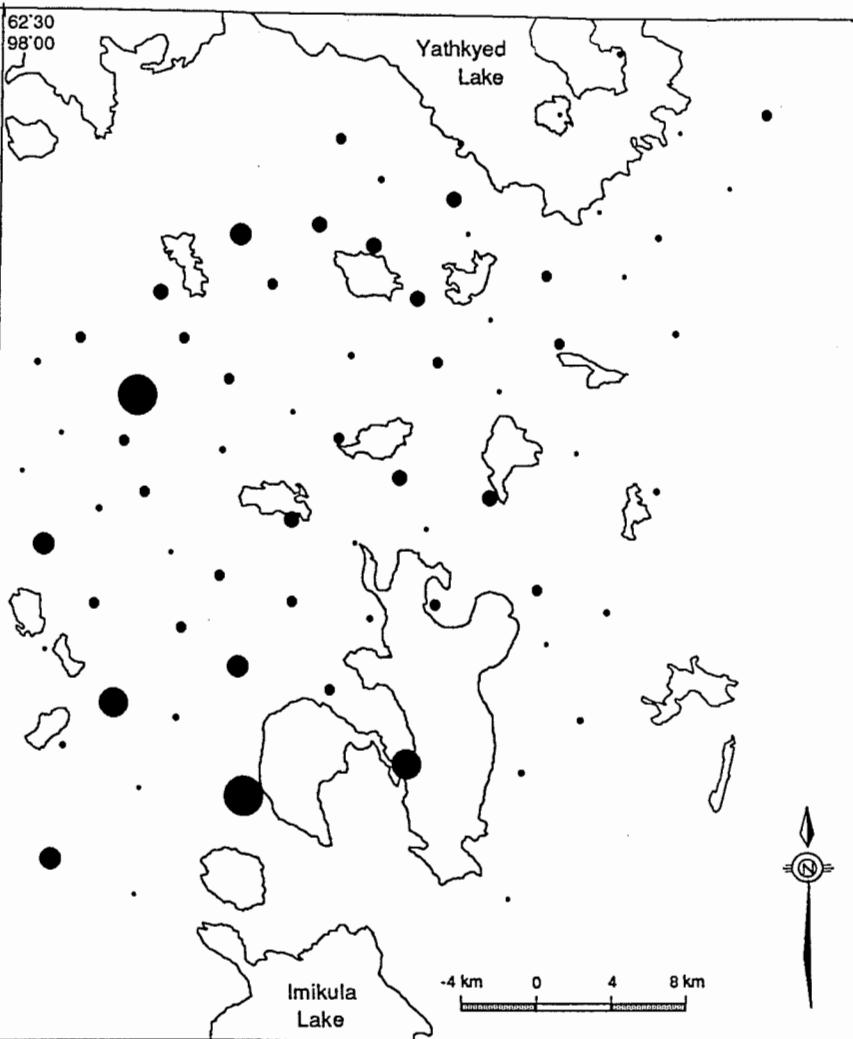
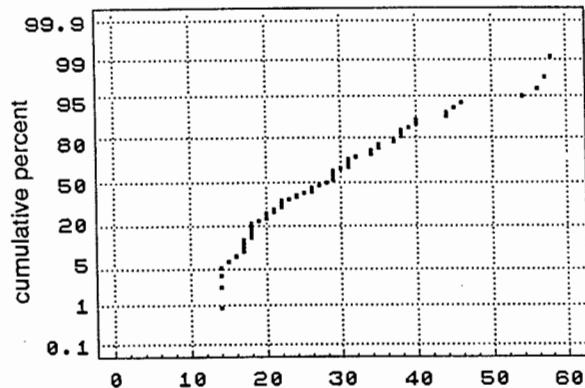
Analytical method: Flame A.A.
Detection limit: 1 ppm

No. of obs.: 71	Mode: 29	Variance: 118.07
Minimum: 14	Geometric mean: 26.80	Coefficient of variance: 0.38
Maximum: 58	Median: 28	Skewness: 0.84
Mean: 28.69	Standard deviation: 10.87	Kurtosis: 0.38

Frequency Histogram



Normal Probability Plot



Cr			
SIZE	RANGE (ppm)	LOW	HIGH
•		20	20
•		28	16
•		35	19
•		40	8
•		46	4
•		56	2
•		58	2
		28.2	100

Compositional Analysis of Till Samples

Variable: Copper (ppm)

Sample preparation method: 230 mesh screen, dry

Analytical preparation method: HCl-HNO₃ (1:3) extraction

Analytical method: Flame A.A.

Detection limit: 1 ppm

No. of obs.: 71

Mode: 8

Variance: 47.74

Minimum: 5

Geometric mean: 12.47

Coefficient of variance: 0.49

Maximum: 36

Median: 13

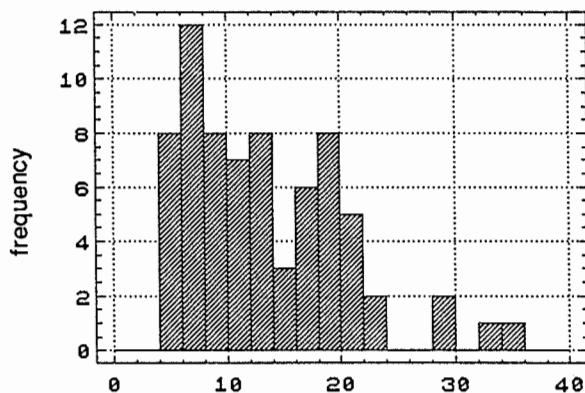
Skewness: 0.99

Mean: 14

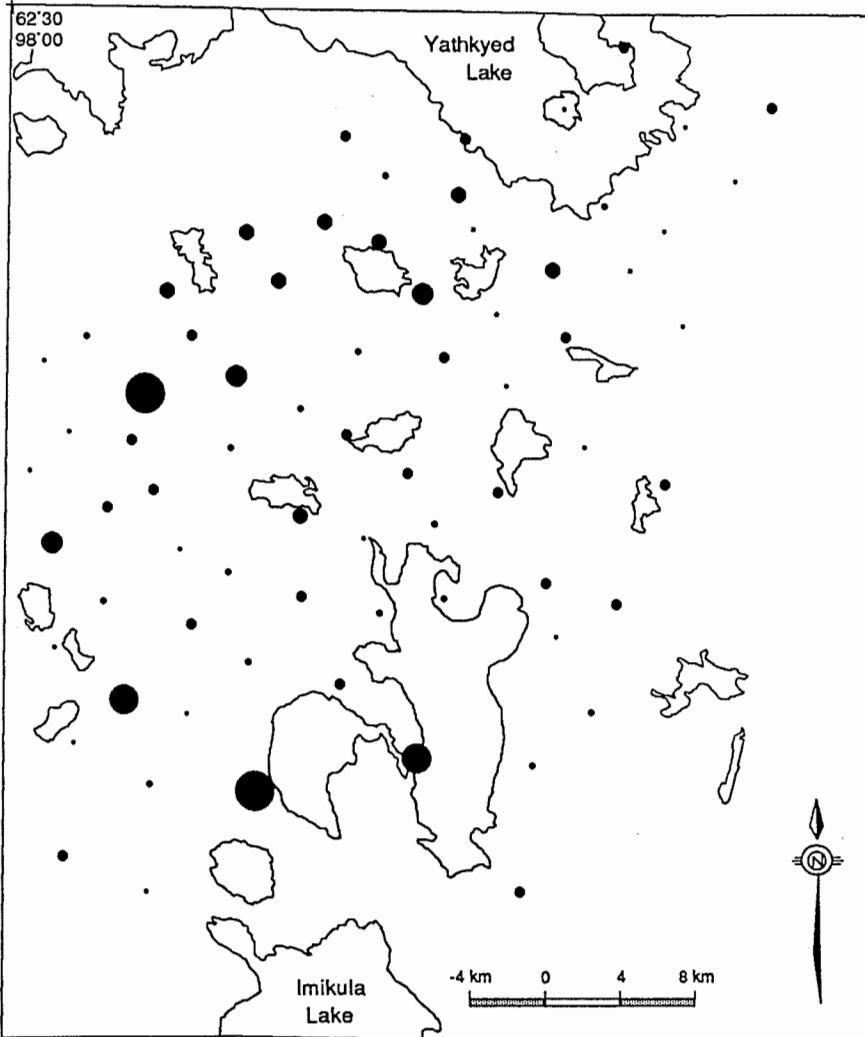
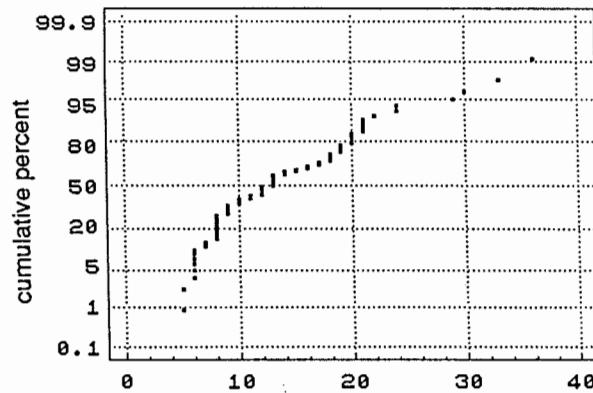
Standard deviation: 6.91

Kurtosis: 0.85

Frequency Histogram



Normal Probability Plot



Cu			
SIZE	RANGE (ppm)	LOW	HIGH
•	5	8	20
•	8	12	15
•	12	19	21
•	19	21	8
•	21	24	3
•	24	30	2
•	30	36	2

SIZE	RANGE (ppm)	LOW	HIGH	OBS.	%TILE
•	5	8	20	28.2	
•	8	12	15	49.3	
•	12	19	21	78.9	
•	19	21	8	90.1	
•	21	24	3	94.4	
•	24	30	2	97.2	
•	30	36	2	100	

Compositional Analysis of Till Samples

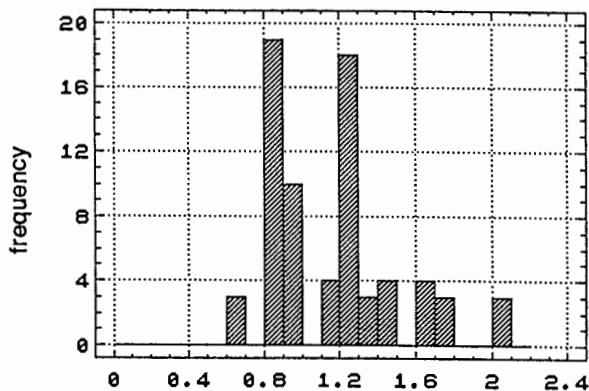
Variable: Iron (%)

Sample preparation method: 230 mesh screen, dry
Analytical preparation method: HCl-HNO₃ (1:3) extraction

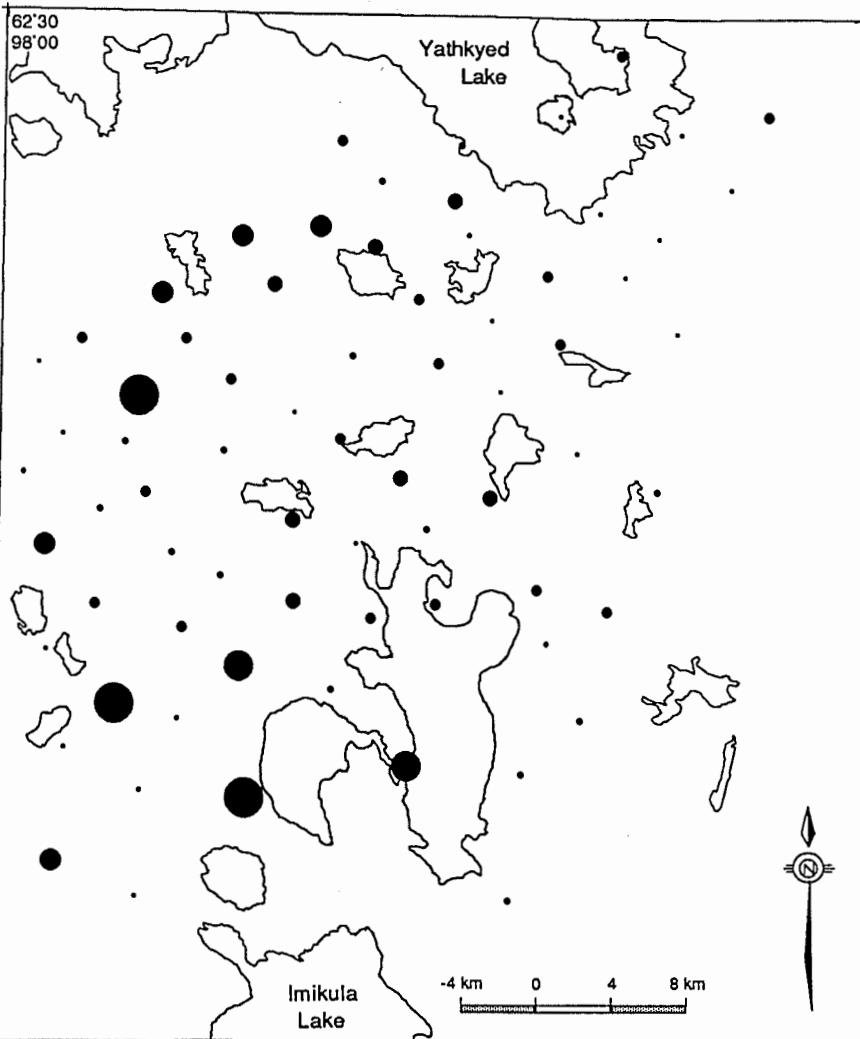
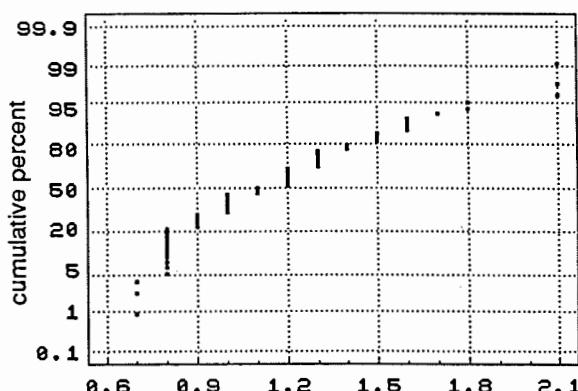
Analytical method: Flame A.A.
Detection limit: 0.1 %

No. of obs.: 71	Mode: 0.8	Variance: 0.12
Minimum: 0.7	Geometric mean: 1.12	Coefficient of variance: 0.30
Maximum: 2.1	Median: 1.1	Skewness: 0.89
Mean: 1.17	Standard deviation: 0.34	Kurtosis: 0.48

Frequency Histogram



Normal Probability Plot



62°00'
97°05'

Compositional Analysis of Till Samples

Variable: Lead (ppm)

Sample preparation method: 230 mesh screen, dry

Analytical method: Flame A.A.

Analytical preparation method: HCl-HNO₃ (1:3) extraction

Detection limit: 2 ppm

No. of obs.: 71

Mode: 9

Variance: 4.81

Minimum: 5

Geometric mean: 8.73

Coefficient of variance: 0.24

Maximum: 16

Median: 9

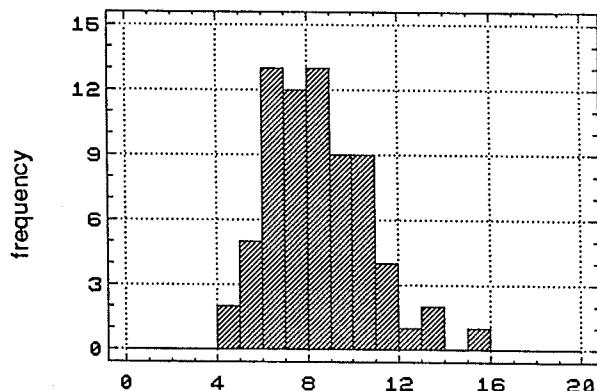
Skewness: 0.67

Mean: 8.98

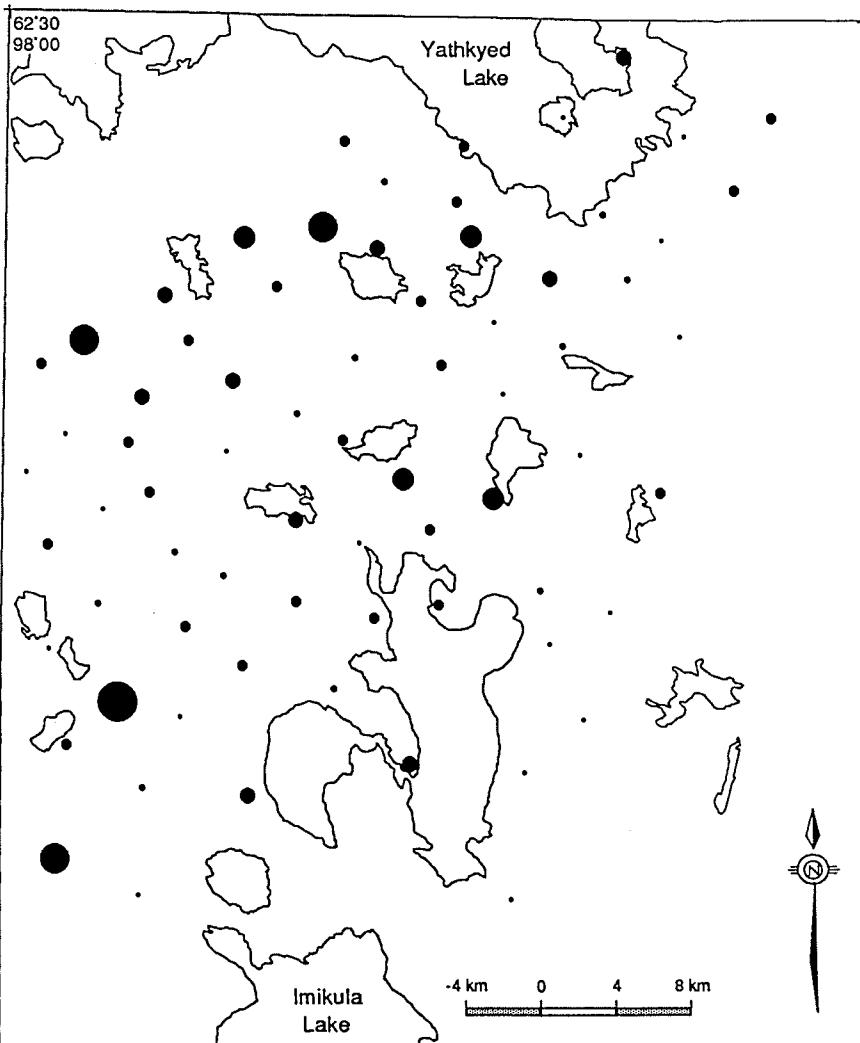
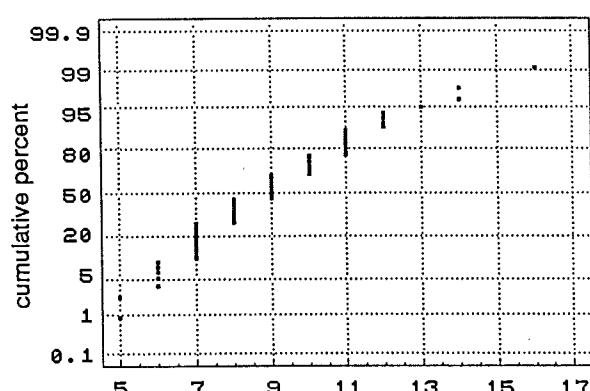
Standard deviation: 2.19

Kurtosis: 0.59

Frequency Histogram



Normal Probability Plot



Compositional Analysis of Till Samples

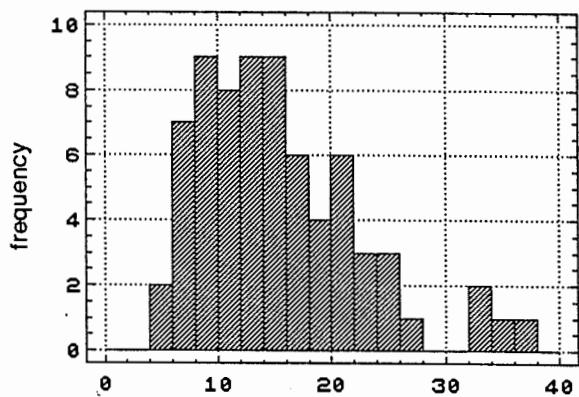
Variable: Nickel (ppm)

Sample preparation method: 230 mesh screen, dry
Analytical preparation method: HCl-HNO₃ (1:3) extraction

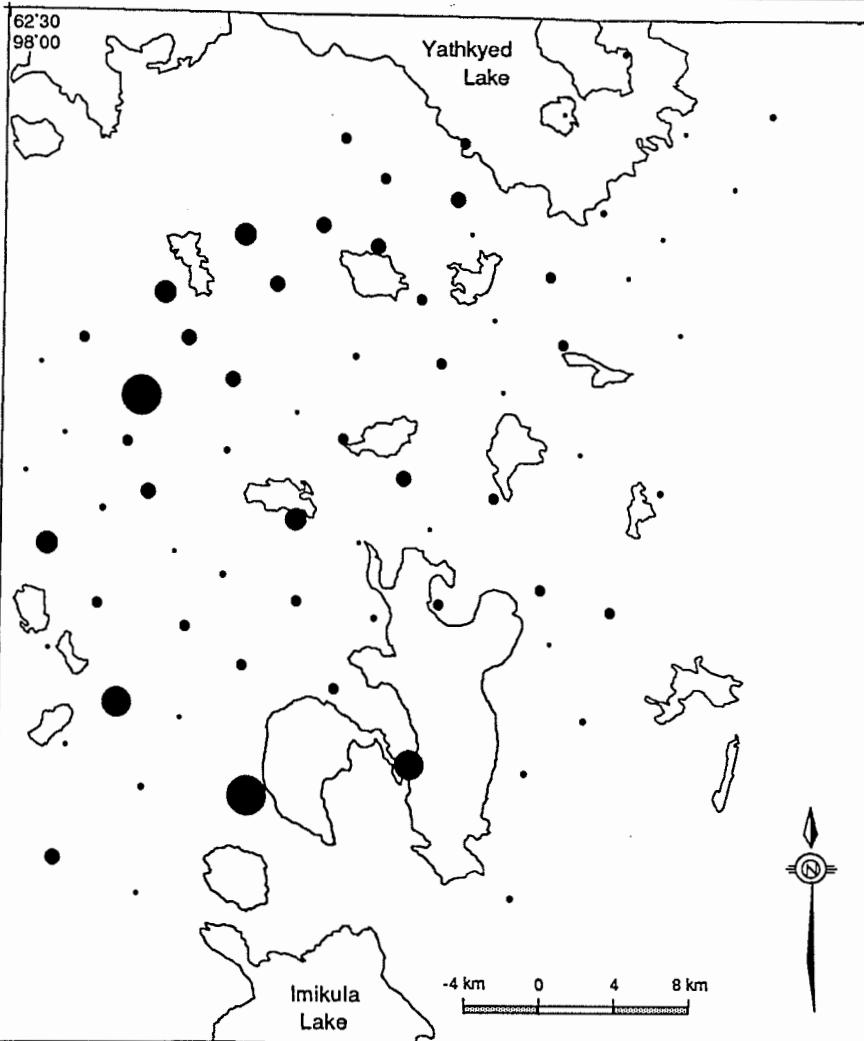
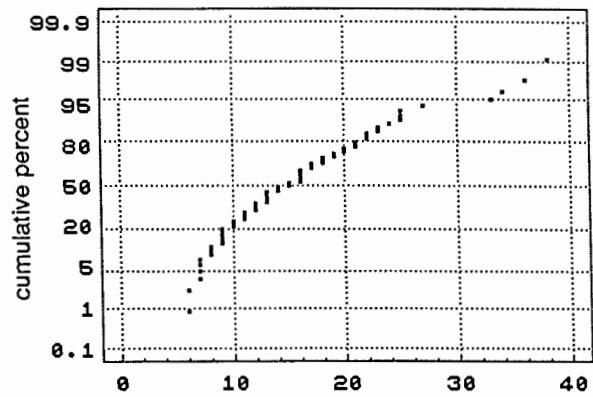
Analytical method: Flame A.A.
Detection limit: 2 ppm

No. of obs.: 71	Mode: 16	Variance: 51.71
Minimum: 6	Geometric mean: 14.42	Coefficient of variance: 0.45
Maximum: 38	Median: 15	Skewness: 1.05
Mean: 15.87	Standard deviation: 7.19	Kurtosis: 1.10

Frequency Histogram



Normal Probability Plot



SIZE	Ni				
	RANGE (ppm)	LOW	HIGH	OBS.	%TILE
•	6	11	22	31	
•	11	14	13	49.3	
•	14	20	19	76.1	
•	20	24	9	88.7	
•	24	27	4	94.4	
•	27	34	2	97.2	
●	34	38	2	100	

Compositional Analysis of Till Samples

Variable: Vanadium (ppm)

Sample preparation method: 230 mesh screen, dry
Analytical preparation method: HCl-HNO₃ (1:3) extraction

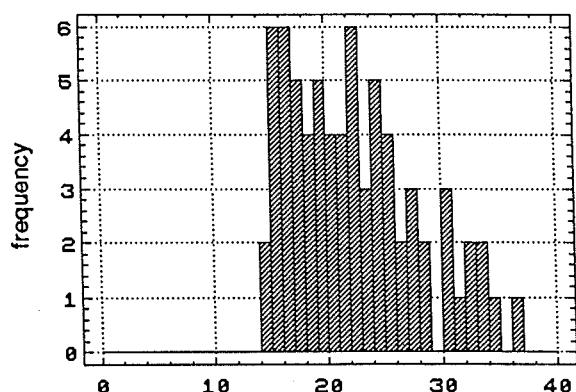
Analytical method: Flame A.A.
Detection limit: 1 ppm

No. of obs.: 71
Minimum: 15
Maximum: 37
Mean: 22.99

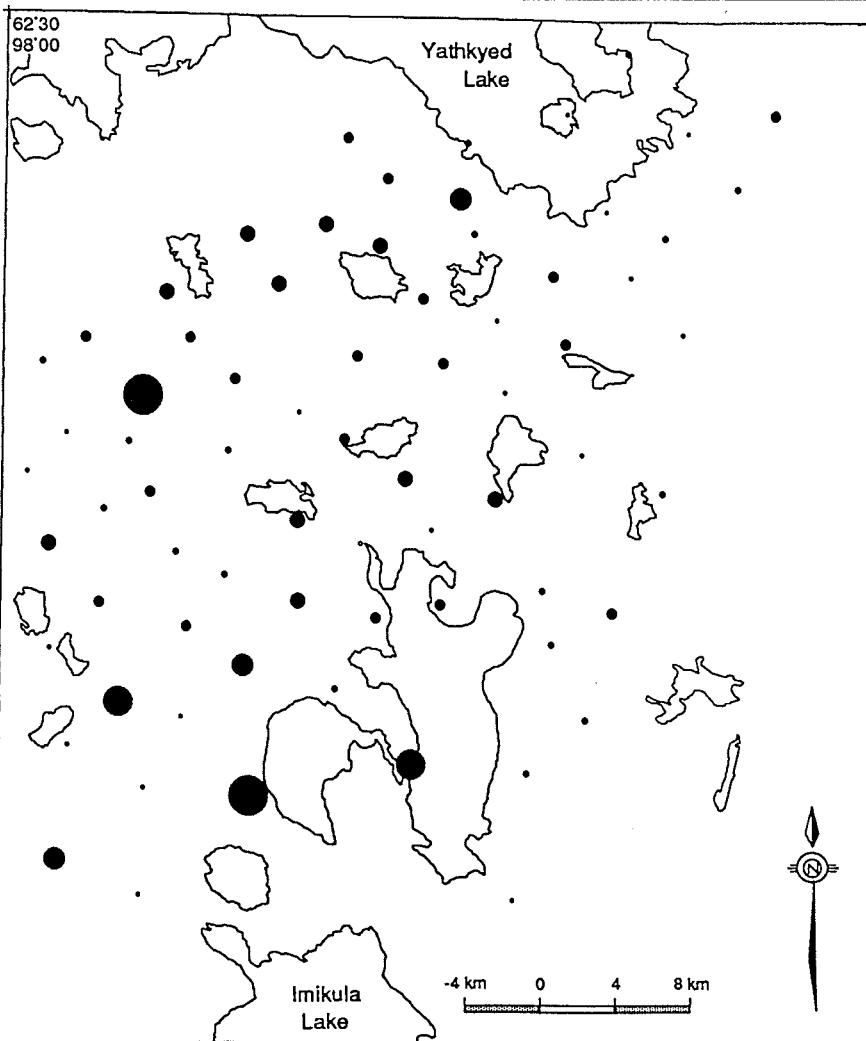
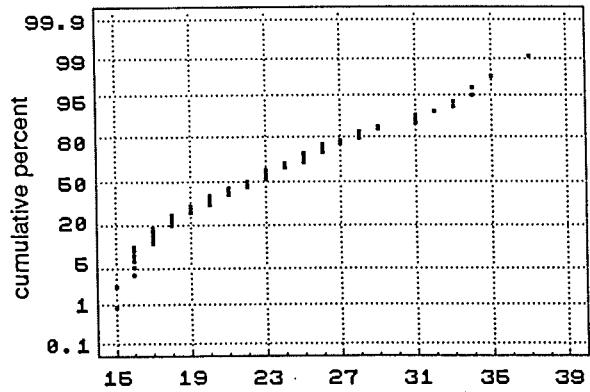
Mode: 16
Geometric mean: 22.35
Median: 22
Standard deviation: 5.59

Variance: 31.21
Coefficient of variance: 0.24
Skewness: 0.60
Kurtosis: -0.45

Frequency Histogram



Normal Probability Plot



SIZE	V			%TILE
	RANGE (ppm)	LOW	HIGH OBS.	
•	15	18	19	26.8
•	18	22	17	50.7
•	22	26	18	76.1
●	26	31	10	90.1
●	31	33	3	94.4
●	33	34	2	97.2
●●	34	37	2	100

Compositional Analysis of Till Samples

Variable: Zinc (ppm)

Sample preparation method: 230 mesh screen, dry

Analytical preparation method: HCl-HNO₃ (1:3) extraction

Analytical method: Flame A.A.

Detection limit: 1 ppm

No. of obs.: 71

Minimum:

Maximum:

Mean:

Mode:

Geometric mean:

Median:

Standard deviation:

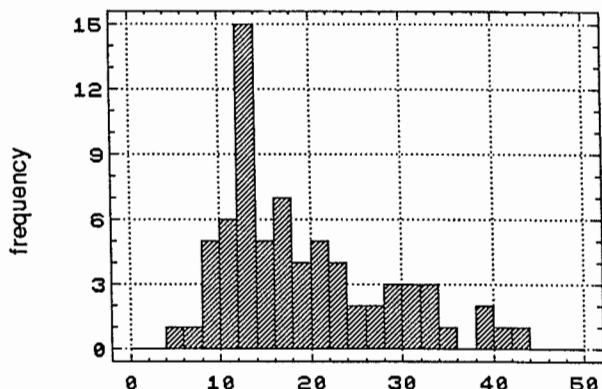
Variance: 79.31

Coefficient of variance: 0.45

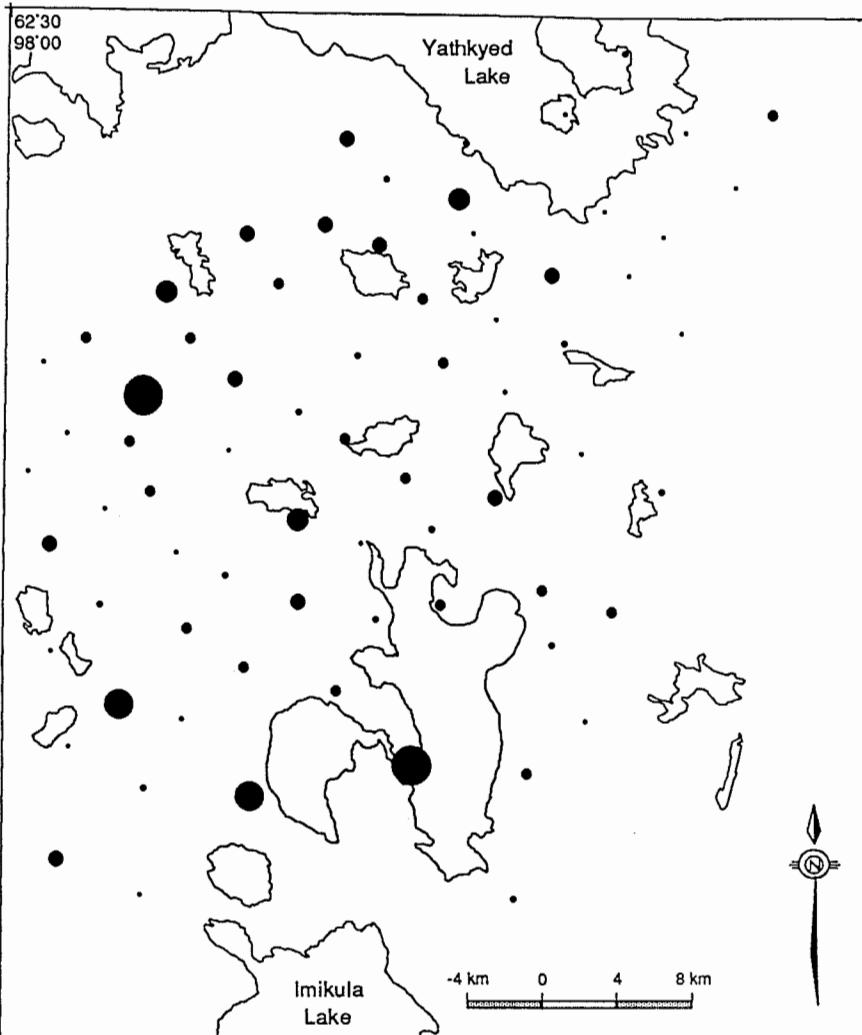
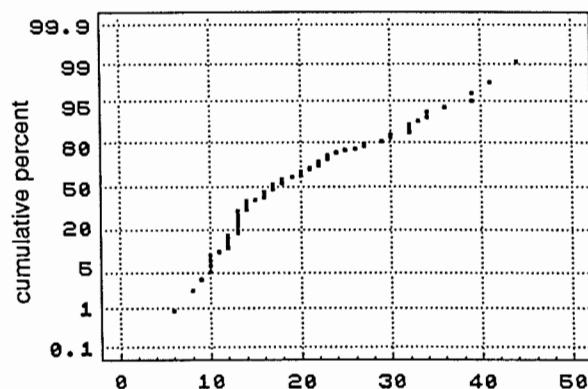
Skewness: 0.90

Kurtosis: -0.01

Frequency Histogram



Normal Probability Plot



Compositional Analysis of Till Samples

Variable: Arsenic (ppm)

Sample preparation method: 230 mesh screen, dry
Analytical preparation method: 10-15g vial

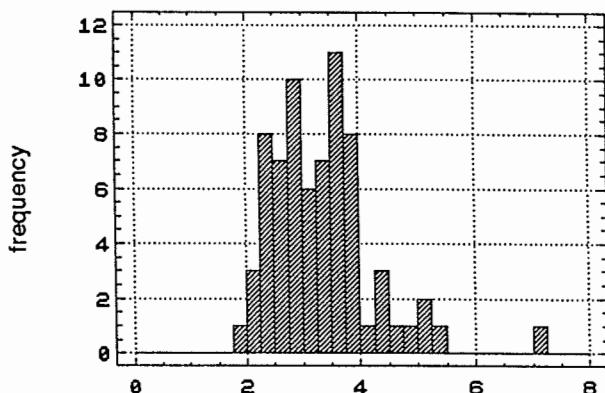
Analytical method: N.A.A.
Detection limit: 0.5 ppm

No. of obs.: 71
Minimum: 2
Maximum: 7.1
Mean: 3.35

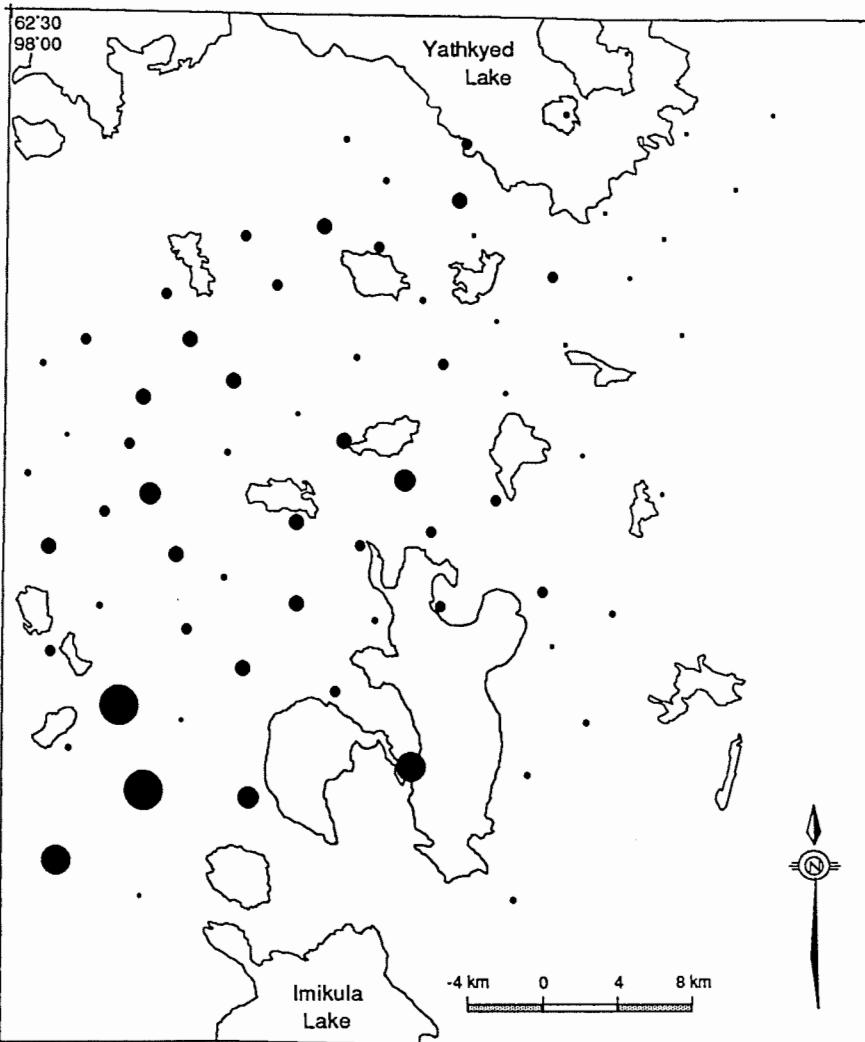
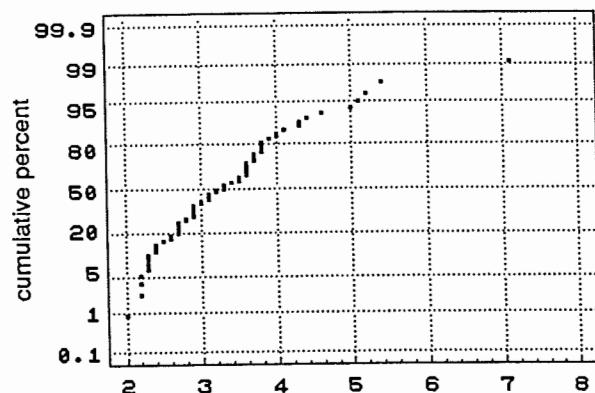
Mode: 3.6
Geometric mean: 3.25
Median: 3.3
Standard deviation: 0.89

Variance: 0.78
Coefficient of variance: 0.26
Skewness: 1.38
Kurtosis: 3.63

Frequency Histogram



Normal Probability Plot



Compositional Analysis of Till Samples

Variable: Gold (ppb)

Sample preparation method: 230 mesh screen, dry
Analytical preparation method: 10-15g vial

Analytical method: N.A.A.
Detection limit: 2 ppb

No. of obs.: 71

Minimum: 1

Maximum: 9

Mean: 2.13

Mode: 1

Geometric mean: 1.62

Median: 1

Standard deviation: 1.85

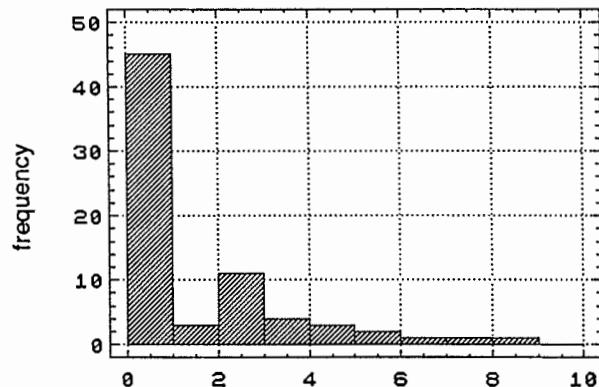
Variance: 3.43

Coefficient of variance: 0.87

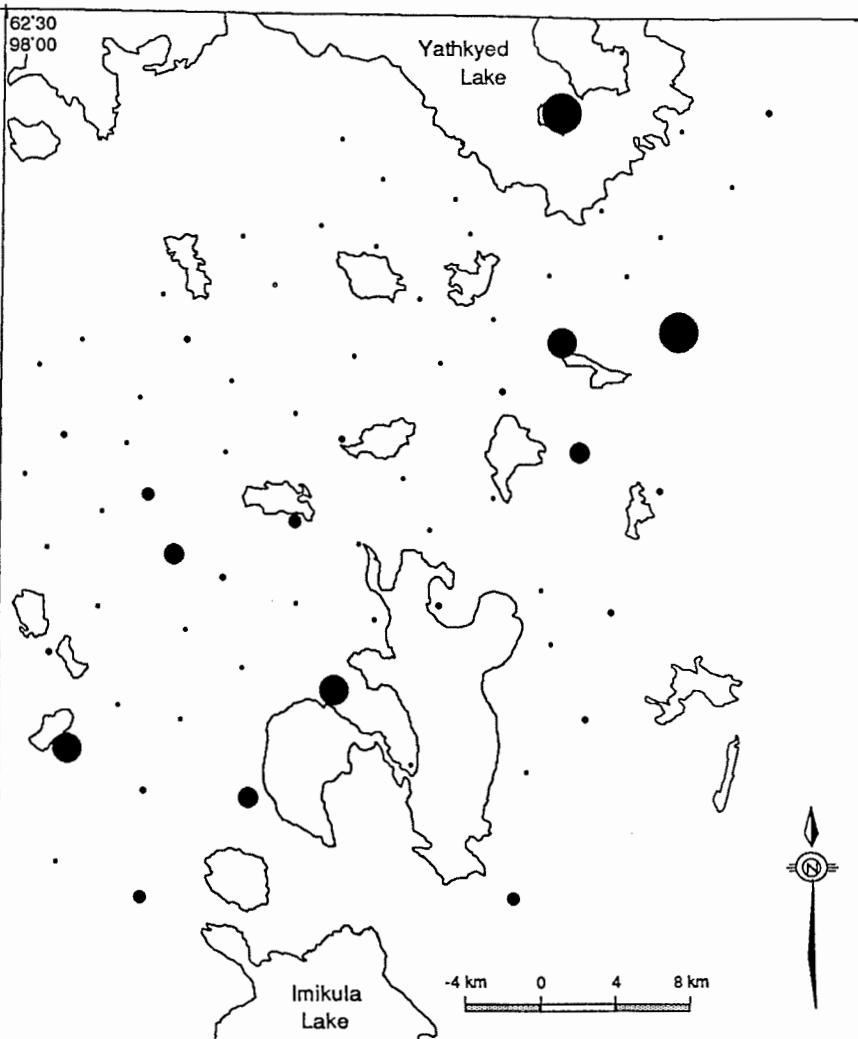
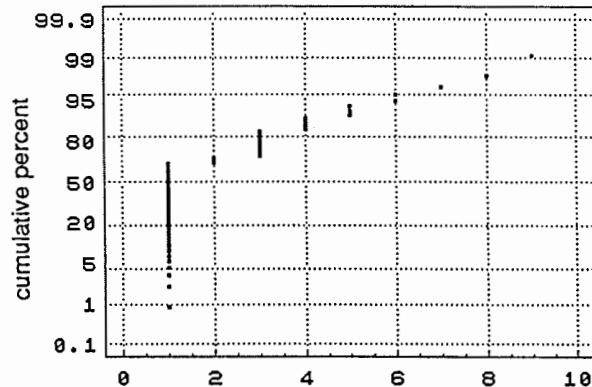
Skewness: 1.85

Kurtosis: 3.19

Frequency Histogram



Normal Probability Plot



62'00'
97'05'

Compositional Analysis of Till Samples

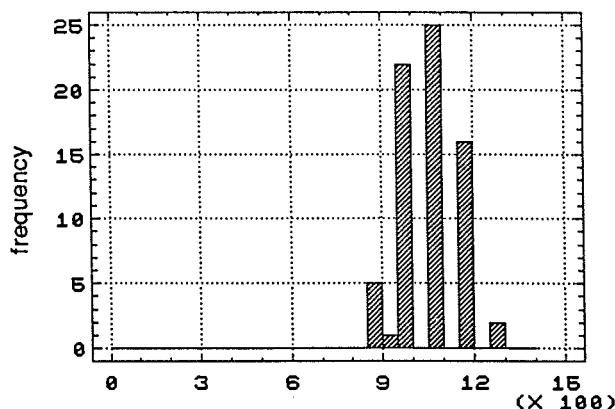
Variable: Barium (ppm)

Sample preparation method: 230 mesh screen, dry
Analytical preparation method: 10-15g vial

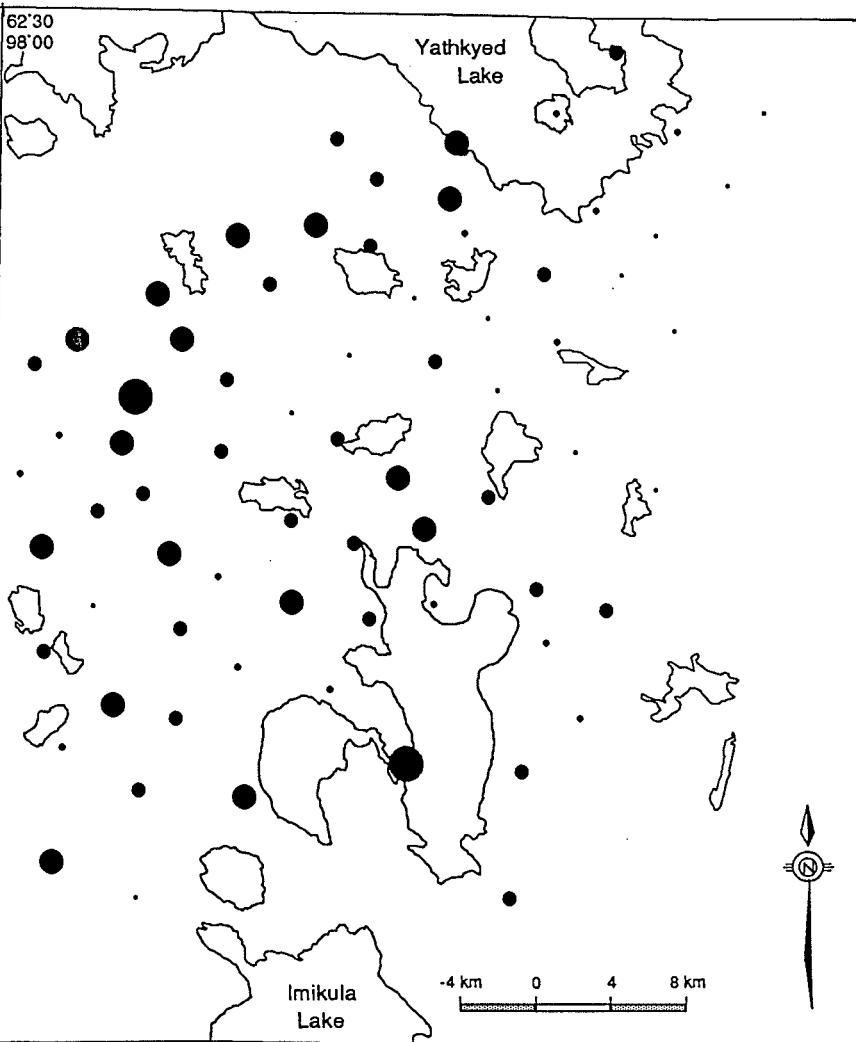
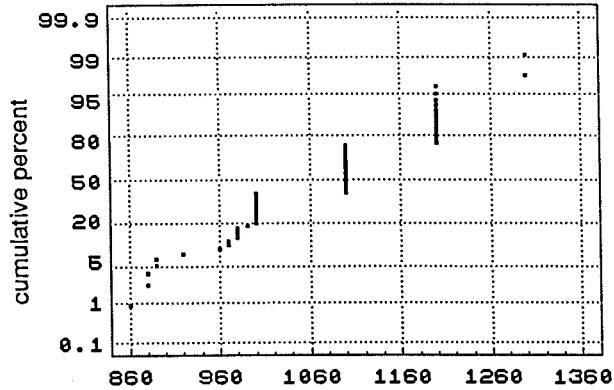
Analytical method: N.A.A.
Detection limit: 50 ppm

No. of obs.:	71	Mode:	1100	Variance:	10554.6
Minimum:	860	Geometric mean:	1071.59	Coefficient of variance:	0.10
Maximum:	1300	Median:	1100	Skewness:	-0.05
Mean:	1076.48	Standard deviation:	102.74	Kurtosis:	-0.58

Frequency Histogram



Normal Probability Plot



Ba					
SIZE	RANGE (ppm)		OBS.	%TILE	
	LOW	HIGH			
•	860	990	14	19.7	
•	990	1000	14	39.4	
●	1000	1100	25	74.6	
●	1100	1200	16	97.2	
●●	1200	1300	2	100	

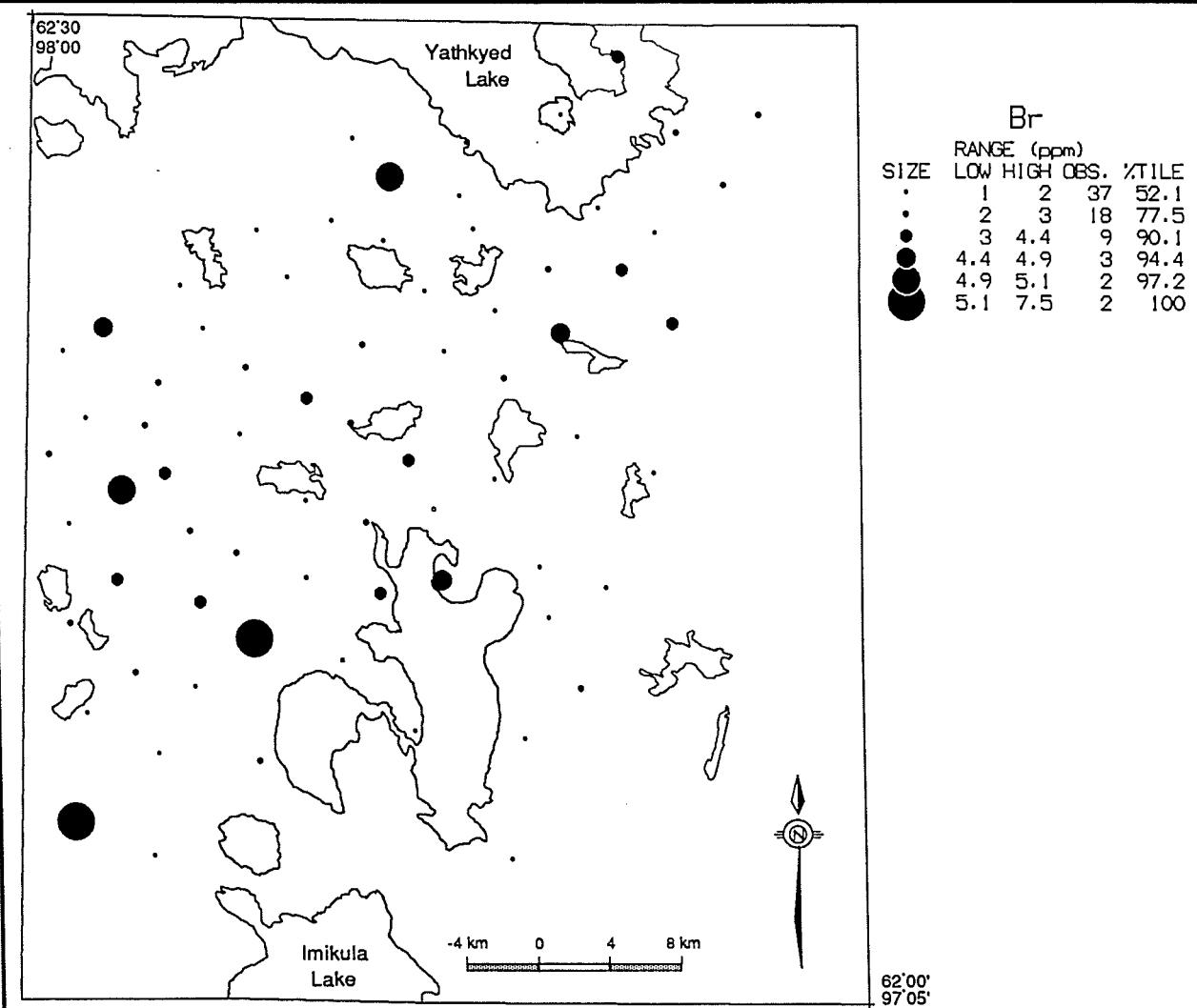
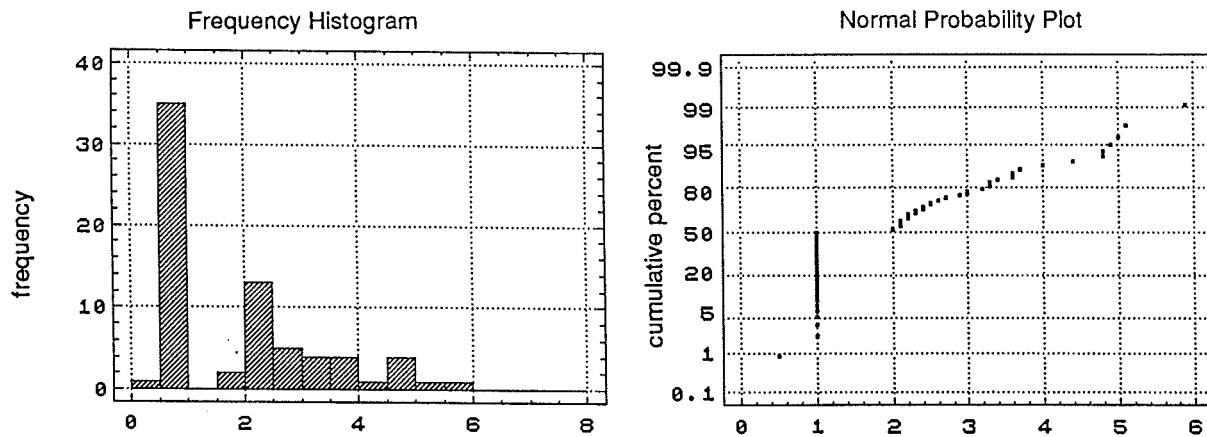
Compositional Analysis of Till Samples

Variable: Bromine (ppm)

Sample preparation method: 230 mesh screen, dry
Analytical preparation method: 10-15g vial

Analytical method: N.A.A.
Detection limit: 0.5 ppm

No. of obs.: 71	Mode: 1	Variance: 1.78
Minimum: 0.5	Geometric mean: 1.70	Coefficient of variance: 0.65
Maximum: 5.9	Median: 1	Skewness: 1.07
Mean: 2.06	Standard deviation: 1.33	Kurtosis: 0.23



Compositional Analysis of Till Samples

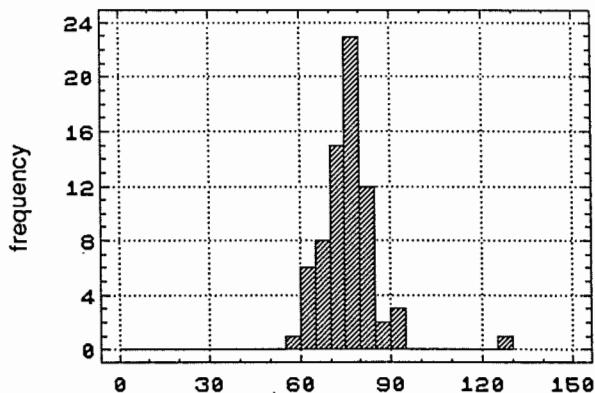
Variable: Cerium (ppm)

Sample preparation method: 230 mesh screen, dry
Analytical preparation method: 10-15g vial

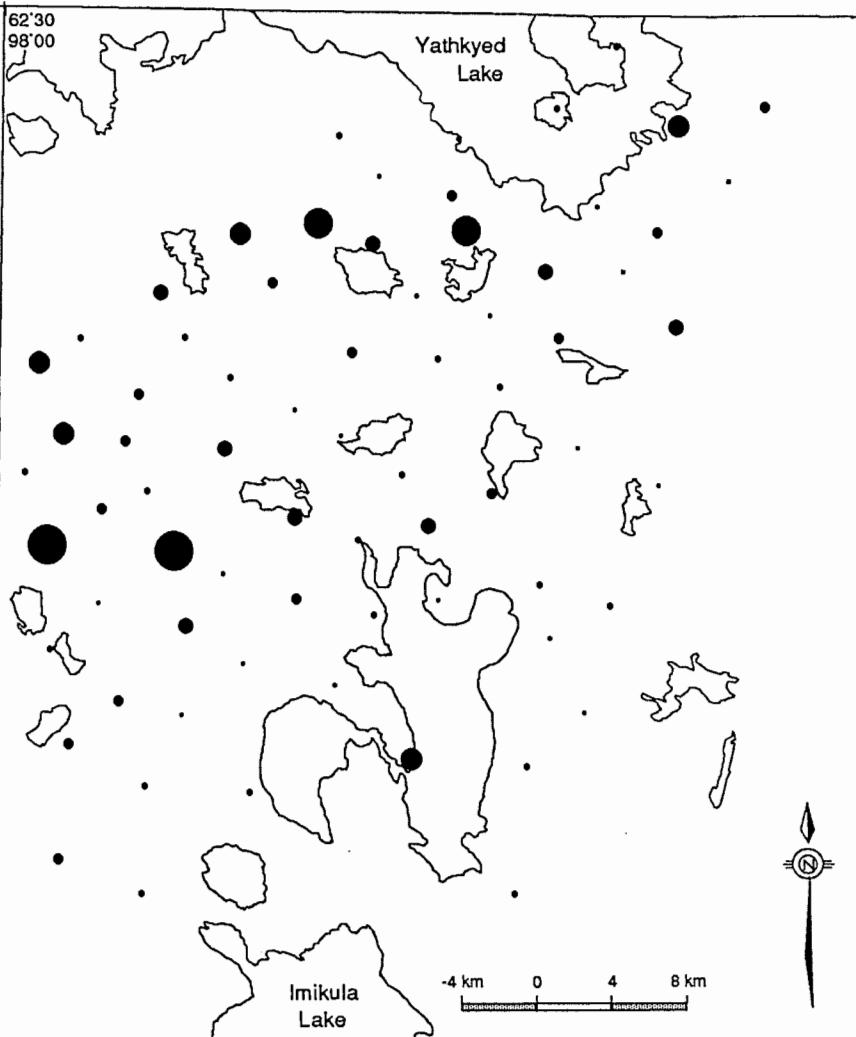
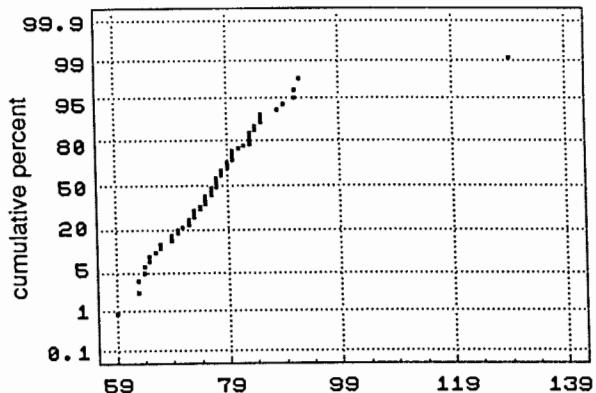
Analytical method: N.A.A.
Detection limit: 5 ppm

No. of obs.:	71	Mode:	77	Variance:	90.46
Minimum:	59	Geometric mean:	76.48	Coefficient of variance:	0.12
Maximum:	129	Median:	77	Skewness:	2.23
Mean:	77	Standard deviation:	9.51	Kurtosis:	11.77

Frequency Histogram



Normal Probability Plot



SIZE	Ce			
	RANGE (ppm)	LOW	HIGH	OBS.
•	59	72	19	26.8
•	72	77	21	56.3
•	77	81	14	76.1
•	81	84	8	87.3
•	84	89	5	94.4
•	89	91	2	97.2
•	91	129	2	100

Compositional Analysis of Till Samples

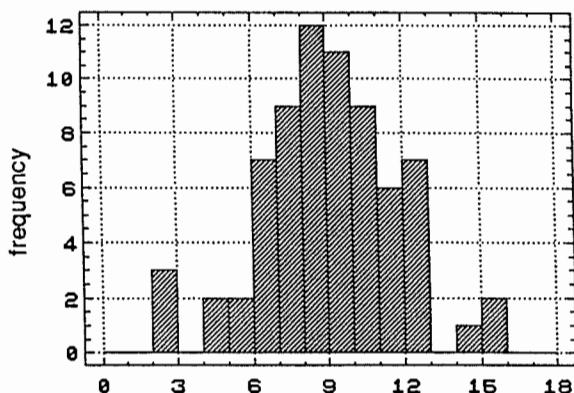
Variable: Cobalt (ppm)

Sample preparation method: 230 mesh screen, dry
Analytical preparation method: 10-15g vial

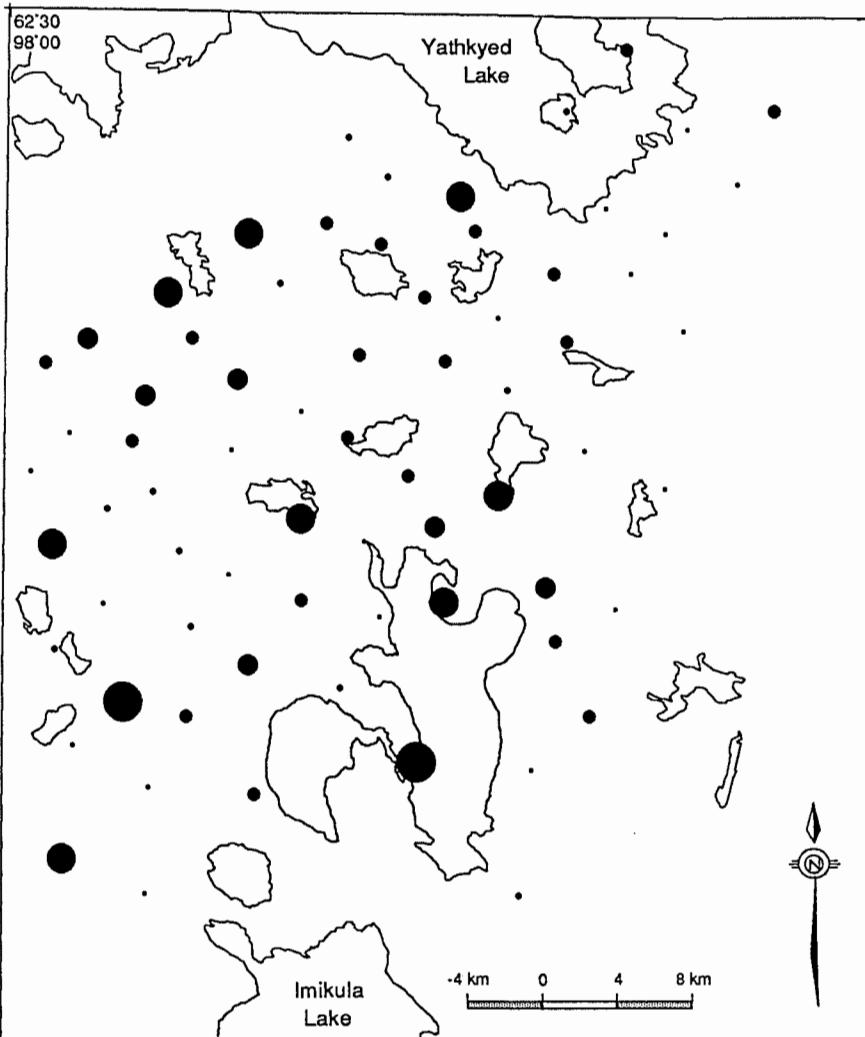
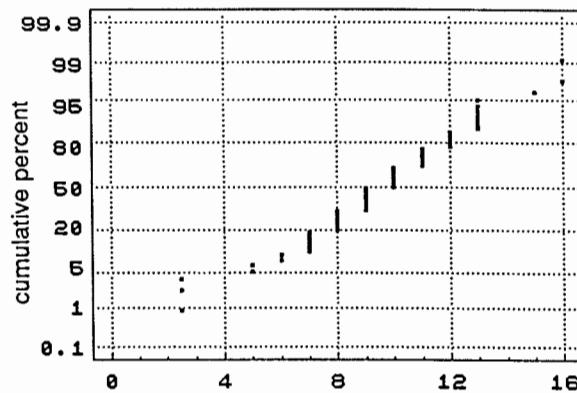
Analytical method: N.A.A.
Detection limit: 5 ppm

No. of obs.: 71	Mode: 9	Variance: 7.71
Minimum: 2.5	Geometric mean: 9.04	Coefficient of variance: 0.29
Maximum: 16	Median: 10	Skewness: -0.25
Mean: 9.54	Standard deviation: 2.78	Kurtosis: 0.66

Frequency Histogram



Normal Probability Plot



Co			
SIZE	RANGE (ppm)	LOW	HIGH
•	2.5 - 8	23	32.4
•	8 - 9	12	49.3
•	9 - 11	20	77.5
•	11 - 12	6	85.9
•	12 - 15	8	97.2
●	15 - 16	2	100

Compositional Analysis of Till Samples

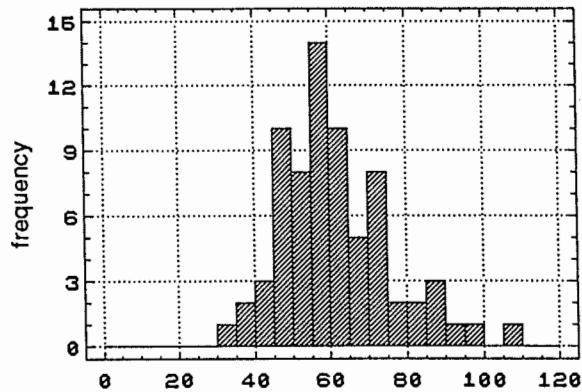
Variable: Chromium (ppm)

Sample preparation method: 230 mesh screen, dry
Analytical preparation method: 10-15g vial

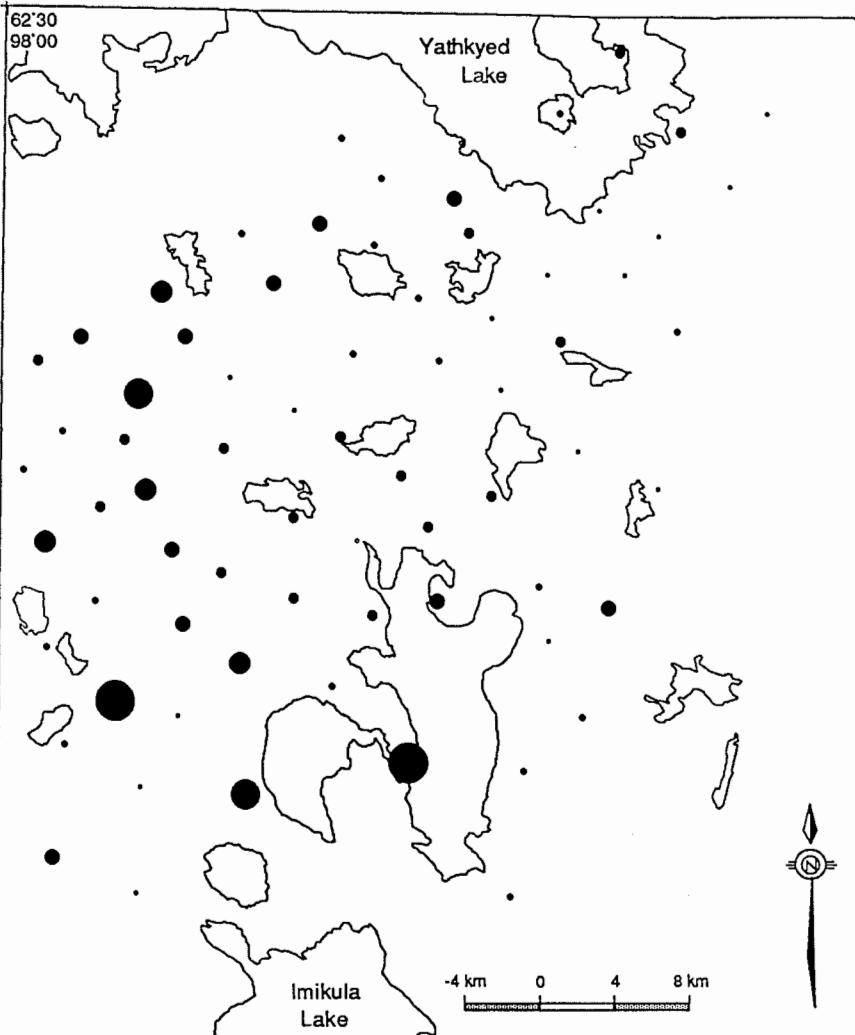
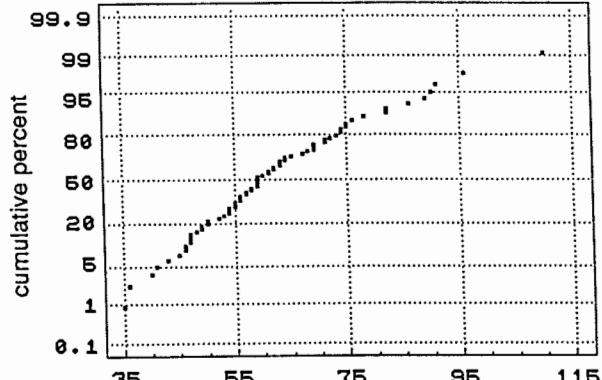
Analytical method: N.A.A.
Detection limit: 20 ppm

No. of obs.: 71	Mode: 59	Variance: 209.11
Minimum: 35	Geometric mean: 60.36	Coefficient of variance: 0.23
Maximum: 110	Median: 59	Skewness: 0.80
Mean: 61.94	Standard deviation: 14.46	Kurtosis: 0.97

Frequency Histogram



Normal Probability Plot



SIZE	Cr				
	RANGE (ppm)	LOW	HIGH	OBS.	%TILE
•	35	53	18	25.4	
●	53	59	19	52.1	
○	59	69	16	74.6	
●	69	78	10	88.7	
●	78	89	4	94.4	
●	89	91	2	97.2	
●	91	110	2	100	

Compositional Analysis of Till Samples

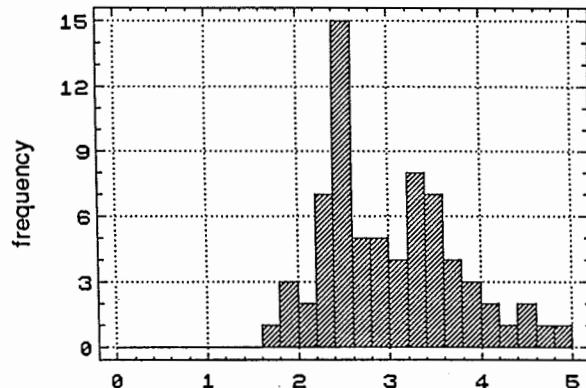
Variable: Cesium (ppm)

Sample preparation method: 230 mesh screen, dry
Analytical preparation method: 10-15g vial

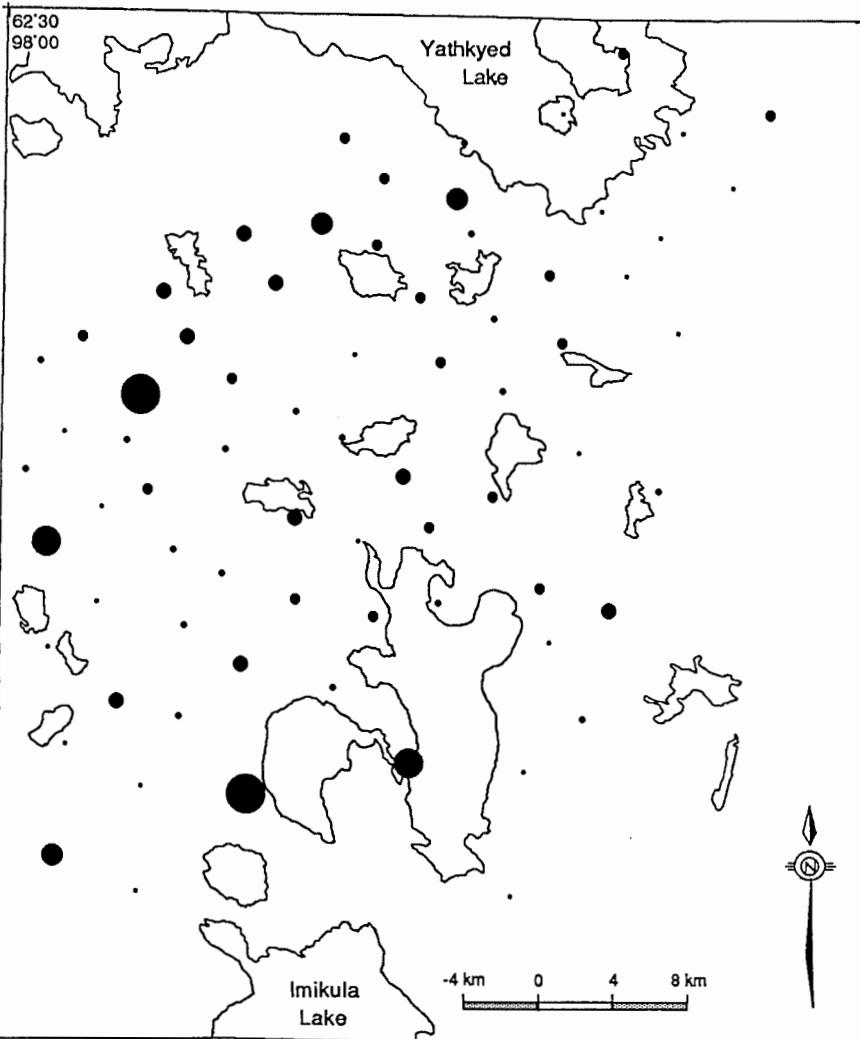
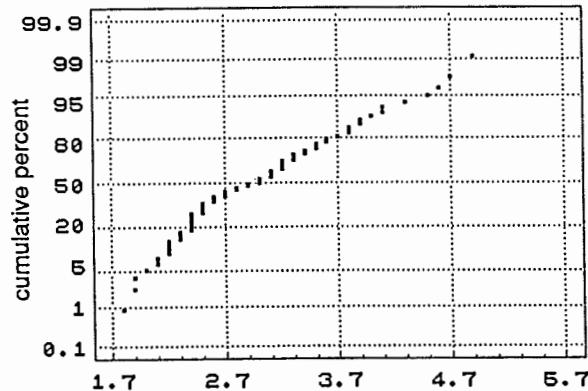
Analytical method: N.A.A.
Detection limit: 0.5 ppm

No. of obs.: 71	Mode: 2.4	Variance: 0.54
Minimum: 1.8	Geometric mean: 2.93	Coefficient of variance: 0.24
Maximum: 4.9	Median: 3	Skewness: 0.57
Mean: 3.01	Standard deviation: 0.74	Kurtosis: -0.30

Frequency Histogram



Normal Probability Plot



Cs			
SIZE	RANGE (ppm)	LOW	HIGH
•	1.79 - 2.40	20	28.2
•	2.40 - 3	18	53.5
•	3 - 3.5	17	77.5
•	3.5 - 4	9	90.1
•	4 - 4.30	3	94.4
•	4.30 - 4.60	2	97.2
•	4.60 - 4.90	2	100

Compositional Analysis of Till Samples

Variable: Hafnium (ppm)

Sample preparation method: 230 mesh screen, dry
Analytical preparation method: 10-15g vial

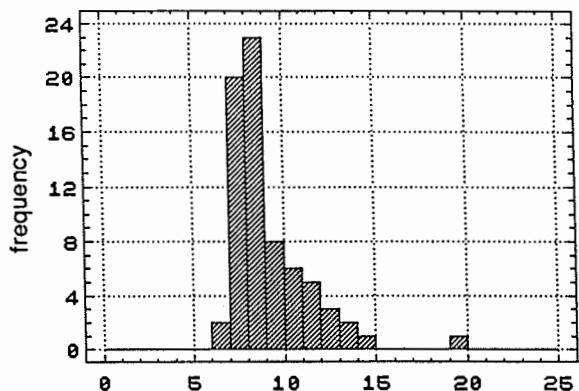
Analytical method: N.A.A.
Detection limit: 1 ppm

No. of obs.: 71
Minimum: 7
Maximum: 20
Mean: 9.70

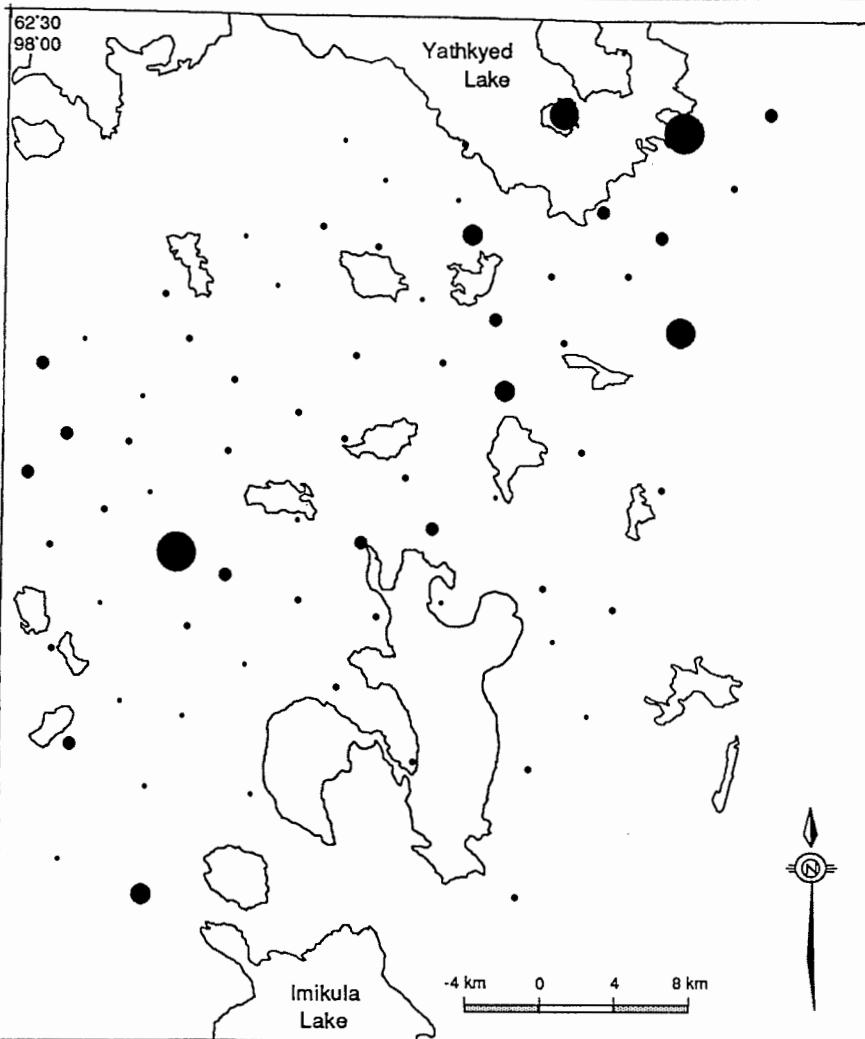
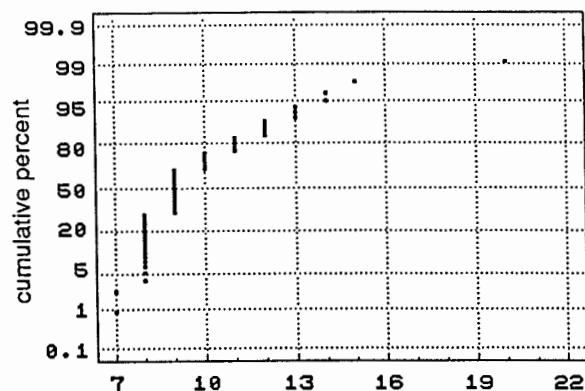
Mode: 9
Geometric mean: 9.51
Median: 9
Standard deviation: 2.15

Variance: 4.64
Coefficient of variance: 0.22
Skewness: 2.11
Kurtosis: 6.62

Frequency Histogram



Normal Probability Plot



Compositional Analysis of Till Samples

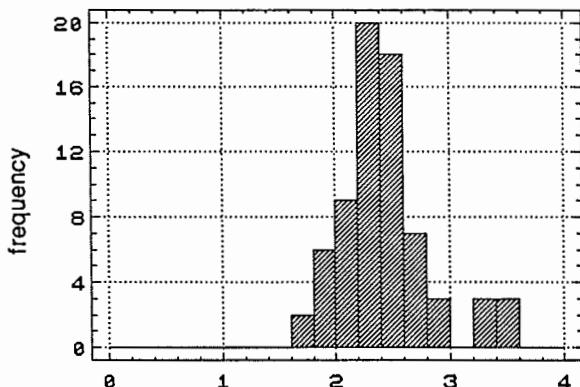
Variable: Iron (%)

Sample preparation method: 230 mesh screen, dry
Analytical preparation method: 10-15g vial

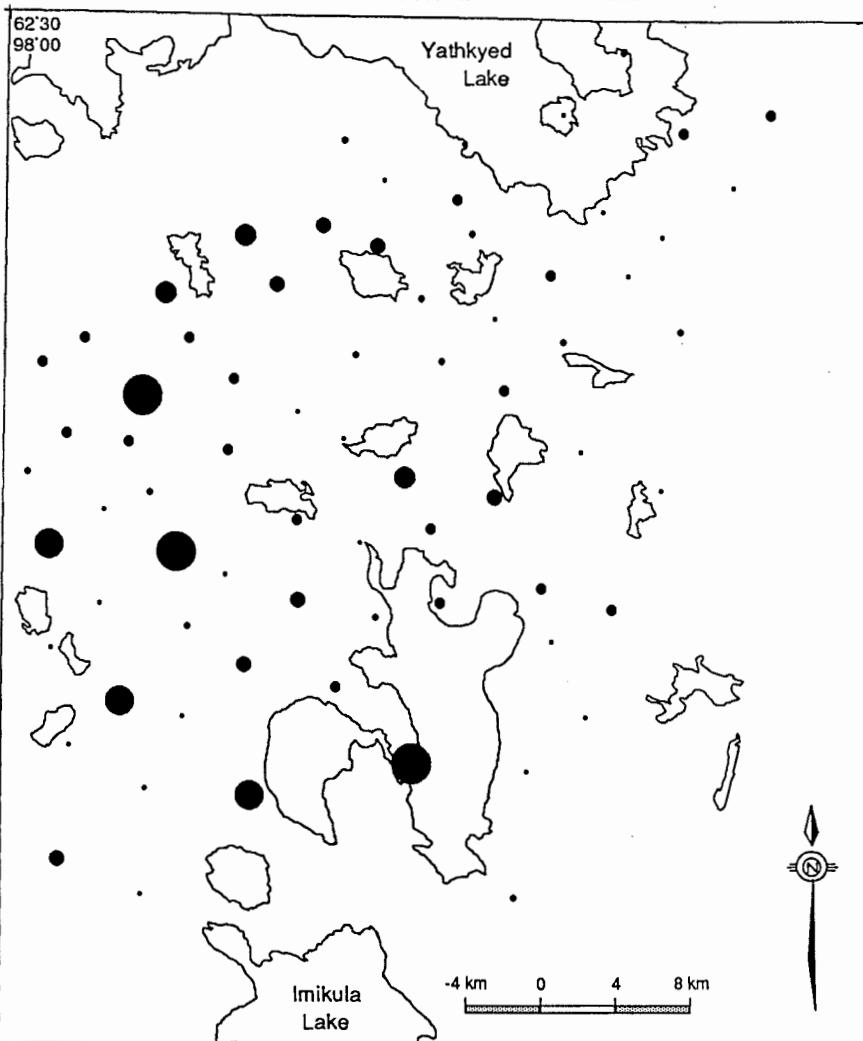
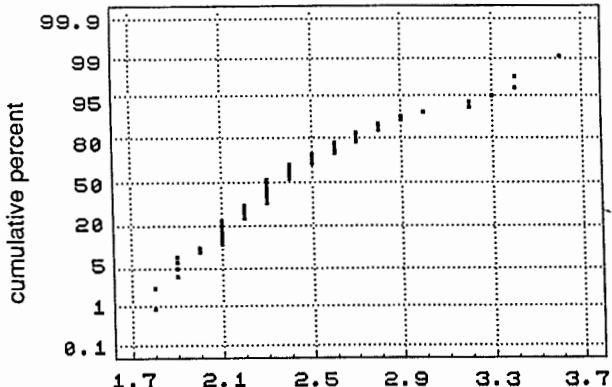
Analytical method: N.A.A.
Detection limit: 0.2 %

No. of obs.: 71	Mode: 2.3	Variance: 0.15
Minimum: 1.8	Geometric mean: 2.40	Coefficient of variance: 0.16
Maximum: 3.6	Median: 2.3	Skewness: 1.01
Mean: 2.43	Standard deviation: 0.40	Kurtosis: 0.94

Frequency Histogram



Normal Probability Plot



Fe			
	RANGE (wt. %)	SIZE	LOW HIGH OBS. %TILE
•	1.79 2.20	24	33.8
•	2.20 2.30	13	52.1
•	2.30 2.60	18	77.5
•	2.60 2.80	7	87.3
•	2.80 3	3	91.5
•	3 3.3	3	95.8
●	3.3 3.60	3	100

Compositional Analysis of Till Samples

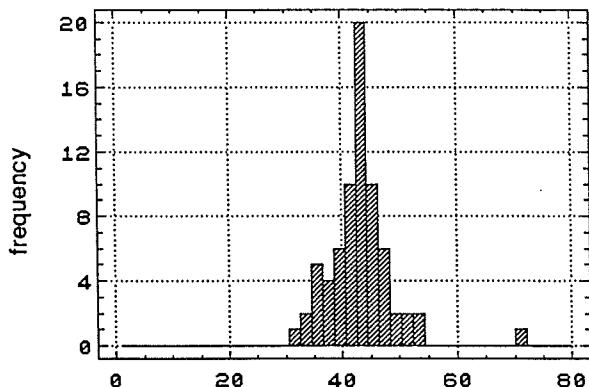
Variable: Lanthanum (ppm)

Sample preparation method: 230 mesh screen, dry
Analytical preparation method: 10-15g vial

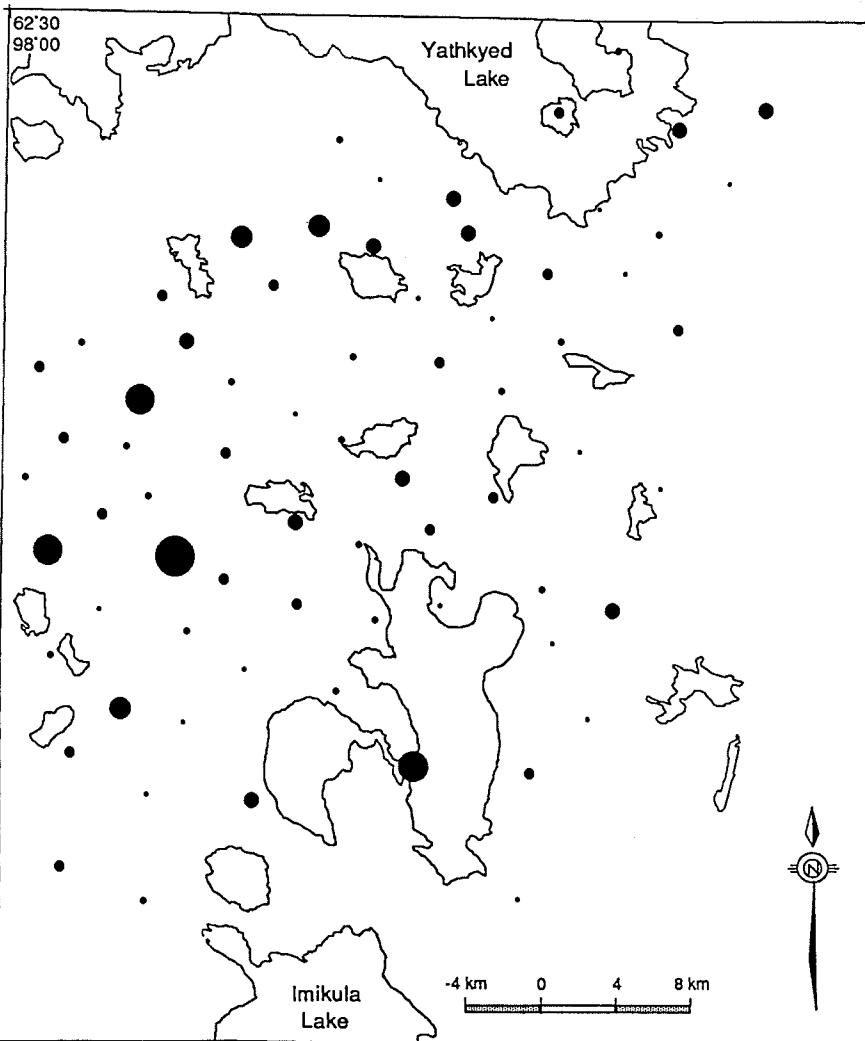
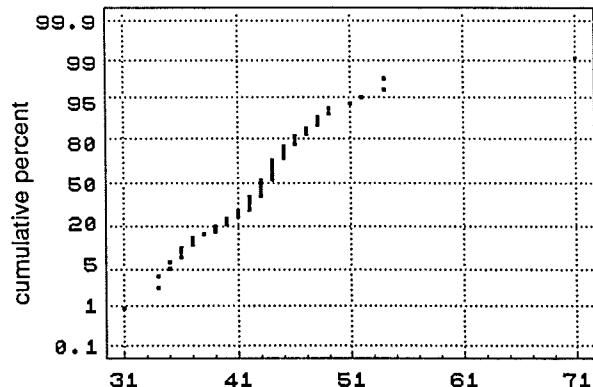
Analytical method: N.A.A.
Detection limit: 2 ppm

No. of obs.: 71	Mode: 44	Variance: 32.01
Minimum: 31	Geometric mean: 42.90	Coefficient of variance: 0.13
Maximum: 71	Median: 43	Skewness: 1.55
Mean: 43.24	Standard deviation: 5.66	Kurtosis: 7.44

Frequency Histogram



Normal Probability Plot



SIZE	La		
	RANGE (ppm)	LOW	HIGH
•	31 - 40	18	25.4
•	40 - 43	19	52.1
•	43 - 45	17	76.1
•	45 - 48	10	90.1
•	48 - 51	3	94.4
•	51 - 54	3	98.6
●	54 - 71	1	100

Compositional Analysis of Till Samples

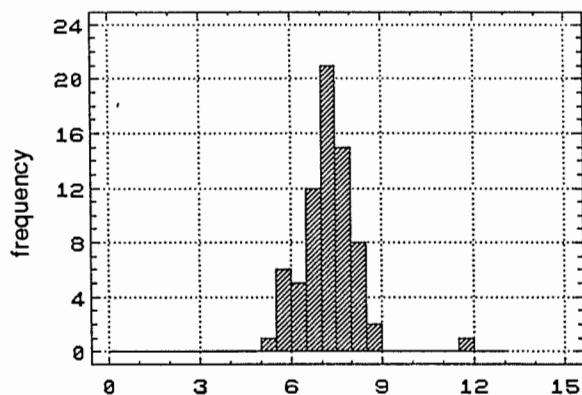
Variable: Samarium (ppm)

Sample preparation method: 230 mesh screen, dry
Analytical preparation method: 10-15g vial

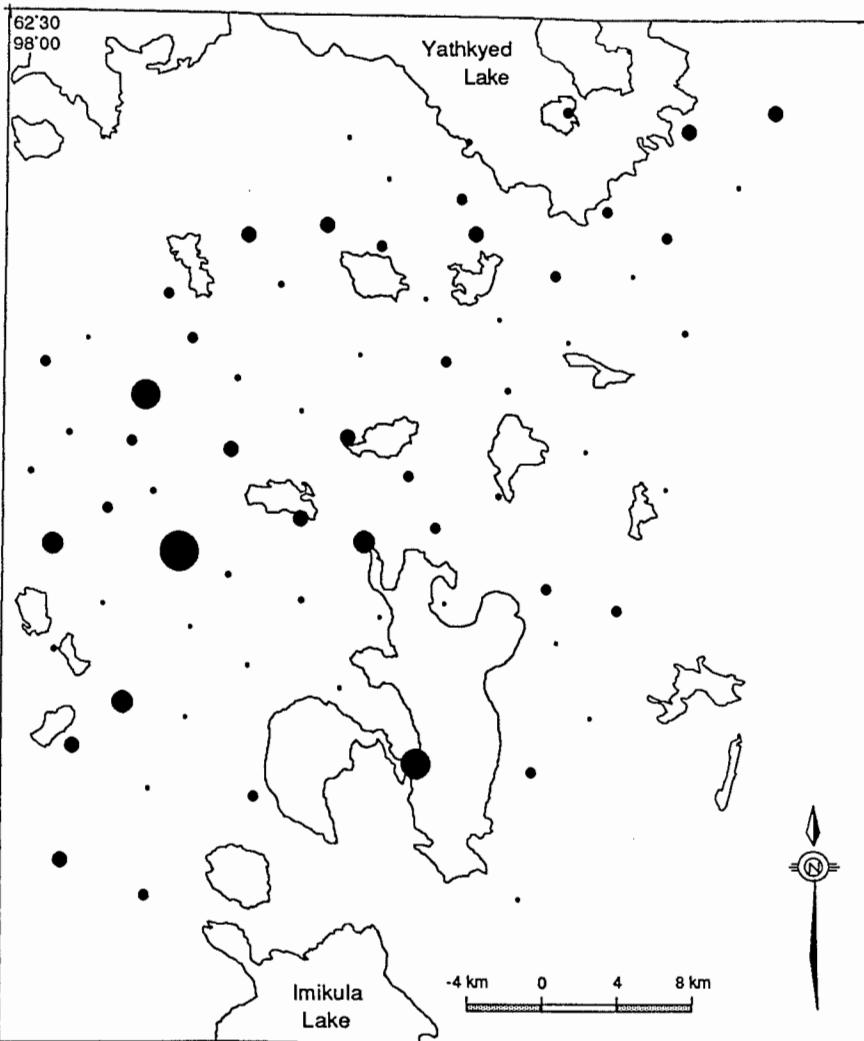
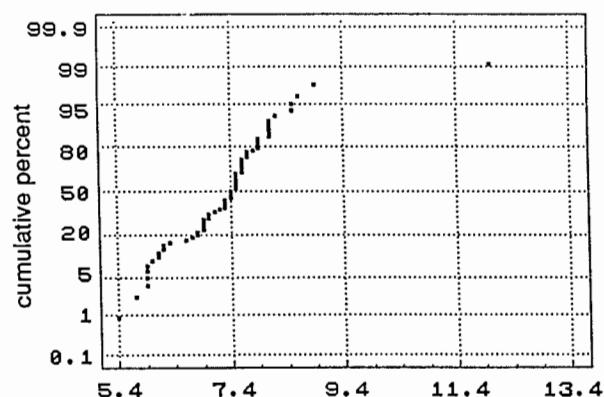
Analytical method: N.A.A.
Detection limit: 0.10 ppm

No. of obs.: 71	Mode: 7.5	Variance: 0.86
Minimum: 5.4	Geometric mean: 7.27	Coefficient of variance: 0.12
Maximum: 12	Median: 7.4	Skewness: 1.47
Mean: 7.33	Standard deviation: 0.93	Kurtosis: 8.04

Frequency Histogram



Normal Probability Plot



Compositional Analysis of Till Samples

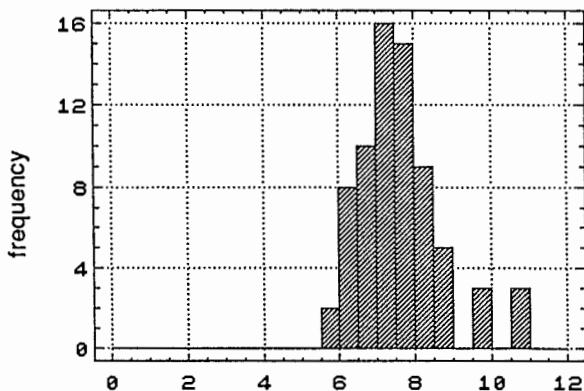
Variable: Scandium (ppm)

Sample preparation method: 230 mesh screen, dry
Analytical preparation method: 10-15g vial

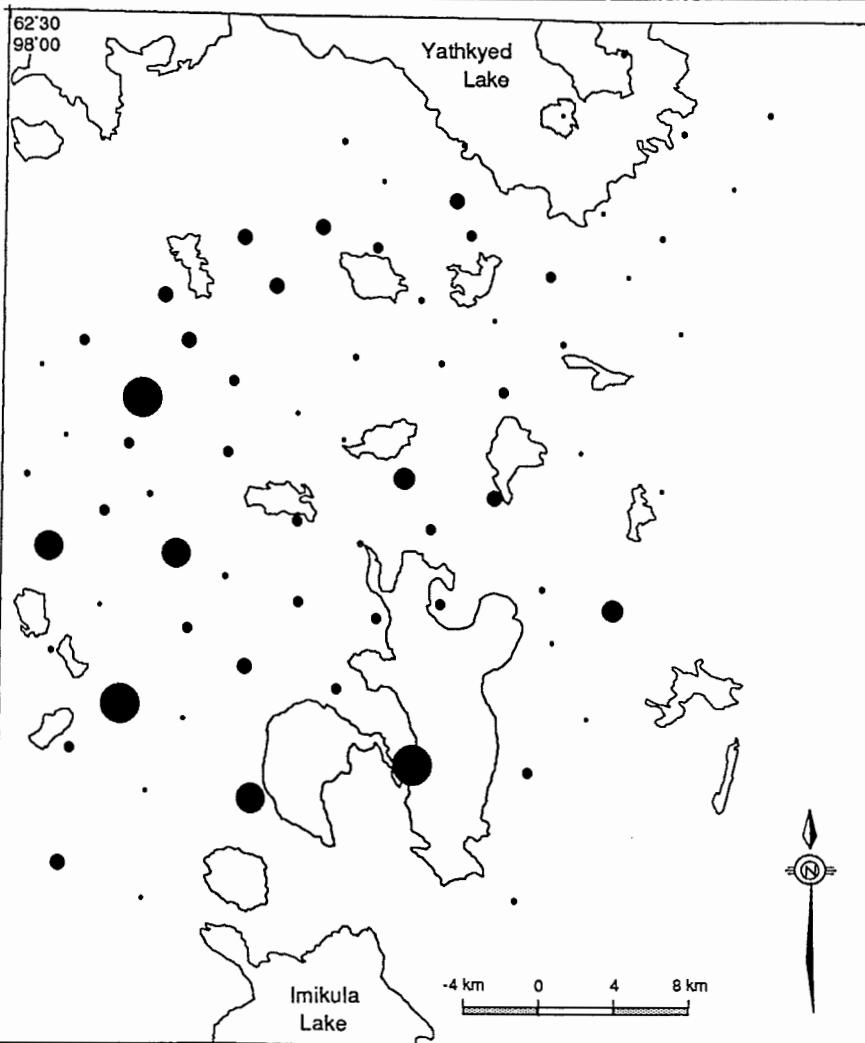
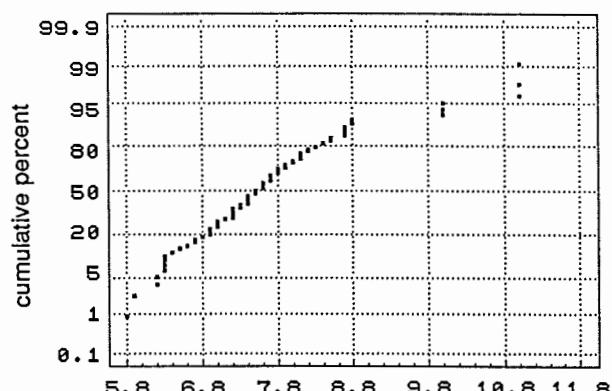
Analytical method: N.A.A.
Detection limit: 0.2 ppm

No. of obs.: 71	Mode: 7.4	Variance: 1.28
Minimum: 5.8	Geometric mean: 7.61	Coefficient of variance: 0.15
Maximum: 11	Median: 7.5	Skewness: 1.17
Mean: 7.68	Standard deviation: 1.13	Kurtosis: 1.77

Frequency Histogram



Normal Probability Plot



Sc	
SIZE	RANGE (ppm)
•	5.80 - 7.00
•	7.00 - 7.50
•	7.50 - 8.10
•	8.10 - 8.70
•	8.70 - 9.00
•	9.00 - 10.00
•	10.00 - 11.00
20	28.2
16	50.7
18	76.1
9	88.7
2	91.5
3	95.8
3	100

Compositional Analysis of Till Samples

Variable: Sodium (%)

Sample preparation method: 230 mesh screen, dry
Analytical preparation method: 10-15g vial

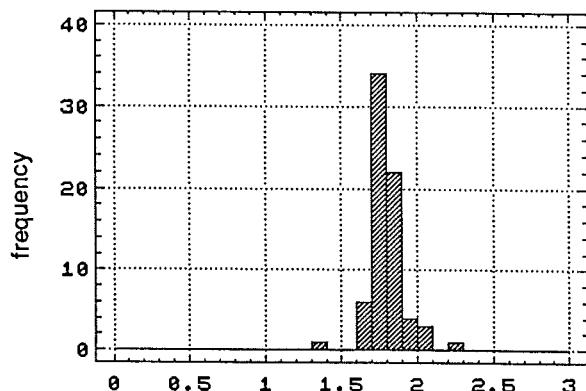
Analytical method: N.A.A.
Detection limit: 0.02 %

No. of obs.: 71
Minimum: 1.4
Maximum: 2.29
Mean: 1.82

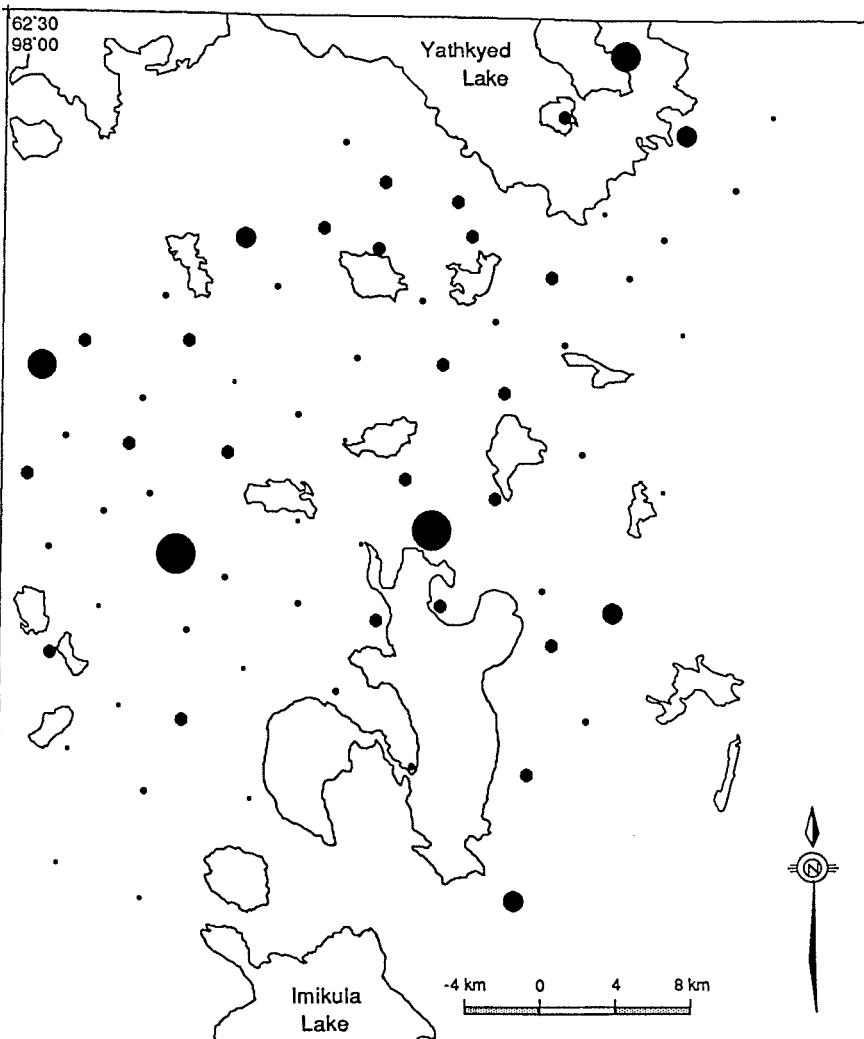
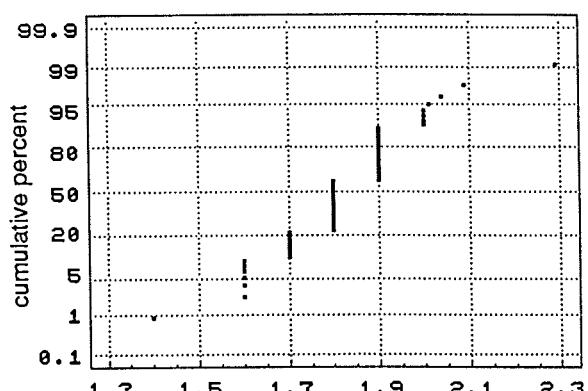
Mode: 1.8
Geometric mean: 1.82
Median: 1.8
Standard deviation: 0.13

Variance: 0.02
Coefficient of variance: 0.07
Skewness: 0.03
Kurtosis: 2.19

Frequency Histogram



Normal Probability Plot



SIZE	Na			
	RANGE (wt. %)	LOW	HIGH	
•	1.39	1.7	16	22.5
•	1.7	1.8	25	57.7
•	1.8	1.9	22	88.7
•	1.9	2	4	94.4
•	2	2.04	2	97.2
●	2.04	2.3	2	100

Compositional Analysis of Till Samples

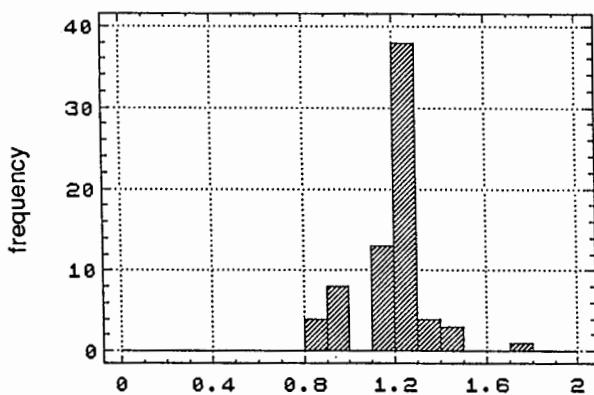
Variable: Tantalum (ppm)

Sample preparation method: 230 mesh screen, dry
Analytical preparation method: 10-15g vial

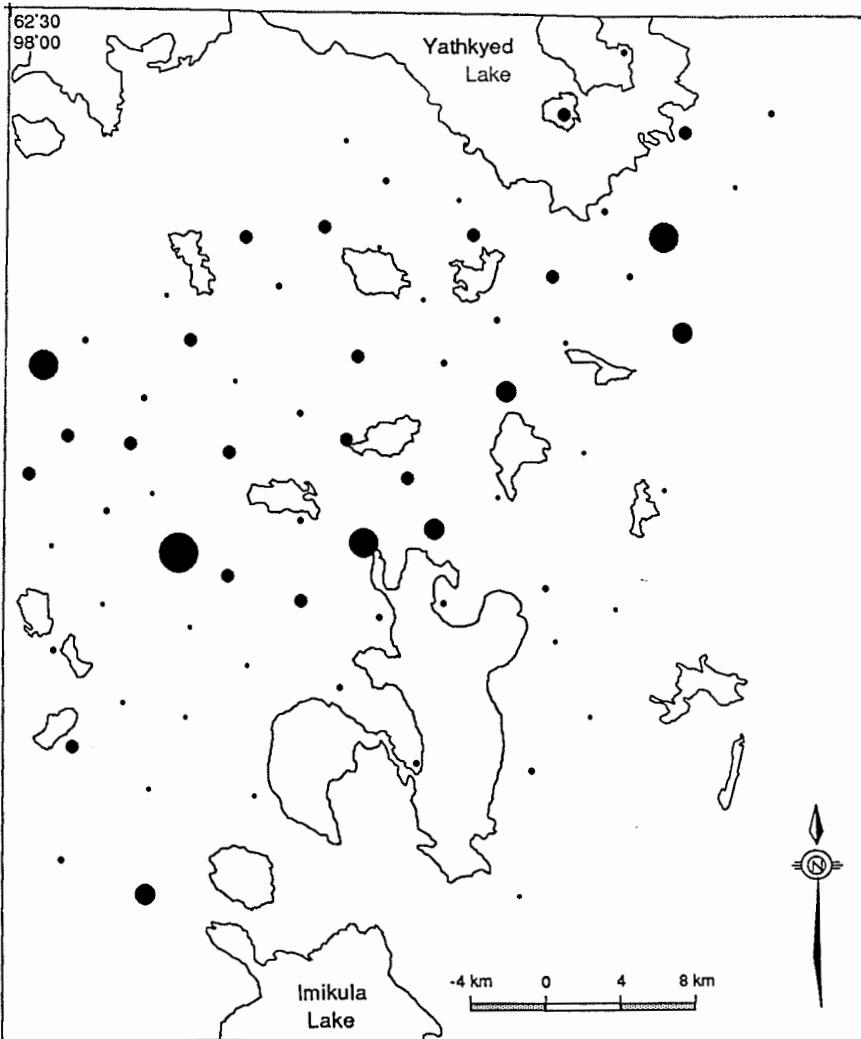
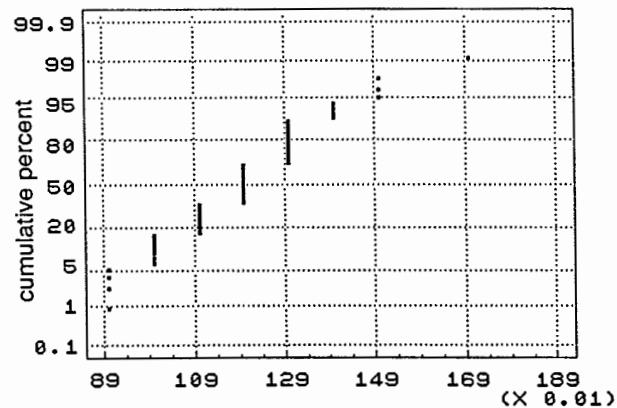
Analytical method: N.A.A.
Detection limit: 0.5 ppm

No. of obs.: 71	Mode: 1.2	Variance: 0.02
Minimum: 0.9	Geometric mean: 1.19	Coefficient of variance: 0.13
Maximum: 1.7	Median: 1.2	Skewness: 0.34
Mean: 1.20	Standard deviation: 0.15	Kurtosis: 0.81

Frequency Histogram



Normal Probability Plot



Ta				
SIZE	RANGE (ppm)		OBS.	%TILE
	LOW	HIGH		
•	0.899	1.1	25	35.2
•	1.1	1.2	21	64.8
●	1.2	1.3	17	88.7
●	1.3	1.4	4	94.4
●	1.4	1.5	3	98.6
●	1.5	1.70	1	100

Compositional Analysis of Till Samples

Variable: Thorium (ppm)

Sample preparation method: 230 mesh screen, dry
Analytical preparation method: 10-15g vial

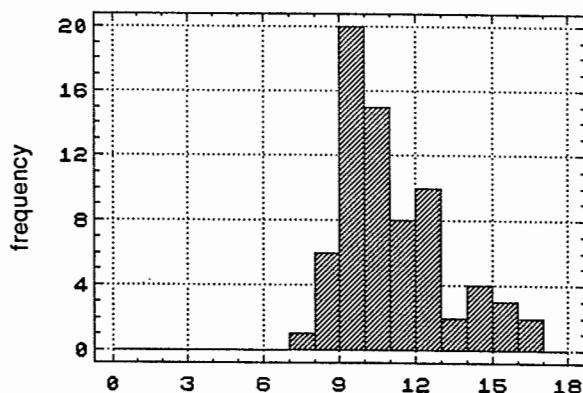
Analytical method: N.A.A.
Detection limit: 0.2 ppm

No. of obs.: 71
Minimum: 7.4
Maximum: 17
Mean: 11.52

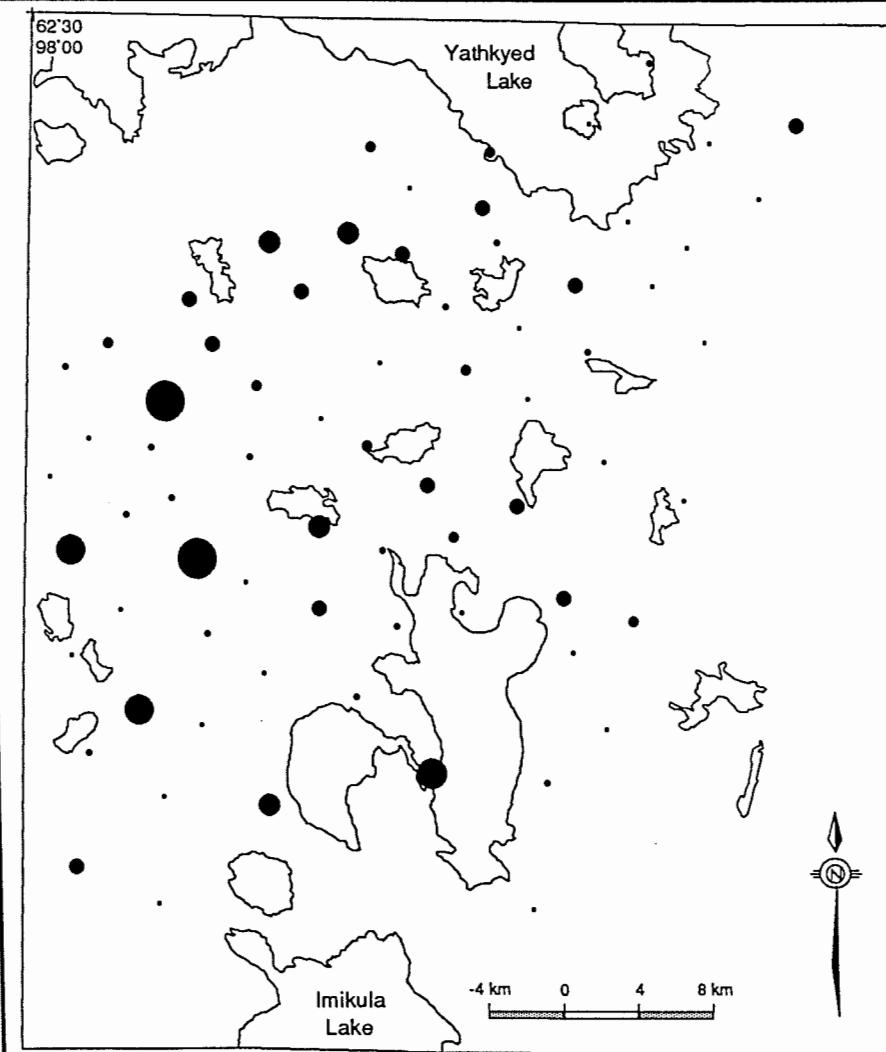
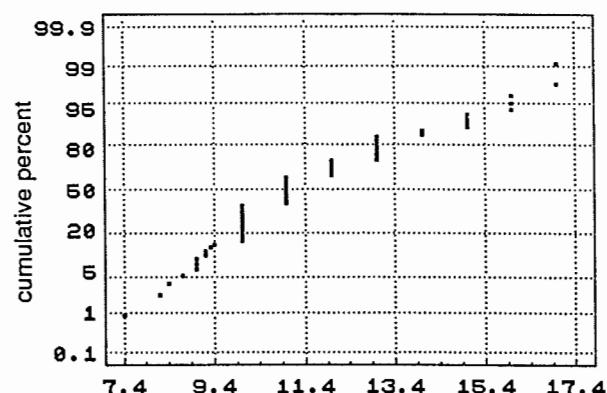
Mode: 10
Geometric mean: 11.33
Median: 11
Standard deviation: 2.17

Variance: 4.72
Coefficient of variance: 0.19
Skewness: 0.75
Kurtosis: 0.08

Frequency Histogram



Normal Probability Plot



Th			
RANGE (ppm)	LOW	HIGH	OBS.
7.4	10	27	38
10	11	15	59.2
11	12	8	70.4
12	14	12	87.3
14	15	4	93
15	16	3	97.2
16	17	2	100

Compositional Analysis of Till Samples

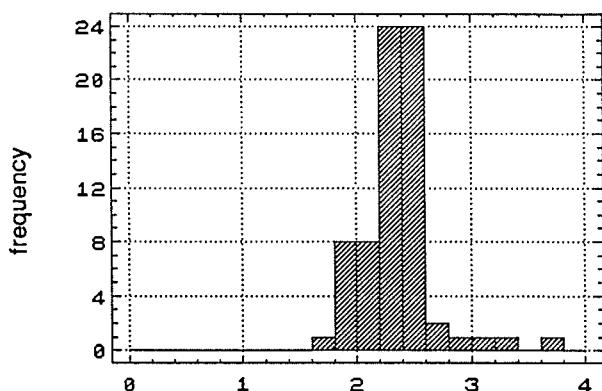
Variable: Uranium (ppm)

Sample preparation method: 230 mesh screen, dry
Analytical preparation method: 10-15g vial

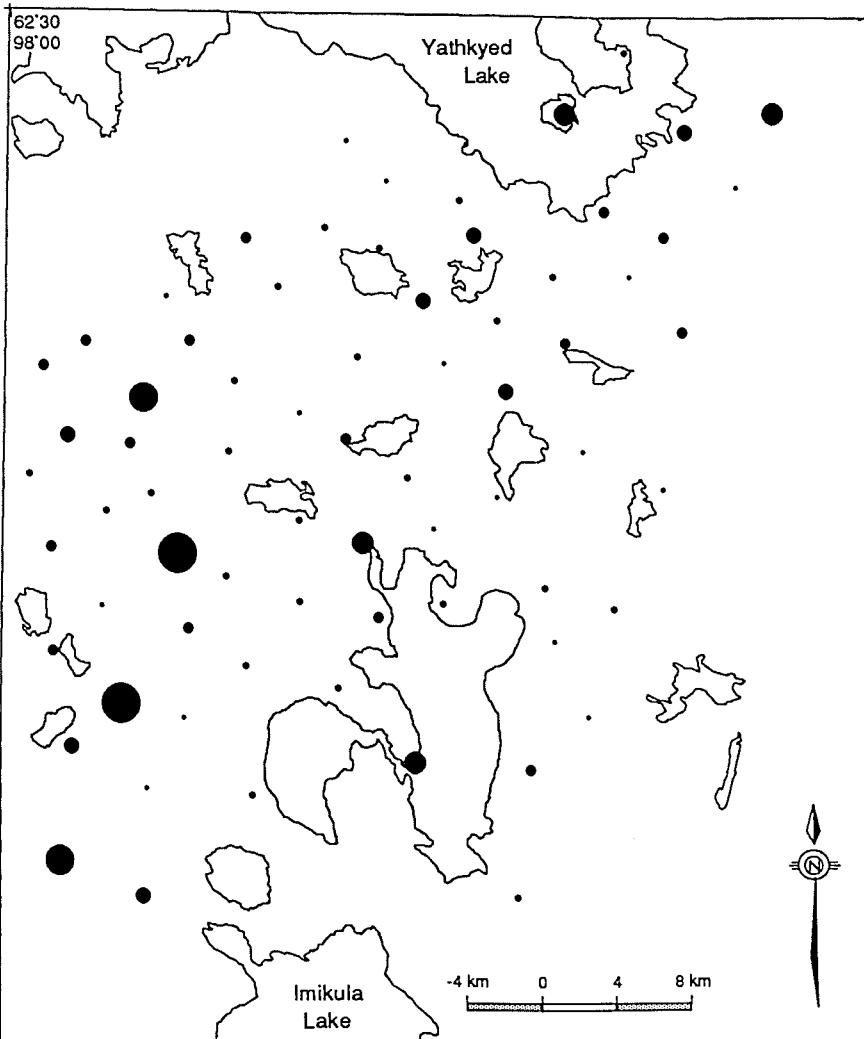
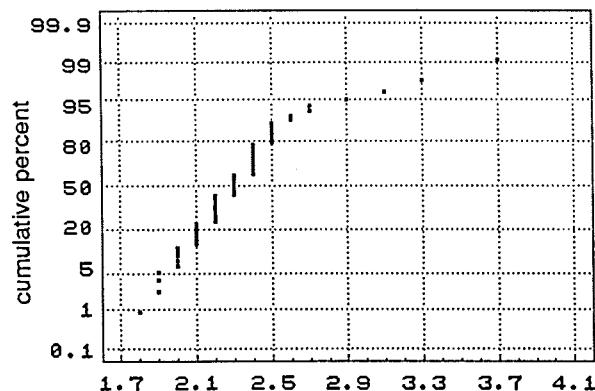
Analytical method: N.A.A.
Detection limit: 0.2 ppm

No. of obs.:	71	Mode:	2.4	Variance:	0.09
Minimum:	1.8	Geometric mean:	2.31	Coefficient of variance:	0.13
Maximum:	3.7	Median:	2.3	Skewness:	1.91
Mean:	2.33	Standard deviation:	0.30	Kurtosis:	6.38

Frequency Histogram



Normal Probability Plot



U			
	RANGE (ppm)	SIZE	LOW HIGH OBS. %TILE
•	1.79	2.1	17 23.9
•	2.1	2.3	24 57.7
•	2.3	2.4	15 78.9
•	2.4	2.5	7 88.7
•	2.5	2.70	4 94.4
●	2.70	3.1	2 97.2
●	3.1	3.7	2 100

Compositional Analysis of Till Samples

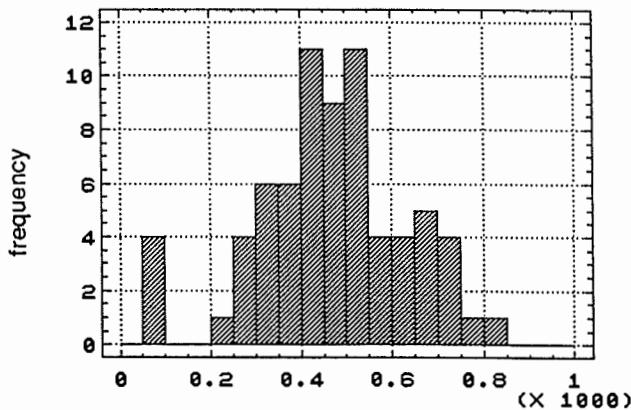
Variable: Zirconium (ppm)

Sample preparation method: 230 mesh screen, dry
Analytical preparation method: 10-15g vial

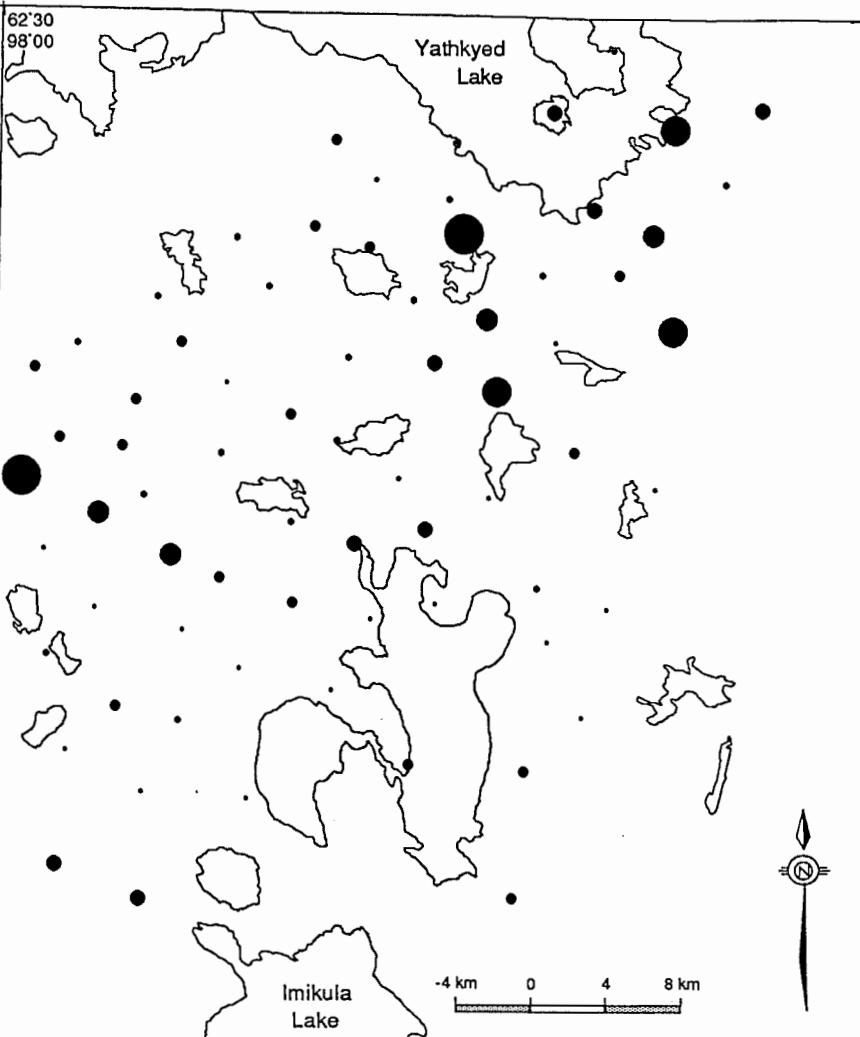
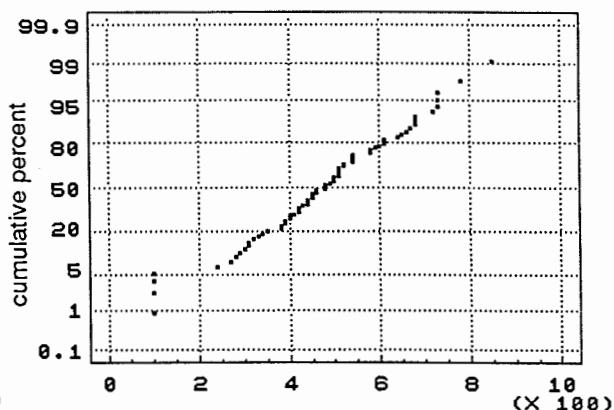
Analytical method: N.A.A.
Detection limit: 200 ppm

No. of obs.: 71	Mode: 510	Variance: 26036.8
Minimum: 100	Geometric mean: 438.29	Coefficient of variance: 0.34
Maximum: 850	Median: 480	Skewness: -0.24
Mean: 474.93	Standard deviation: 161.36	Kurtosis: 0.23

Frequency Histogram



Normal Probability Plot



SIZE	Zr				
	RANGE (ppm)	LOW	HIGH	OBS.	%TILE
•	100	390	19	26.8	
•	390	480	18	52.1	
•	480	580	17	76.1	
•	580	670	8	87.3	
•	670	720	4	93	
•	720	730	3	97.2	
•	730	850	2	100	