1990 ASSESSMENT REPORT ON THE GRAN 16 CLAIM

LIARD MINING DIVISION
NTS: 104G/13
LAT: 57° 14'N
LONG: 131° 47'W

OWNER: HOMESTAKE MINERAL DEVELOPMENT CO.
#1000 - 700 WEST PENDER ST.
VANCOUVER, B.C.

OPERATOR: HOMESTAKE MINERAL DEVELOPMENT CO.

AUTHOR: DARCY MARUD

DATE: SEPTEMBER 5, 1990

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1.0 INTRODUCTION

1.1 Scope of Report

This report summarizes exploration activities carried out by Homestake Mineral Development Company on 5the Gran 16 claim during the period June 5 to June 7, 1990.

1.2 Location, Access and Physiography

The Gran 16 property is located approximately 37 kilometers west-southwest of Telegraph Creek on the Barrington River, approximately 1 kilometre upstream from its junction with Limpoke Creek and 800 meters east of the Limpoke Creek property (Figure 4 and 3o). The property is centered at 57° 47'N latitude and 131° 47'W longitude on NTS map sheet 104G/13.

Access to the property is via helicopter from Telegraph Creek, which is connected to Dease Lake by an all weather road and serviced by fixed wing flights from Smithers, B.C. The Stikine River provides navigable water access from Wrangell, Alaska north to Telegraph Creek. A gravel airstrip capable of handling aircraft as large as DC-3's is located at the Galore Creek camp just south of Scud River.

The claim straddles the Barrington River canyon and is characterized by steep topography. On the east side of the river, the canyon rises 260 meters to a small plateau and on the west side the steep slopes rise 660 meters to the ridge top. Although exposure is good, much of the property is inaccessible due to extreme topography. Vegetation occurs on the less steep slopes and consists of mature spruce and balsam trees with a thick undergrowth of slide alder and devil's club.

1.3 Land Status

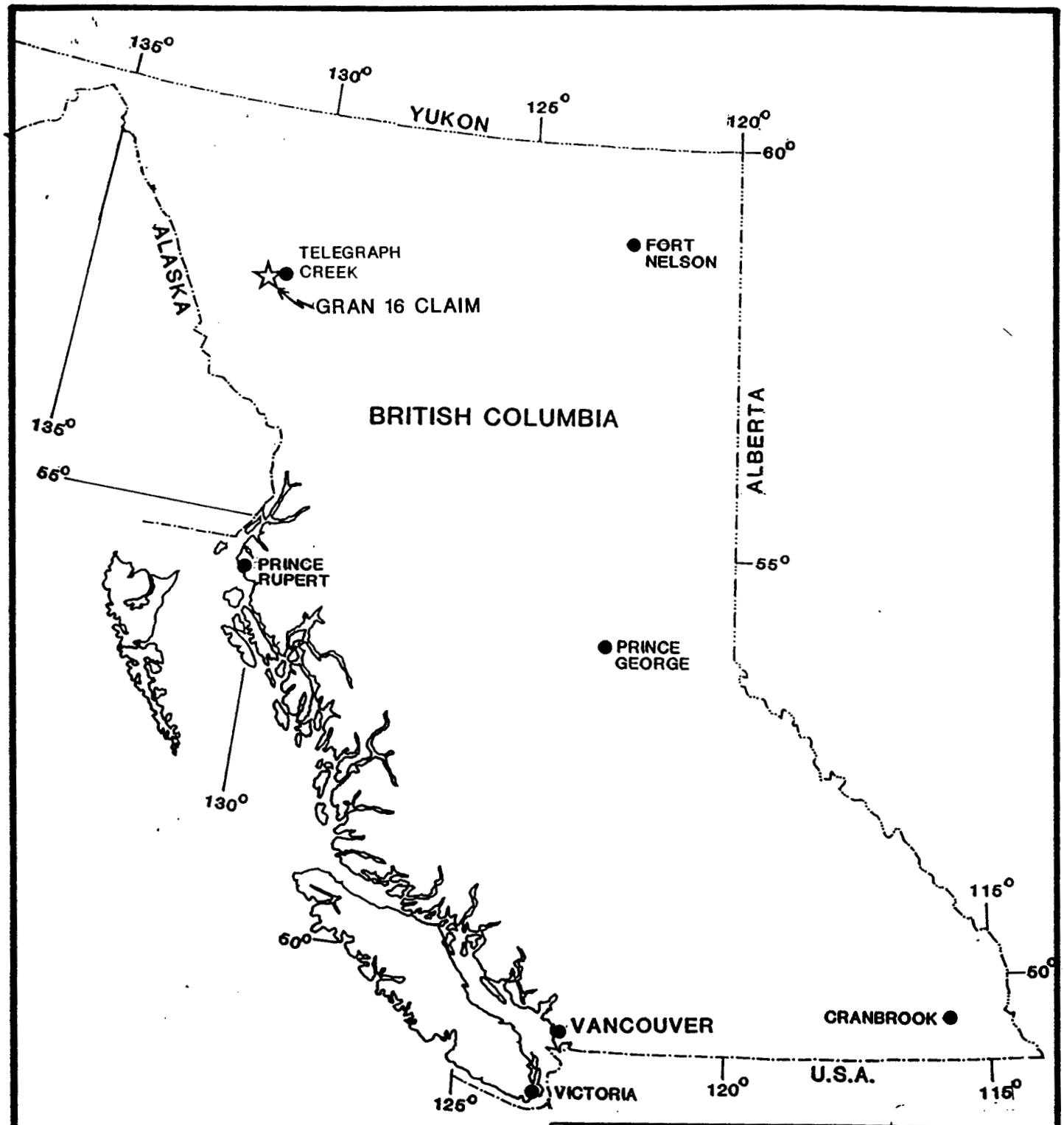
The Gran 16 claim is currently 100% owned by Homestake Mineral Development Company, pertinent claim data is as follows:

Claim	Record #	Units	Record	Expiry *
Gran 16	4740	18	June 28, 1988	June 28, 1993*

* Assuming acceptance of this assessment report.

1.4 Regional Geology

The property lies on the boundary between the Coast Plutonic Complex and Intermontane Belts and is underlain by rocks of the Stikine terrane. The terrane in this area can be divided into four tectonostratigraphic packages: a Late Paleozoic to Middle Jurassic island arc suite represented by the Stikine



HOMESTAKE MINERAL DEVELOPMENT COMPANY

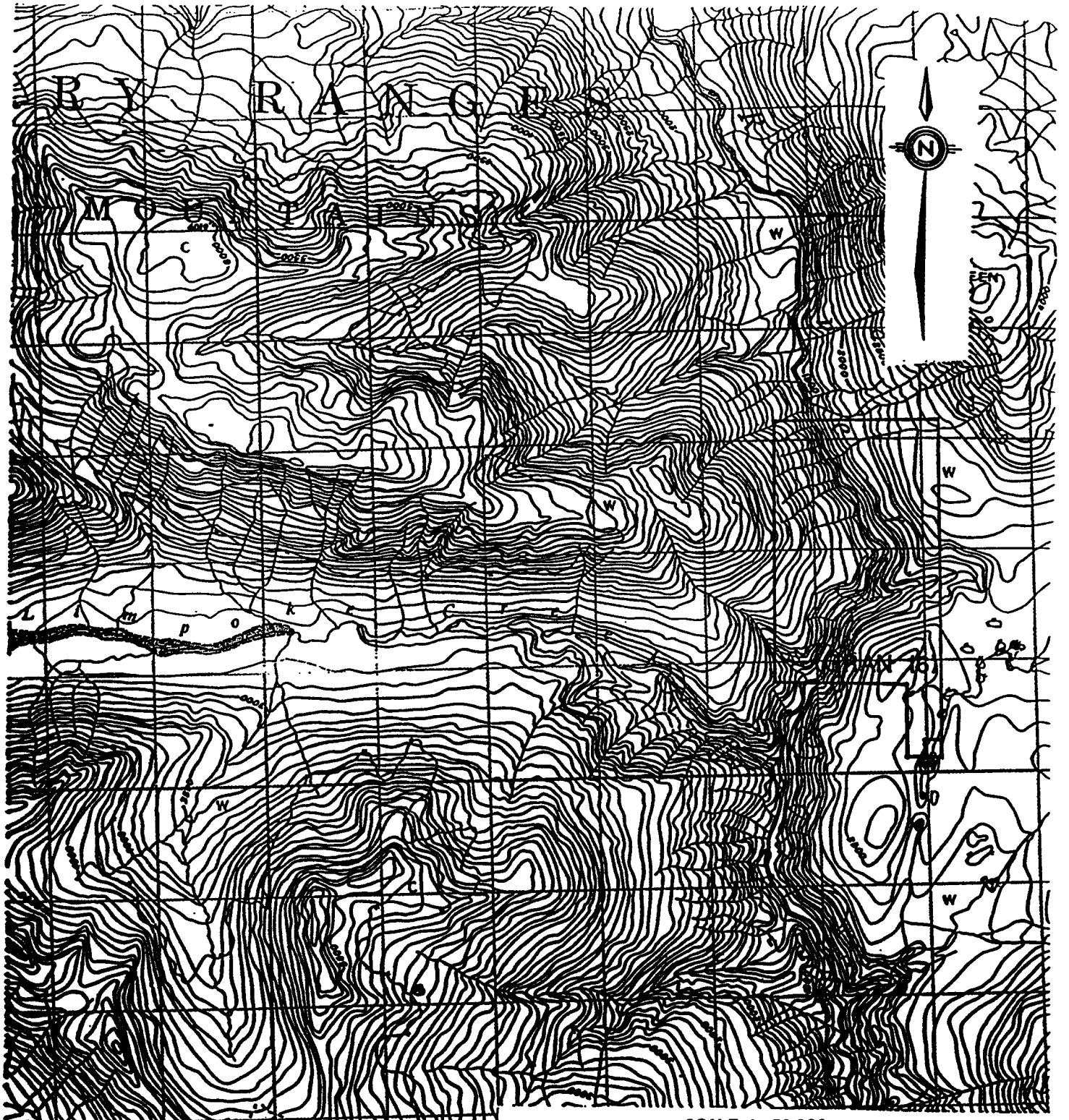
GRAND CANYON PROJECT, B.C.

GRAN 16 CLAIM

LOCATION MAP

DRAWN	DATE	FILE CODE	
KMc	[illegible]	104G	FIGURE 1.0

Revised



SCALE 1: 50,000

HOMESTAKE MINERAL DEVELOPMENT COMPANY			
LIMPOKE GRAN 16			
DETAILED CLAIM LOCATION.			
DRAWN P.H.	DATE Aug, 10, 89	FILE CODE 1046/13	FIG. 2.0

assemblage of Monger (1977) and the Stuhini Group (Kerr, 1948); Middle Jurassic to early Late Cretaceous successor-basin sediments of the Bowser Lake Group (Tipper and Richards, 1976); Late Cretaceous to Tertiary volcanic arc assemblages of the Sloko Group (Aiken, 1959); and Late Tertiary to Recent post - orogenic plateau basalts of the Edziza and Spectrum Ranges.

Three stages of plutonism are recognized in the area. The Hickman batholith is composed of Early to Middle Triassic quartz monzonite to quartz diorite. The Yehiniko and Galore Creek Intrusions are composed of quartz diorite to syenite of Early to Middle Jurassic age. Numerous dykes and sills of monzonite to diorite of Tertiary age occur throughout the project area.

These rocks have undergone multiple stages of deformation, forming a complex structural pattern which is complicated by large differences in the competence of the different units. North and northwest trending normal faults are dominant and are cut by narrow west - trending extensional faults (Souther, 1972).

1.5 Exploration History

Kenco Exploration Ltd. conducted a program of soil sampling and prospecting on the Gordon showing (minfile 104 G 002) in 1966 (B.C. Assessment Report #847). The showing is located at the junction of the Barrington River and Limpoke Creek, just south of the property. Mineralization is reported to consist of scattered patches of weakly disseminated chalcopyrite in all rock types and widely disseminated pyrite. Chalcopyrite, bornite and malachite were discovered in a 10 centimetre wide silicified fracture zone.

1.6 Work Completed

During the period June 5 to June 7, 1990, 98 talus fine samples were collected from the Gran 16 property along the 2000 and 2500 foot contours on the west side of the Barrington River and from the 2000 foot contour on the east side of the Barrington River. All outcrops that were seen on the contour traverses were visited, described, plotted and when necessary sampled. A total of four rock samples were also collected.

2.0 PROPERTY GEOLOGY

The Gran 16 property is underlain by Stuhini Group intermediate to mafic volcanic rocks which have been intruded by a large syenite body in the southeast corner of the property, and numerous syenite dykes over the rest of the property area. olcanic rocks are locally fragmental and porphyritic and represent a series of flows and related pyroclastics. The syenite intrusive is locally megacrystic with orthoclase crystals to 5 centimetres.

3.0 DETAILED TECHNICAL DATA

3.1 Talus Fine Geochemical Survey

3.1.1 Methods Employed

A total of 98 talus fine samples were collected from the Gran 16 claim. The samples were collected from three contour lines; Line L1 and Lines L2 and L4 were run on the west side of the Barrington River at elevations of 2500 and 2000 feet A.S.L. respectively, line L3 was run at 2000 feet A.S.L. on the east side of the

LEGEND

CENOZOIC

QUATERNARY
PLEISTOCENE AND RECENT

29 Fluviatile gravel; sand, silt; glacial outwash, till, alpine moraine and colluvium

28 Hot-spring deposit, tufa , aragonite

27 Olivine basalt, related pyroclastic rocks and loose tephra; younger than some of 29

TERTIARY AND QUATERNARY
UPPER TERTIARY AND PLEISTOCENE

26 Rhyolite and dacite flows, lava domes, pyroclastic rocks and related subvolcanic intrusions; minor basalt

25 Basalt, olivine basalt, dacite, related pyroclastic rocks and subvolcanic intrusions; minor rhyolite; in part younger than some 26

CRETACEOUS AND TERTIARY
UPPER CRETACEOUS AND LOWER TERTIARY
SLOKO GROUP

24 Light green, purple and white rhyolite, trachyte and dacite flows, pyroclastic rocks and derived sediments

22 23 22. Biotite leucogranite, subvolcanic stocks, dykes and sills
23. Porphyritic biotite andesite, lava domes, flows and (?) sills

SUSTUT GROUP

21 Chert-pebble conglomerate, granite-boulder conglomerate, quartzose sandstone, arkose, siltstone, carbonaceous shale and minor coal

20 Felsite, quartz-feldspar porphyry, pyritiferous felsite, orbicular rhyolite; in part equivalent to 22

19 Medium-to coarse-grained, pink biotite-hornblende quartz monzonite

JURASSIC AND/OR CRETACEOUS
POST-UPPER TRIASSIC PRE-TERTIARY

18 Hornblende diorite

17 Granodiorite, quartz diorite; minor diorite, leucogranite and migmatite

JURASSIC
MIDDLE (?) AND UPPER JURASSIC
BOWSER GROUP

16 Chert-pebble conglomerate, grit, greywacke, subgreywacke, siltstone and shale; may include some 13

MIDDLE JURASSIC

15 Basalt, pillow lava, tuff-breccia, derived volcaniclastic rocks and related subvolcanic intrusions

LOWER AND MIDDLE JURASSIC

14 Shale, minor siltstone, siliceous and calcareous siltstone, greywacke and ironstone

LOWER JURASSIC

13 Conglomerate, polymictic conglomerate; granite-boulder conglomerate, grit, greywacke, siltstone; basaltic and andesitic volcanic rocks, peperites, pillow-breccia and derived volcaniclastic rocks

TRIASSIC AND JURASSIC
POST-UPPER TRIASSIC PRE-LOWER JURASSIC

12 Syenite, orthoclase porphyry, monzonite, pyroxenite

HICKMAN BATHOLITH

10 11 10. Hornblende granodiorite, minor hornblende-quartz diorite. 11. Hornblende, quartz diorite, hornblende-pyroxene diorite, amphibolite and pyroxene-bearing amphibolite

MESOZOIC

TRIASSIC
UPPER TRIASSIC

9 Undifferentiated volcanic and sedimentary rocks (units 5 to 8 inclusive)

8 Augite-andesite flows, pyroclastic rocks, derived volcaniclastic rocks and related subvolcanic intrusions; minor greywacke, siltstone and polymictic conglomerate

7 Siltstone, thin-bedded siliceous siltstone, ribbon chert, calcareous and dolomitic siltstone, greywacke, volcanic conglomerate, and minor limestone

6 Limestone, fetid argillaceous limestone, calcareous shale and reefoid limestone; may be in part younger than some 7 and 8

5 Greywacke, siltstone, shale; minor conglomerate, tuff and volcanic sandstone

MIDDLE TRIASSIC

4 Shale, concretionary black shale; minor calcareous shale and siltstone

PALEOZOIC

PERMIAN
MIDDLE AND UPPER PERMIAN

3 Limestone, thick-bedded mainly bioclastic limestone; minor siltstone, chert and tuff

PERMIAN AND OLDER

2 Phyllite, argillaceous quartzite, quartz-sericite schist, chlorite schist, greenstone, minor chert, schistose tuff and limestone

MISSISSIPPIAN

1 Limestone, crinoidal limestone, ferruginous limestone; maroon tuff, chert and phyllite

B Amphibolite, amphibolite gneiss; age unknown probably pre-Upper Jurassic

A Ultramafic rocks; peridotite, dunite, serpentinite; age unknown, probably pre-Lower Jurassic

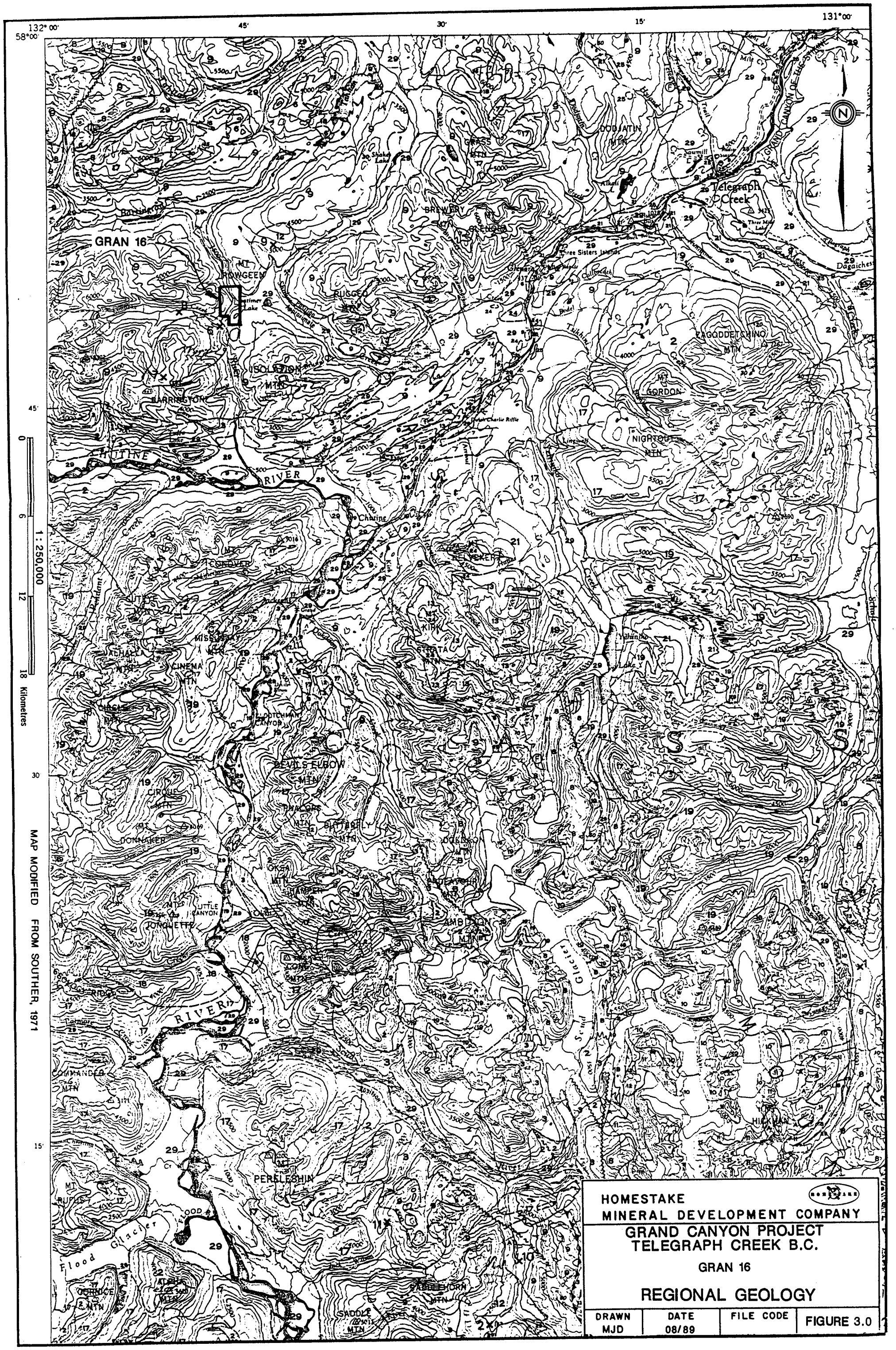
Geological boundary (defined and approximate, assumed) .....
Bedding (horizontal, inclined, vertical, overturned) .....
Anticline .....
Syncline .....
Fault (defined and approximate, assumed) .....
Thrust fault, teeth on hanging-wall side (defined and approximate, assumed) .....
Fossil locality ..... F
Mineral property 15
Glacier .....

INDEX TO MINERAL PROPERTIES

1. Liard Copper	5. Bam	9. MH	13. Ann, Su
2. Galore Creek	6. Gordon	10. BIK	14. SF
3. QC, QCA	7. Limpoke	11. JW	15. Goat
4. Nabs	8. Poke	12. Copper Canyon	16. Mary

GRAND CANYON PROJECT B.C.

GEOLOGICAL LEGEND


132° 00'
58° 00'
45'
30'
15'
131° 00'
GRAN 16
MT ROWGEE
RUGGED
BREWERY
GLENORA
GRASS MTN
DODJATIN MTN
Telegraph Creek
Three Sisters Islands
Dagaicheesh
TAGOODETCHINO MTN
MT GORDON
NIGHTOUT MTN
ISOLATION MTN
BARRINGTON
CHUTINE RIVER
Chutine
MT CONOVER
MT REVEKER
KIPK
GITATA MTN
MISSEZULA MTN
ACHALLA MTN
CINEMA MTN
DEVILS ELBOW MTN
CIRQUE MTN
PHALOPE MTN
BUTTERFLY MTN
DONNAKER MTN
OKSA MTN
HAMPER MTN
JONQUETTE
AMBITION MTN
COMMANDER MTN
MT RUFUS
PERSLESHIN MTN
SADDLE MTN
HICKMAN
Glacier
Flood
1 : 250,000
0
6
12
18 Kilometres
30
MAP MODIFIED FROM SOUTHER, 1971
HOMESTAKE
MINERAL DEVELOPMENT COMPANY
GRAND CANYON PROJECT
TELEGRAPH CREEK B.C.
GRAN 16
REGIONAL GEOLOGY
DRAWN MJD
DATE 08/89
FILE CODE
FIGURE 3.0

Barrington River.

On all lines, the samples were collected from reddish-brown talus-fine material located 15-40 centimeters below ground surface. The samples were collected with a steel mattock placed in kraft paper bags, air dried for two days and then forwarded to Acme Analytical Labs in Vancouver where they were analyzed for 30 different elements by ICP and gold by fire assay with ICP finish. All geochemical data is attached with this report as Appendix B.

3.1.2 Results and Interpretation

Gold

The highest gold value obtained was 64 ppb while the lowest was at the detection limit of 1 ppb. For the most part, correlation of high value between contour lines is difficult.

Copper

The highest copper value obtained was 1085 ppm while the lowest was 48 ppm. There are numerous anomalous results of >300 ppm but they are erratic and do not appear to define any large areas of potential economic interest.

Silver

The highest silver value obtained was 1.0 ppm while the lowest was at the detection limit of 0.1 ppm. Silver appears to be of limited use in defining potential targets of economic interest as values are generally low and erratic.

Molybdenum

The highest molybdenum value obtained was 88 ppm while the lowest was at the detection limit of 1 ppm. High molybdenum values generally correlate well with high copper values.

The talus fine geochemical survey did not delineate any copper or precious metal targets of significant size. The erratic high copper, molybdenum, silver and gold values are characterisitic of a porphyry style environment which is in line with the geologic information previously gained in the southern part of the map area.

Appendix C contains the statistical analysis including calculation of mean, standard deviation and frequency for all elements.

3.2 LITHOGEOCHEMICAL SAMPLING

3.2.1 Methods Employed

A total of four rock samples were collected from exposures on the west side of the Gran 16 claim. Approximately three kilograms of rock was collected with a rock hammer for each sample and placed in 3 mil plastic sample bags. The samples were forwarded to Acme Analytical Labs in Vancouver where they were analyzed for 30 different elements by ICP and gold by fire assay with ICP finish. All geochemical data is attached with this report as Appendix B.

3.2.2 Results and Interpretations

None of the rock samples collected returned any geochemical results of economic significance. A brief description of all samples is given below:

		Au ppb	Ag ppm	Cu ppm	Mo ppm
Sample 35001:	Carbonatized mafic volcanic with trace diss py.	10	0.3	336	1
Sample 35002:	Mafic volcanic, rusty colored with diss py and fracture py.	6	0.3	30	3
Sample 35003:	Mafic volcanic	15	0.2	231	1
Sample 35004:	Bleached mafic volcanic, trace pyrite.	4	0.2	151	1

SUMMARY AND RECOMMENDATIONS

The Gran 16 claim is located on NTS 104G/13 where Limpoke Creek empties into the Barrington River. The claim is 100% owned by Homestake Mineral Development Company.

A talus fine sampling program was undertaken by Homestake from June 5 to June 7, 1990. The program was designed to test the claim for precious metal mineralization.

Results of the sampling program were for the most part disappointing as the program failed to delineate any sizeable of anomalous gold, silver or copper, thus, the possibility of finding a sizeable mineralization Cu $\pm$ porphyry system of higher grade gold deposit on the claims appear limited. No further work is recommended for the property.

REFERENCES

Allen, D.G. Panteleyev, A. and Armstrong, A.T. (1976) "Galore Creek" in Porphyry Deposits of the Canadian Cordillera, Special Volume 15, pg. 402-417.

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Holbek, P.M. (1988): "Geology and Mineralization of the Stikine Assemblage, Mess Creek Area, Northwestern British Columbia.", University of British Columbia MSc thesis.

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Ney, C.S. and Hollister, V.F. (1976):"Geological Setting of Porphyry Deposits of the Canadian Cordillera" in Porphyry Deposits of the Canadian Cordillera, Special Volume 15, pg. 21-30.

Souther, J.G. (1972):"Telegraph Creek Map Area, B.C.", GSC Paper 71-44.

APPENDIX "A"

COST STATEMENT

STATEMENT OF COSTS

Labour			
D. Marud	3 days @ $ 250/day	$	750.00
D. McBean	2 days @ $ 130/day	$	260.00
T. Frkovich	2 days @ $ 130/day	$	260.00
J. Bozek	2 days @ $ 180/day	$	360.00
D. Munroe	2 days @ $ 105/day	$	210.00
G. Gray	1 day @ $ 105/day	$	105.00
		$	1945.00
Food and Accomodation			
	10 mandays @ $ 115	$	1150.00
Geochemical Analysis			
	98 Soil @ $ 10/sample	$	980.00
	4 Rock @ $ 15/sample	$	60.00
Helicopter Support			
	2 hrs @ $ 650/hr	$	1300.00
Consumables		$	100.00
	TOTAL	$	5535.00

APPENDIX "B"

SAMPLE RESULTS

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER B.C. V6A [illegible] PHONE (604) 253-3158 FAX (604) 253-1716

GEOCHEMICAL ANALYSIS CERTIFICATE

Homestake International Minerals File # 90-2100 Page 1

1000 - 700 W. Pender St., Vancouver BC V6C 1G8 Submitted by: DARCY MARUD

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Tl ppm	Au** ppb
GN-16-2-L1-1	2	80	18	144	.3	20	20	911	6.41	25	5	ND	2	62	1.0	2	2	182	.74	.151	6	35	1.55	58	.15	6	2.43	.01	.09	1	1	7
GN-16-2-L1-2	3	172	12	136	.4	30	22	788	5.77	14	5	ND	1	77	1.6	2	2	120	1.36	.110	12	29	.97	64	.25	5	2.89	.03	.06	1	1	8
GN-16-2-L1-3	1	69	12	119	.4	21	19	599	5.87	13	5	ND	2	33	.7	3	2	162	.50	.059	5	32	1.20	45	.17	5	2.56	.02	.08	1	1	5
GN-16-2-L1-4	1	111	13	140	.2	27	18	548	6.46	18	5	ND	2	29	1.0	2	2	178	.44	.053	5	38	1.54	42	.19	3	3.13	.02	.06	1	1	18
GN-16-2-L1-5	2	76	8	83	.3	21	19	567	6.22	18	5	ND	2	35	.9	2	2	177	.56	.050	5	32	1.21	34	.17	3	2.52	.01	.07	1	1	9
GN-16-2-L1-6	1	70	17	186	.4	18	24	1523	5.50	3	5	ND	2	39	1.2	2	2	142	.79	.105	6	23	.54	88	.16	2	1.82	.01	.07	1	1	6
GN-16-2-L1-7	4	110	13	239	.3	22	27	1078	7.58	11	5	ND	1	26	1.3	2	2	184	.41	.109	6	32	.94	58	.24	4	2.60	.03	.08	1	1	5
GN-16-2-L1-8	2	80	10	211	.1	24	24	652	6.27	16	5	ND	2	33	1.4	2	2	169	.73	.075	5	27	1.00	55	.23	5	2.26	.02	.13	1	1	17
GN-16-2-L1-9	8	376	17	281	.6	82	39	1197	6.52	7	5	ND	2	53	1.4	4	2	187	1.00	.069	13	32	.88	47	.20	7	2.87	.03	.08	1	1	9
GN-16-2-L1-10	4	123	13	140	.2	25	19	626	6.63	13	5	ND	2	41	1.2	3	2	182	.66	.068	5	31	1.06	53	.25	3	2.65	.02	.08	1	1	9
GN-16-2-L1-11	3	262	11	109	.1	49	27	604	6.40	16	5	ND	2	40	1.3	2	2	171	.70	.046	6	37	1.33	43	.26	3	3.28	.02	.07	1	1	11
GN-16-2-L1-12	6	148	13	116	.3	64	26	472	7.10	16	5	ND	2	32	1.0	2	2	201	.61	.050	5	34	1.04	30	.25	5	2.65	.02	.07	2	1	17
GN-16-2-L1-13	8	441	18	144	.5	85	54	724	9.70	31	5	ND	3	43	1.5	2	2	198	.64	.099	6	36	1.08	34	.19	3	3.05	.01	.07	1	1	27
GN-16-2-L1-14	23	573	17	61	.7	73	60	705	14.19	70	5	ND	3	69	2.1	3	2	262	.64	.108	6	26	.97	14	.21	3	2.39	.02	.04	1	1	57
GN-16-2-L1-15	6	185	16	213	.4	47	31	783	7.84	10	5	ND	2	36	2.0	2	2	191	.54	.082	6	41	.84	37	.22	2	2.24	.02	.07	1	1	25
GN-16-2-L1-16	1	136	13	128	.5	40	39	1018	5.43	12	5	ND	2	50	1.4	2	2	157	1.24	.059	6	27	.68	69	.20	3	2.04	.02	.06	1	1	9
GN-16-2-L1-17	2	90	14	81	.2	31	18	406	6.55	12	5	ND	3	28	1.2	2	2	168	.60	.077	6	30	.88	41	.28	2	3.49	.02	.05	1	1	3
GN-16-2-L1-18	3	65	12	109	.1	19	19	557	5.95	9	5	ND	1	34	1.0	2	2	169	.86	.086	5	23	.70	47	.21	4	2.58	.02	.04	1	1	8
GN-16-2-L1-19	4	158	12	96	.5	42	23	699	6.50	19	5	ND	1	38	.8	3	2	172	.62	.082	7	45	.88	30	.19	4	3.22	.01	.04	1	1	9
GN-16-2-L1-20	1	103	10	95	.2	37	21	466	5.27	17	5	ND	1	37	.9	2	2	144	.90	.058	5	36	1.08	29	.21	3	3.21	.02	.04	1	1	5
GN-16-2-L1-21	3	122	12	138	.5	29	28	997	6.29	16	5	ND	1	42	1.1	2	2	182	1.08	.091	6	31	.72	47	.18	3	2.66	.02	.05	1	1	10
GN-16-2-L1-22	5	242	18	138	.6	39	55	1672	7.01	28	5	ND	1	46	1.1	2	2	189	1.27	.136	8	26	.58	42	.10	2	2.70	.01	.04	1	1	14
GN-16-2-L1-23	13	253	20	151	.7	50	37	1474	8.91	59	5	ND	1	58	1.4	2	2	244	1.24	.132	7	35	1.00	41	.09	5	2.90	.01	.06	1	1	15
GN-16-2-L1-24	3	121	12	79	.2	34	25	569	6.55	16	5	ND	2	55	.8	2	2	168	.93	.068	5	49	1.25	22	.23	3	3.01	.02	.04	1	1	6
GN-16-2-L1-25	3	195	11	86	.2	39	26	488	6.51	8	5	ND	2	40	.7	4	2	154	.57	.048	5	47	1.36	38	.21	3	3.40	.02	.05	1	1	24
GN-16-2-L1-26	2	107	10	117	.3	29	18	479	6.95	18	5	ND	2	35	.9	2	2	189	.53	.068	6	31	.99	45	.25	2	2.98	.02	.04	1	1	36
GN-16-2-L1-27	3	75	14	130	.4	15	16	447	6.91	10	5	ND	2	39	1.5	3	2	227	.60	.047	5	23	.88	35	.24	3	2.80	.02	.05	1	1	32
GN-16-2-L1-28	20	516	18	113	.7	30	35	749	12.89	35	5	ND	3	37	2.2	2	2	316	.78	.082	10	42	.41	26	.21	2	3.11	.01	.04	1	1	14
GN-16-2-L2-1	2	159	18	129	.3	22	21	896	5.30	10	5	ND	2	42	1.1	2	2	128	.66	.170	6	25	1.03	96	.15	4	2.27	.02	.11	1	1	8
GN-16-2-L2-2	2	150	14	81	.4	22	17	461	5.40	7	5	ND	2	40	.5	2	2	134	.67	.117	5	23	1.20	67	.16	7	2.38	.02	.12	1	1	9
GN-16-2-L2-3	2	153	21	110	.4	20	24	736	5.75	6	5	ND	2	72	1.0	3	2	148	.87	.169	5	25	1.48	76	.18	5	2.53	.04	.16	1	1	5
GN-16-2-L2-4	2	154	17	73	.1	21	19	535	5.70	7	5	ND	2	62	.8	2	2	142	.88	.079	5	22	1.57	58	.20	5	2.67	.02	.15	2	1	7
GN-16-2-L2-5	5	102	20	116	.3	20	21	849	6.29	7	5	ND	3	55	1.4	2	2	161	.89	.070	6	25	1.03	89	.23	8	2.32	.03	.11	1	1	12
GN-16-2-L2-6	5	141	20	155	.4	20	23	790	6.48	10	5	ND	2	49	1.5	2	2	176	.70	.066	6	27	1.00	78	.22	4	2.41	.02	.09	1	1	11
GN-16-2-L2-7	4	102	14	149	.3	24	17	484	6.49	10	5	ND	2	42	1.3	2	2	168	.62	.070	6	29	1.11	57	.28	4	2.81	.02	.08	1	1	65
GN-16-2-L2-8	3	151	17	128	.5	19	21	513	6.29	11	5	ND	2	49	1.5	2	2	175	.78	.065	5	25	1.15	44	.23	4	2.44	.02	.12	1	1	6
STANDARD C/AU-S	17	60	37	132	7.6	67	28	950	4.05	37	25	7	36	48	18.4	15	20	59	.52	.097	36	56	.93	179	.07	35	1.97	.06	.13	11	15	51

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM.
- SAMPLE TYPE: Soil -80 Mesh AU** ANALYSIS BY FA\ICP FROM 10 GM SAMPLE.

DATE RECEIVED: JUN 28 1990 **DATE REPORT MAILED:** July 3/90. **SIGNED BY** C. Leong D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Tl ppm	Au** ppb
GN-16-2-L2-9	4	179	18	182	.5	24	25	808	7.27	16	5	ND	2	41	1.7	2	2	178	.59	.060	6	32	.98	53	.28	3	2.39	.02	.08	1	1	14
GN-16-2-L2-10	3	157	9	68	.3	23	20	457	5.62	9	5	ND	1	85	.8	3	2	122	1.72	.048	8	28	.93	46	.18	4	3.29	.03	.07	1	1	14
GN-16-2-L2-11	6	98	12	66	.1	22	17	401	5.49	14	5	ND	1	39	.6	2	2	139	.68	.041	6	23	.93	41	.22	6	2.27	.02	.05	2	1	10
GN-16-2-L2-12	1	136	8	106	.2	34	21	764	5.26	8	5	ND	1	79	.8	3	2	114	1.54	.075	9	28	1.15	57	.20	8	2.43	.04	.06	1	1	5
GN-16-2-L2-13	3	316	10	117	.3	32	23	673	5.29	17	5	ND	2	58	1.0	2	2	121	.96	.051	15	28	.95	57	.20	2	2.69	.02	.06	1	1	3
GN-16-2-L2-14	1	62	12	108	.2	22	19	665	4.81	8	5	ND	1	38	.5	3	2	115	.69	.095	5	25	1.00	46	.17	7	1.99	.02	.06	1	1	1
GN-16-2-L2-15	3	162	12	76	.1	31	24	501	6.30	17	5	ND	2	48	1.1	2	2	150	.84	.053	6	28	1.01	41	.20	3	2.53	.02	.07	1	1	5
GN-16-2-L2-16	4	144	12	64	.3	37	22	489	6.21	23	5	ND	2	34	1.0	4	2	147	.65	.051	6	29	1.11	44	.22	5	2.41	.02	.06	2	1	11
GN-16-2-L2-17	5	62	17	116	.2	15	19	724	5.28	3	5	ND	2	47	.7	2	2	146	.69	.068	6	23	.64	66	.22	2	1.94	.02	.06	2	1	3
GN-16-2-L2-18	2	143	15	93	.2	27	28	874	6.05	21	5	ND	2	33	.8	3	2	170	.69	.046	6	31	1.13	62	.22	4	2.69	.02	.09	1	1	7
GN-16-2-L2-19	1	74	12	75	.1	20	19	650	5.65	13	5	ND	2	36	.7	2	2	151	.64	.074	5	25	1.02	52	.18	5	2.24	.02	.05	2	1	4
GN-16-2-L2-20	7	83	10	87	.4	28	19	594	7.51	18	5	ND	2	41	.8	2	2	197	.50	.082	6	36	.73	45	.21	7	2.09	.01	.04	2	1	2
GN-16-2-L2-21	16	142	9	55	.2	46	19	423	6.64	27	5	ND	2	37	1.0	3	2	219	.78	.052	6	32	1.14	46	.21	10	2.51	.02	.03	2	1	21
GN-16-2-L2-22	4	146	10	74	.1	46	22	438	6.02	17	5	ND	2	31	.8	2	2	145	.59	.048	6	34	1.08	36	.27	8	2.59	.02	.03	2	1	16
GN-16-2-L2-23	8	107	11	84	.3	35	20	407	6.97	19	5	ND	2	37	1.1	3	2	186	.57	.058	6	32	1.01	38	.25	8	2.46	.02	.04	2	1	19
GN-16-2-L2-24	10	113	11	76	.4	29	17	387	6.89	16	5	ND	1	39	1.0	2	2	168	.68	.078	5	29	.81	36	.21	3	2.06	.01	.03	2	1	6
GN-16-2-L2-25	32	135	22	211	.5	65	21	407	8.52	55	5	ND	2	26	2.0	6	2	210	.41	.110	6	36	.65	39	.28	2	1.87	.02	.05	2	1	22
GN-16-2-L2-26	6	90	12	106	.1	26	17	437	6.70	26	5	ND	2	39	.7	2	2	217	.63	.055	6	29	.66	43	.22	2	2.07	.01	.03	1	1	2
GN-16-2-L2-27	3	149	9	95	.2	24	22	580	6.43	14	5	ND	1	46	.8	2	2	170	.80	.067	6	27	1.02	38	.24	3	2.35	.02	.04	2	1	34
GN-16-2-L2-28	1	109	8	78	.1	21	16	497	5.79	13	5	ND	1	40	.9	2	3	157	.61	.058	5	27	1.01	30	.23	6	2.57	.02	.02	1	1	8
GN-16-2-L2-29	2	169	7	85	.1	23	18	557	5.80	11	5	ND	1	39	.7	2	2	153	.57	.055	7	29	1.07	40	.21	5	3.13	.01	.03	1	1	28
GN-16-2-L2-30	1	102	9	101	.1	22	20	649	5.06	12	5	ND	1	49	.6	2	2	136	.94	.079	6	28	1.13	41	.20	5	2.41	.01	.04	1	1	16
GN-16-2-L2A-1	1	99	9	57	.1	16	13	448	5.01	9	5	ND	1	34	.8	2	2	140	.79	.080	5	20	1.15	43	.21	6	3.71	.02	.05	1	1	9
GN-16-2-L2A-2	1	87	7	69	.1	18	15	529	6.14	8	5	ND	1	45	.8	3	2	160	.63	.111	5	29	1.42	35	.22	7	2.72	.02	.02	1	1	2
GN-16-2-L2A-3	1	80	11	79	.2	16	14	588	7.13	10	5	ND	2	43	1.1	5	2	199	.69	.132	5	29	1.18	42	.24	3	2.65	.02	.03	1	1	4
GN-16-2-L2A-4	1	117	9	80	.2	19	16	597	6.96	3	5	ND	2	46	1.1	4	2	176	.71	.107	5	31	1.43	34	.24	4	2.93	.02	.03	1	1	15
GN-16-2-L2A-5	1	79	12	92	.2	17	18	817	6.64	10	5	ND	2	53	1.3	4	2	166	.69	.221	5	30	1.23	46	.20	2	2.58	.01	.04	1	1	17
GN-16-2-L2A-6	2	74	10	121	.3	19	25	1234	6.53	12	5	ND	2	67	1.2	2	2	172	.93	.109	6	31	.98	86	.24	2	2.33	.02	.03	1	1	1
GN-16-2-L2A-7	5	87	14	108	.1	18	19	706	6.64	17	5	ND	2	50	1.3	3	2	196	.83	.064	5	26	.94	58	.21	2	2.64	.02	.02	1	1	1
GN-16-2-L2A-8	2	63	11	243	.1	17	23	898	5.75	9	5	ND	1	49	2.1	2	2	164	.76	.066	5	26	.91	68	.23	7	2.22	.02	.03	1	1	11
GN-16-2-L2A-9	7	195	19	277	.4	32	44	1243	7.99	23	5	ND	2	51	2.9	3	2	197	.79	.095	7	38	.88	53	.17	6	2.55	.02	.04	1	1	9
GN-16-2-L2A-10	1	58	6	121	.1	18	19	573	6.10	3	5	ND	2	43	1.2	3	2	158	.69	.159	5	30	1.07	41	.24	2	2.46	.01	.04	1	1	9
GN-16-2-L2A-11	88	1085	19	117	1.0	144	100	1842	11.40	60	5	ND	1	63	2.8	2	3	212	1.62	.191	13	34	.49	66	.06	7	1.96	.01	.04	1	1	27
GN-16-2-L3-1	2	159	19	202	.2	34	22	935	5.55	19	5	ND	2	42	1.0	2	2	126	.70	.103	8	31	1.23	138	.14	5	2.97	.02	.19	1	1	6
GN-16-2-L3-2	1	86	8	122	.3	26	14	602	4.53	18	5	ND	2	32	1.0	2	2	108	.65	.079	6	25	.94	108	.14	8	2.36	.02	.14	1	1	64
GN-16-2-L3-3	1	71	6	56	.2	17	8	374	3.30	9	5	ND	3	35	.3	2	2	77	.69	.080	12	18	.81	97	.12	3	1.52	.03	.06	2	1	12
STANDARD C/AU-S	18	57	36	130	7.4	68	27	950	4.02	38	25	7	36	48	18.9	14	18	57	.51	.094	38	55	.92	173	.07	35	1.93	.06	.14	11	15	47

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Tl ppm	Au** ppb
GN-16-2-L3-4	1	92	8	62	.1	20	9	374	3.76	4	5	ND	3	41	.3	2	2	91	.78	.085	13	21	.90	133	.13	6	1.85	.04	.08	2	1	9
GN-16-2-L3-5	1	78	7	118	.2	24	12	406	3.84	4	5	ND	3	33	.6	2	2	89	.59	.099	9	25	.81	126	.12	3	2.16	.02	.07	1	1	4
GN-16-2-L3-6	2	48	6	77	.4	17	10	554	3.18	3	5	ND	2	33	.4	2	2	76	.59	.046	7	20	.74	100	.12	6	1.69	.02	.07	2	1	12
GN-16-2-L3-7	1	126	16	250	.3	20	19	1495	3.98	5	5	ND	1	57	3.3	2	2	86	.74	.146	7	22	.67	172	.10	6	1.76	.02	.11	1	1	6
GN-16-2-L3-8	1	81	12	161	.4	20	19	988	5.28	10	5	ND	2	40	1.5	2	2	129	.60	.125	6	26	.81	134	.18	4	2.15	.02	.08	1	1	1
GN-16-2-L3-9	1	256	29	153	.2	22	23	1122	5.18	8	5	ND	1	50	1.5	2	2	126	.73	.088	8	25	1.26	94	.16	4	2.52	.03	.12	1	1	3
GN-16-2-L3-10	1	478	12	218	.2	40	29	902	5.40	11	5	ND	2	54	2.4	2	2	116	.93	.207	10	26	1.18	79	.16	5	2.84	.03	.09	1	1	16
GN-16-2-L3-11	1	132	4	50	.1	16	11	401	3.19	5	5	ND	2	34	.3	2	2	86	.57	.076	9	16	.70	56	.11	3	1.49	.03	.05	1	1	10
GN-16-2-L3-12	1	103	13	129	.2	23	18	486	4.91	21	5	ND	2	31	.8	4	2	118	.50	.066	6	20	.93	84	.18	9	2.57	.02	.06	1	1	4
GN-16-2-L3-13	1	194	10	135	.2	20	20	1659	4.89	9	5	ND	2	51	1.1	2	2	118	.87	.081	9	22	.88	92	.16	8	2.40	.02	.07	1	1	11
GN-16-2-L3-14	2	161	18	131	.4	18	29	3337	5.84	11	5	ND	1	64	1.0	2	2	136	1.07	.144	9	21	.90	165	.11	3	2.49	.02	.07	1	1	8
GN-16-2-L3-15	2	79	12	150	.3	14	20	1076	5.72	13	5	ND	2	46	1.2	2	2	152	.70	.064	6	22	.81	72	.19	3	2.22	.02	.07	1	1	1
GN-16-2-L3-16	1	94	7	141	.1	20	17	941	5.24	7	5	ND	3	37	.9	2	2	133	.61	.067	6	24	.89	89	.19	4	2.45	.02	.05	1	1	7
GN-16-2-L3-17	1	120	10	138	.1	20	15	805	5.31	14	5	ND	2	40	1.0	2	2	129	.74	.120	7	22	.97	54	.17	4	2.68	.01	.06	1	1	8
GN-16-2-L3-18	1	119	13	184	.3	17	24	1320	6.71	19	5	ND	2	52	1.6	2	2	174	.89	.114	7	21	1.07	85	.20	4	2.73	.02	.07	1	1	6
GN-16-2-L3-19	1	118	11	155	.1	19	18	1155	5.10	8	5	ND	2	41	1.0	2	2	125	.77	.107	7	21	.87	103	.17	5	2.35	.01	.06	1	1	60
GN-16-2-L3-20	2	100	13	363	.1	15	24	1667	6.35	11	5	ND	2	43	2.6	2	2	155	.68	.124	6	23	.74	65	.19	6	2.05	.02	.09	1	1	7
GN-16-2-L3-21	1	122	10	217	.2	22	18	1557	5.03	5	5	ND	2	54	2.1	2	2	129	1.10	.097	7	26	.99	105	.18	9	2.43	.02	.05	1	1	8
GN-16-2-L3-22	1	114	13	148	.1	21	20	1729	5.24	11	5	ND	2	56	1.2	2	2	141	1.10	.077	6	29	.88	89	.17	6	2.21	.02	.06	1	1	8
GN-16-2-L3-23	1	260	9	75	.2	20	17	626	5.19	3	5	ND	2	39	.7	3	2	139	.81	.056	9	27	1.01	49	.20	8	3.00	.02	.07	1	1	5
GN-16-2-L3-24	1	156	3	50	.2	15	14	677	4.16	4	5	ND	1	55	.7	2	2	114	1.51	.054	5	21	1.05	30	.16	10	2.07	.02	.03	1	1	1
GN-16-2-L3-25	1	89	5	75	.2	13	9	677	3.32	6	5	ND	1	70	.6	2	2	80	2.24	.071	6	19	.76	58	.12	15	1.69	.03	.05	1	1	8
GN-16-2-L3-26	1	318	10	131	.3	20	18	1374	5.18	5	5	ND	1	97	1.3	2	2	166	1.50	.136	12	28	1.28	76	.12	7	3.38	.02	.06	1	1	1
GN-16-2-L3-27	1	198	10	240	.1	19	19	1393	4.89	7	5	ND	1	58	2.1	2	2	125	1.13	.095	8	22	.93	94	.16	5	2.49	.02	.06	1	1	4
GN-16-2-L3-28	1	156	10	114	.1	20	16	737	5.34	9	5	ND	2	52	1.2	3	2	132	.70	.086	7	23	1.12	60	.24	4	2.85	.02	.07	1	1	6
GN-16-2-L3-29	1	441	12	263	.5	15	14	455	5.68	8	5	ND	2	52	1.6	2	2	187	.96	.048	12	23	.60	41	.27	4	2.61	.02	.05	1	1	11
STANDARD C/AU-S	18	57	37	131	7.4	67	27	954	4.07	43	22	6	36	47	18.7	15	21	59	.52	.096	37	59	.93	177	.07	36	1.96	.06	.14	11	15	48

ACME [redacted] LABORATORIES LTD. [redacted] E. [redacted]TIN[redacted]ST. [redacted]COU[redacted]B.C. [redacted]6A [redacted] [redacted]ONE [redacted])25[redacted]158 [redacted]X(6[redacted]53-[redacted]

GEOCHEMICAL ANALYSIS CERTIFICATE

Homestake International Minerals File # 90-2099

1000 - 700 W. Pender St., Vancouver BC V6C 1G8 Submitted by: DARCY MARUD

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Tl ppm	Au** ppb
GN-16-1 35001	1	336	7	50	.3	33	41	512	7.42	9	5	ND	1	25	1.1	12	2	133	1.31	.100	5	48	1.98	63	.22	7	2.91	.05	.51	2	3	10
GN-16-1 35002	3	30	6	30	.3	10	8	407	1.75	12	5	ND	1	164	.2	2	2	68	2.87	.129	13	14	.69	32	.09	8	.79	.05	.06	1	2	6
GN-16-1 35003	1	231	2	15	.2	29	37	136	5.11	24	5	ND	1	25	1.7	5	2	104	1.12	.105	5	37	.98	25	.16	7	1.59	.04	.32	1	5	15
GN-16-1 35004	1	151	3	34	.2	18	35	362	5.15	5	5	ND	1	35	1.2	8	3	115	1.12	.111	4	22	1.50	54	.21	4	2.34	.05	.33	1	2	4
MH-03-1 35051	1	28	2	102	.2	40	25	790	6.26	8	5	ND	1	30	1.5	9	2	109	1.39	.098	11	99	1.97	49	.12	5	2.28	.05	.05	1	2	6
MH-03-1 35076	26	17	24	115	2.4	13	10	710	5.79	70	5	ND	1	17	1.7	4	2	57	.57	.102	14	34	1.03	21	.01	5	1.18	.02	.10	1	3	22
MH-03-1 35077	1	6	8	78	.1	54	16	571	4.87	21	5	ND	1	9	1.4	9	2	83	.51	.144	7	111	2.21	32	.15	13	1.71	.04	.02	1	2	2
MH-03-1 35124	15	6929	51	1261	8.4	46	31	3200	14.40	28	5	ND	1	8	4.4	18	2	108	.33	.088	10	61	2.70	43	.01	7	4.78	.02	.04	1	2	19
MH-03-1 35125	1	36	55	117	.4	4	18	594	4.98	17	5	ND	1	38	2.5	10	2	84	.59	.081	2	14	1.93	3	.37	4	1.81	.03	.01	3	2	4
MH-03-1 35129	1	84	8	72	.4	60	37	1069	7.78	25	5	ND	1	51	1.3	13	2	165	3.24	.068	3	75	3.35	37	.14	2	3.88	.10	.04	1	2	1
MH-03-1 35130	1	251	2	65	.3	37	26	611	4.55	11	5	ND	1	119	1.9	10	2	76	2.09	.075	3	32	1.61	39	.17	3	4.53	.29	.04	1	4	2
MH-03-1 35201	2	33	6	18	.2	5	6	252	7.96	3	5	ND	1	114	1.5	7	2	168	.19	.081	8	19	1.42	55	.27	6	1.69	.16	.05	1	2	3
NU-20-1 35052	1	49	8	60	.2	84	21	817	3.70	9	8	ND	1	78	1.1	9	2	86	9.14	.077	10	97	2.18	19	.01	4	2.43	.01	.06	1	7	3
NU-20-1 35078	2	148	3	58	.2	70	28	633	5.13	2	5	ND	1	29	2.4	9	2	118	1.85	.135	4	114	2.01	14	.15	15	2.75	.03	.02	1	6	1
NU-20-1 35079	1	8	2	53	.2	12	4	473	1.30	10	5	ND	1	23	.8	4	2	16	39.85	.017	4	11	.36	16	.01	11	.10	.01	.01	1	2	7
NU-20-1 35080	1	4	3	8	.1	8	1	24	.18	4	5	ND	1	3	.2	2	2	1	6.54	.023	2	5	.02	2	.01	6	.03	.01	.01	1	2	5
NU-20-1 35126	1	2	2	13	.1	5	2	39	.17	5	5	ND	1	16	.2	3	2	1	5.82	.005	2	10	1.75	1	.01	13	.01	.01	.01	1	2	13
NU-20-1 35127	1	3	5	78	.2	6	6	934	2.92	8	6	ND	1	49	1.4	2	2	6	7.73	.069	13	4	.40	88	.01	2	.99	.01	.11	1	2	7
NU-20-1 35128	2	104	6	112	.2	7	16	114	7.06	22	5	ND	1	78	1.7	7	2	29	4.17	.098	5	15	1.52	24	.01	2	2.40	.01	.10	1	2	3
STANDARD C/AU-R	20	62	41	136	7.4	72	32	1057	3.92	42	19	8	36	53	18.8	16	20	60	.52	.097	38	56	.81	179	.08	36	1.94	.06	.13	11	2	536

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM.
- SAMPLE TYPE: Rock AU** ANALYSIS BY FA\ICP FROM 10 GM SAMPLE.

DATE RECEIVED: JUN 28 1990 **DATE REPORT MAILED:** July 3/90. **SIGNED BY.** C. Leong .D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS

APPENDIX "C"

SAMPLE STATISTICS

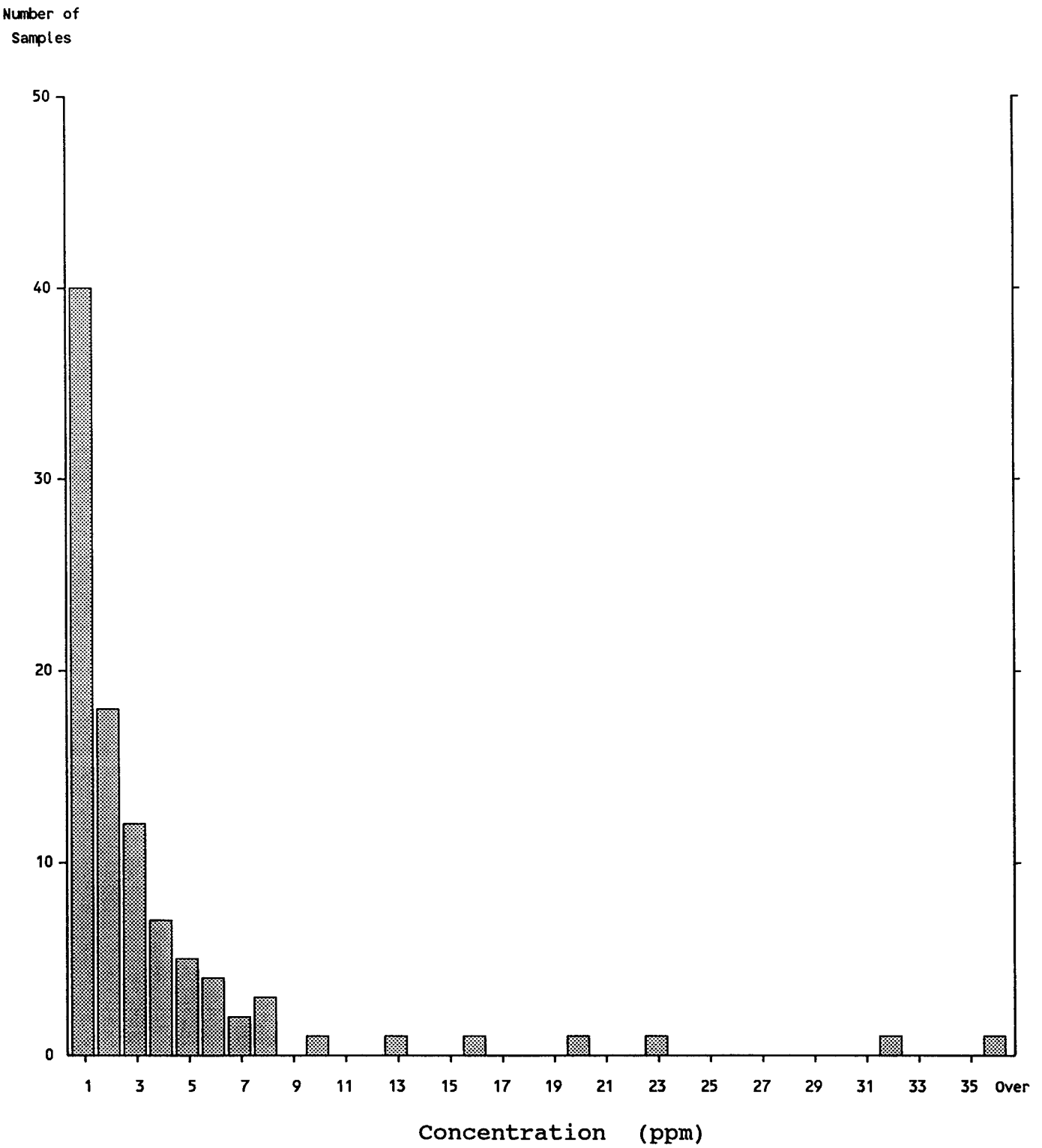
HOMESTAKE MINERALS - 90-2100

98 SAMPLES

ELEMENT	Min.	Max.	Mean	Med.	Std D	Units
Mo	1	88	4	2	10	ppm
Cu	48	1085	159	121	137	ppm
Pb	3	29	12	12	4	ppm
Zn	50	363	128	117	59	ppm
Ag	0.1	1.0	0.3	0.2	0.2	ppm
Ni	13	144	28	22	18	ppm
Co	8	100	23	20	12	ppm
Mn	374	3337	804	665	444	ppm
Fe	3.18	14.19	6.13	5.95	1.65	%
As	3	70	14	11	12	ppm
U	5	5	5	5	0	ppm
Au	2	2	2	2	0	ppm
Th	1	3	2	2	1	ppm
Sr	26	97	46	42	13	ppm
Cd	0.3	3.3	1.2	1.0	0.6	ppm
Sb	2	6	2	2	1	ppm
Bi	2	3	2	2	0	ppm
V	76	316	157	157	39	ppm
Ca	0.41	2.24	0.81	0.70	0.30	%
P	0.041	0.221	0.087	0.078	0.037	%
La	5	15	7	6	2	ppm
Cr	16	49	28	27	6	ppm
Mg	0.41	1.57	0.99	0.99	0.23	%
Ba	14	172	61	53	30	ppm
Ti	0.06	0.28	0.20	0.20	0.05	%
B	2	15	5	4	2	ppm
Al	1.49	3.71	2.52	2.51	0.43	%
Na	0.01	0.04	0.02	0.02	0.01	%
K	0.02	0.19	0.06	0.06	0.03	%
W	1	2	1	1	0	ppm
Tl	1	1	1	1	0	ppm
Au**	1	65	12	9	13	ppb

HOMESTAKE MINERALS - 90-2100

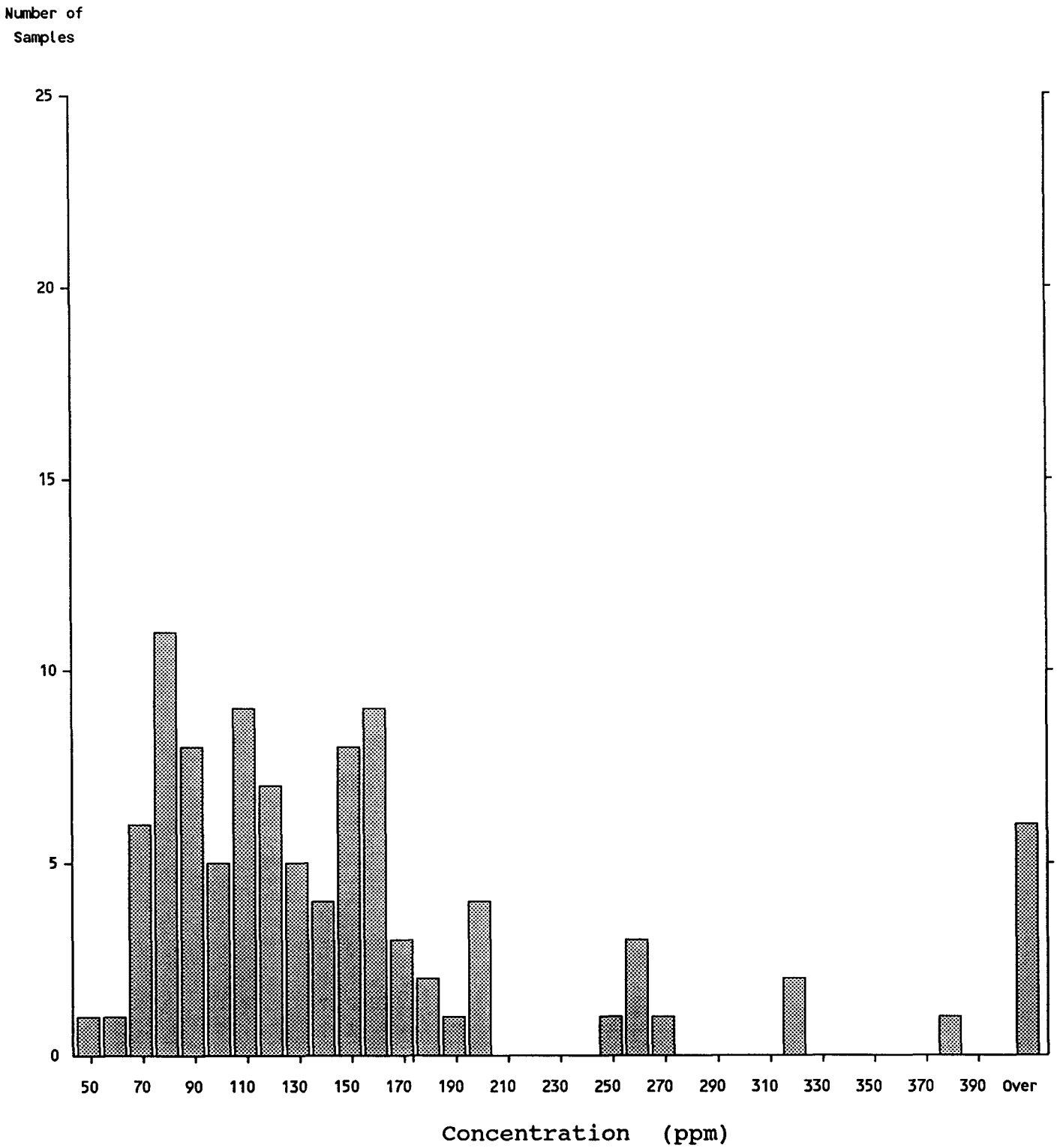
Mo



98 Samples	Maximum:	88		Mean:	4
	Minimum:	1		Median:	2
			Standard Deviation:		10

HOMESTAKE MINERALS - 90-2100

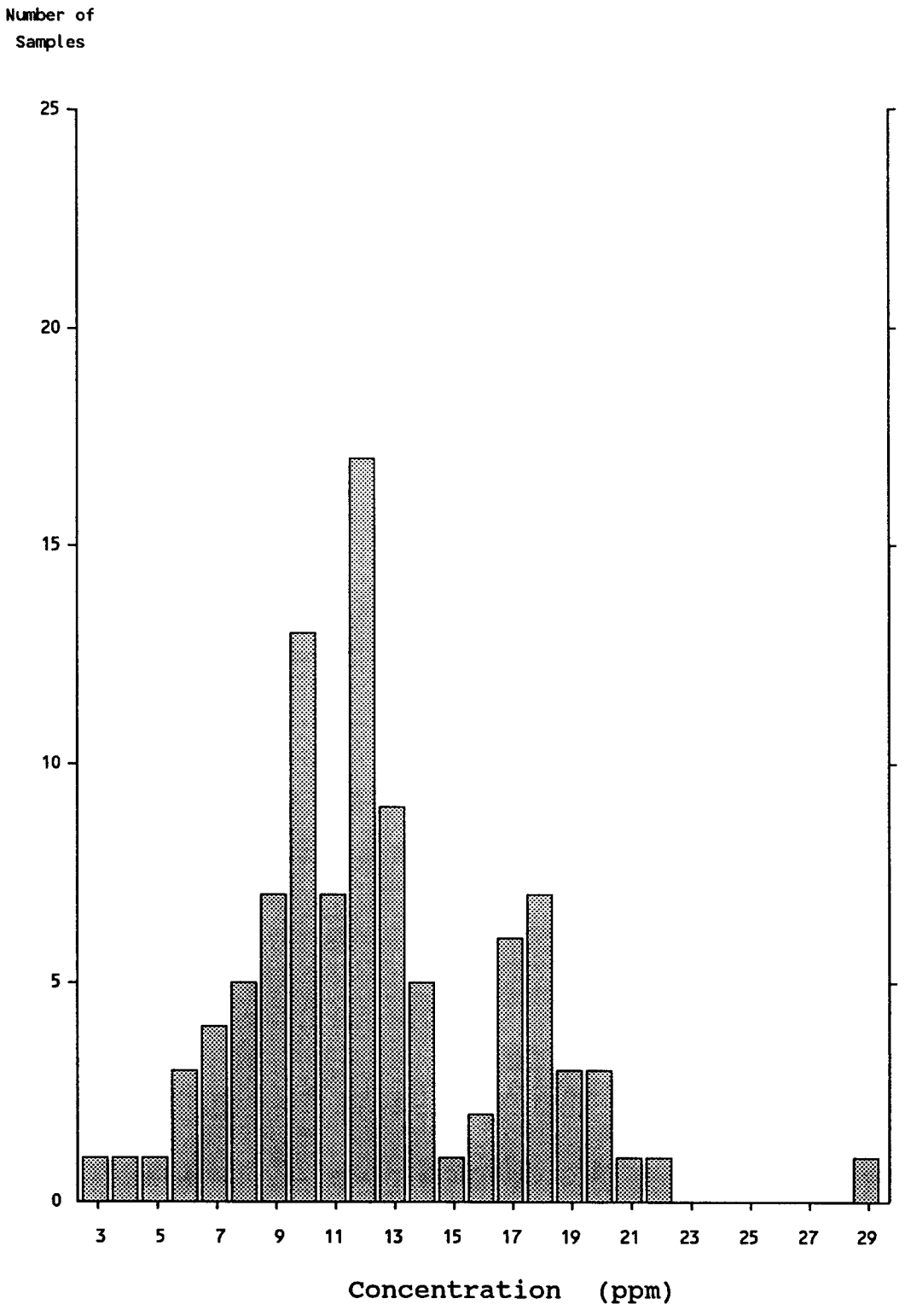
Cu



98 Samples	Maximum:	1085	Mean: 159
	Minimum:	48	Median: 121
			Standard Deviation: 137

HOMESTAKE MINERALS - 90-2100

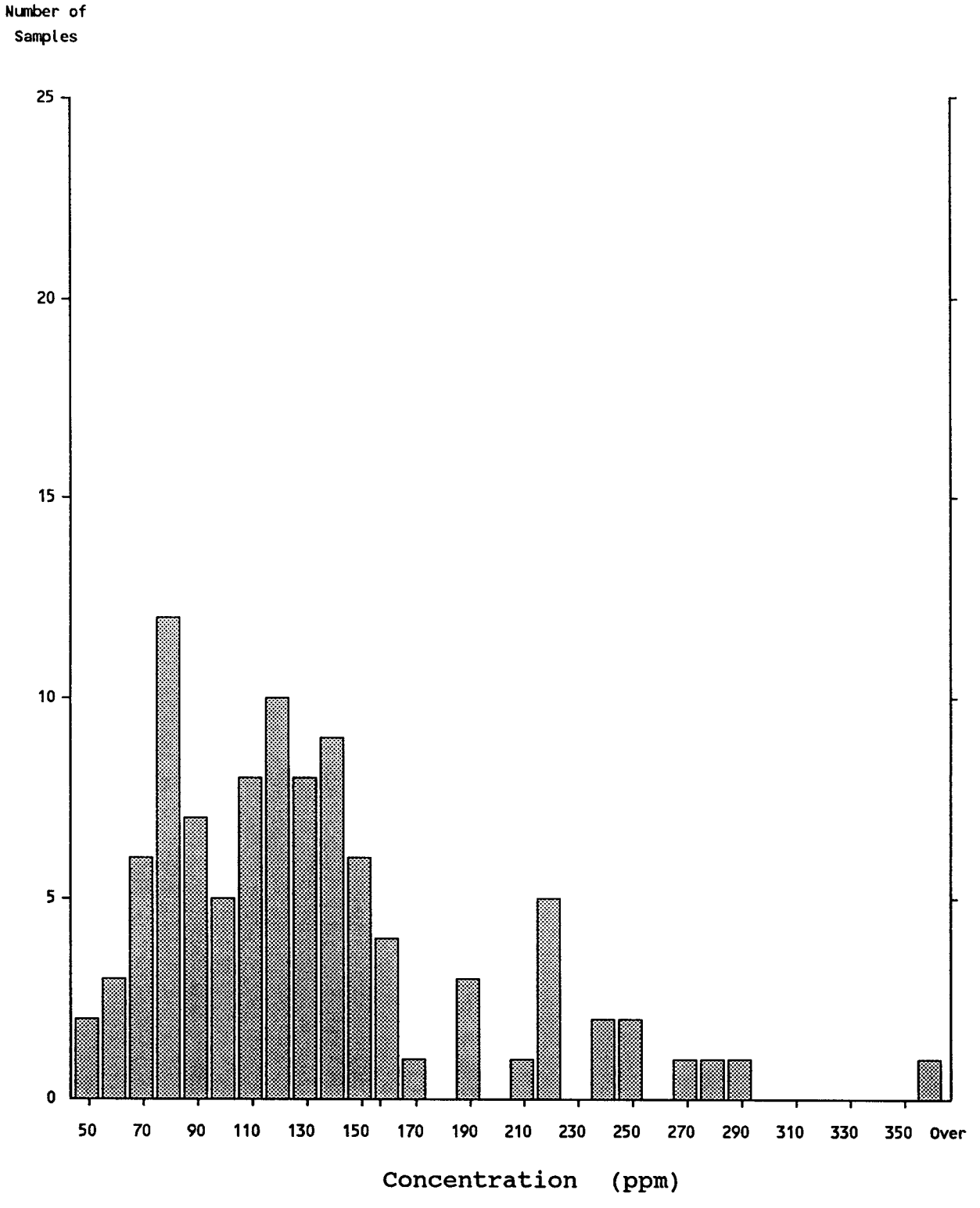
Pb



98 Samples	Maximum:	29		Mean:	12
	Minimum:	3		Median:	12
			Standard Deviation:		4

HOMESTAKE MINERALS - 90-2100

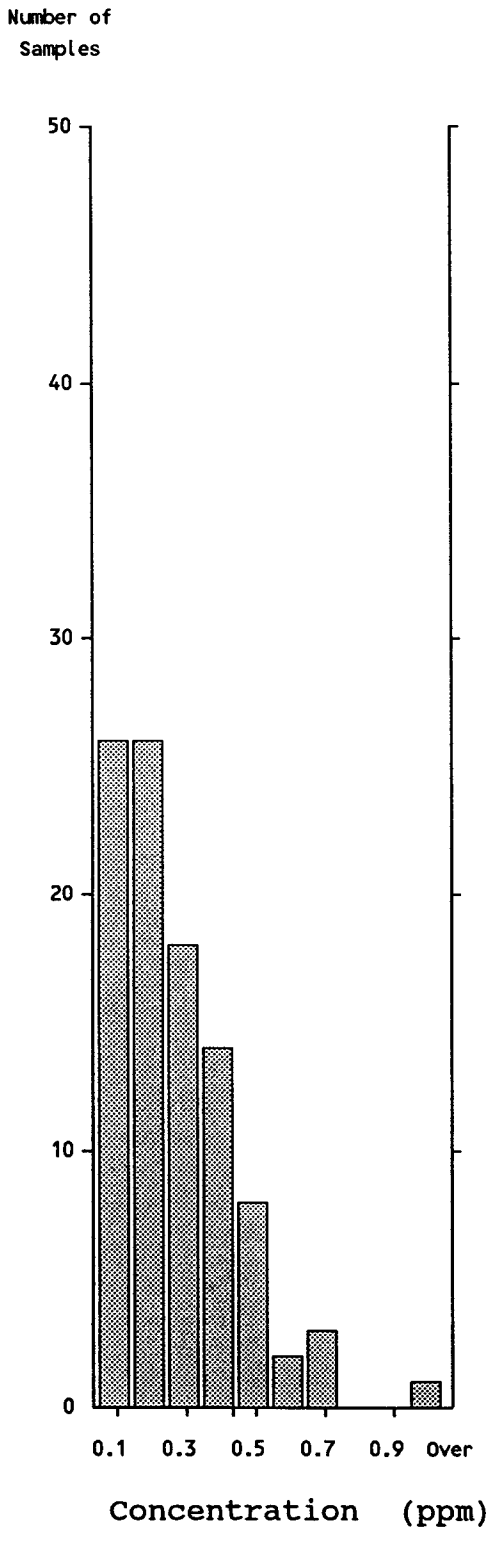
Zn



98 Samples	Maximum:	363		Mean:	128
	Minimum:	50		Median:	117
			Standard Deviation:		59

HOMESTAKE MINERALS - 90-2100

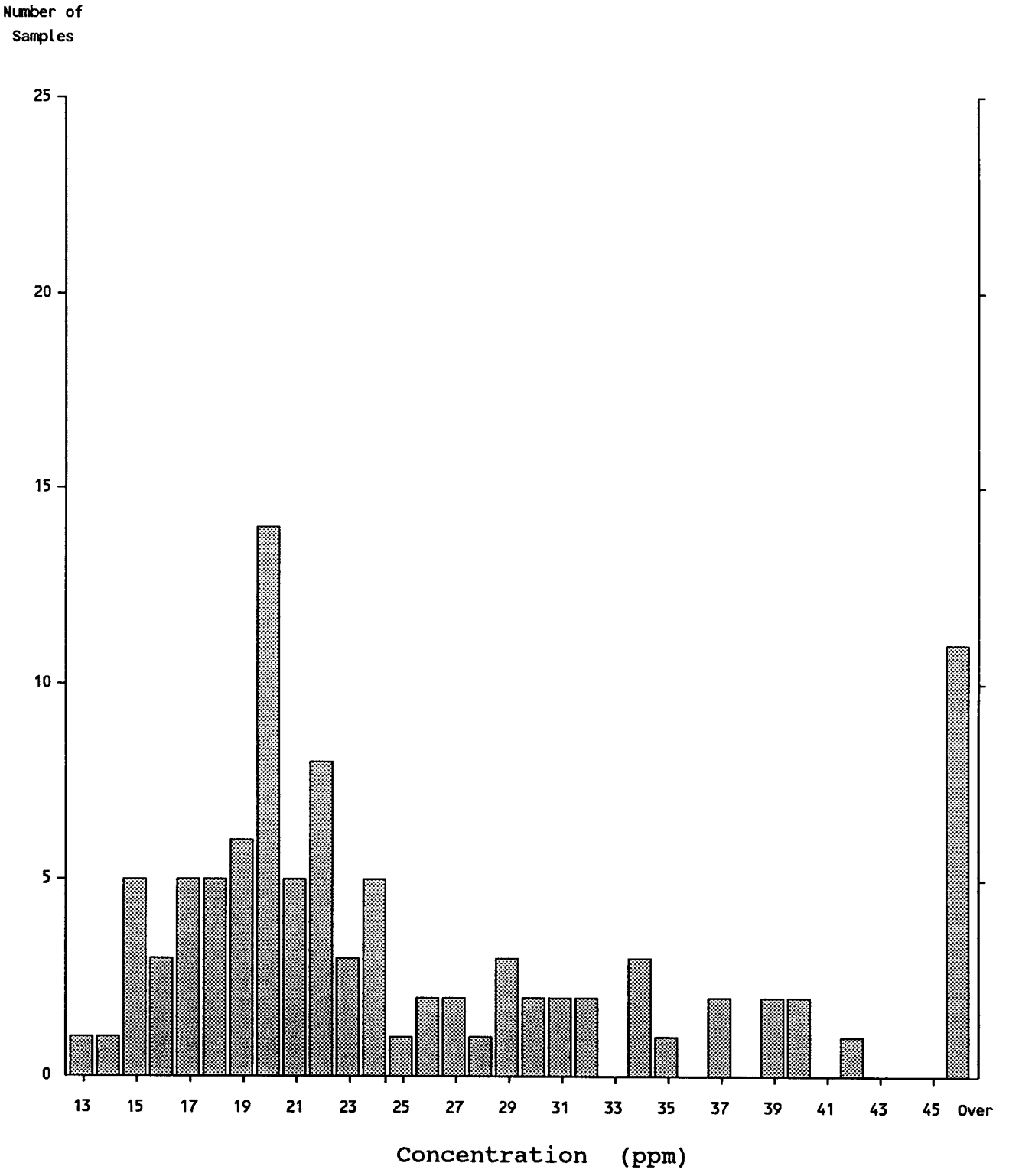
Ag



98 Samples	Maximum:	1.0	Mean:	0.3
	Minimum:	0.1	Median:	0.2
			Standard Deviation:	0.2

HOMESTAKE MINERALS - 90-2100

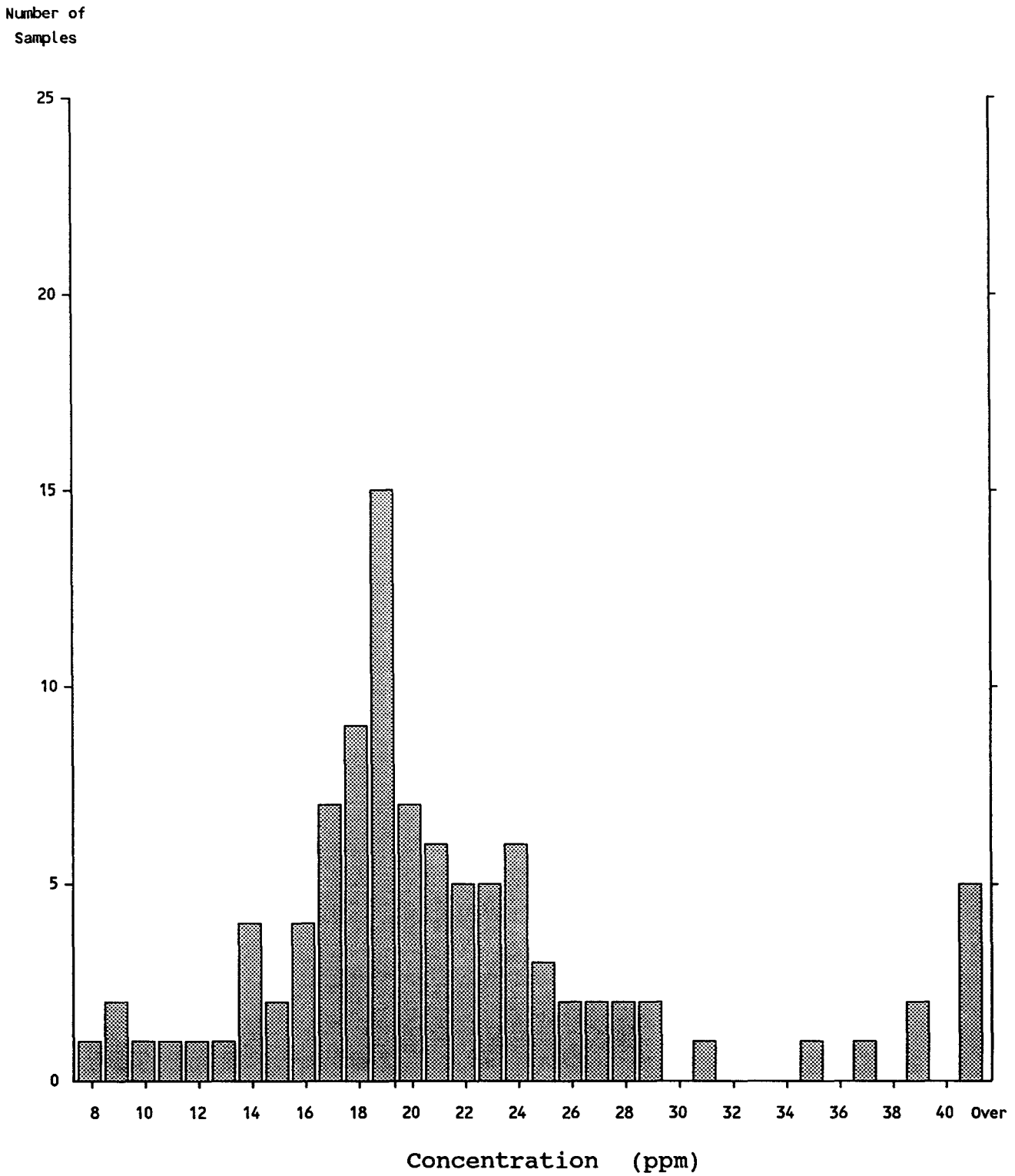
Ni



98 Samples	Maximum:	144	Mean:	28
	Minimum:	13	Median:	22
			Standard Deviation:	18

HOMESTAKE MINERALS - 90-2100

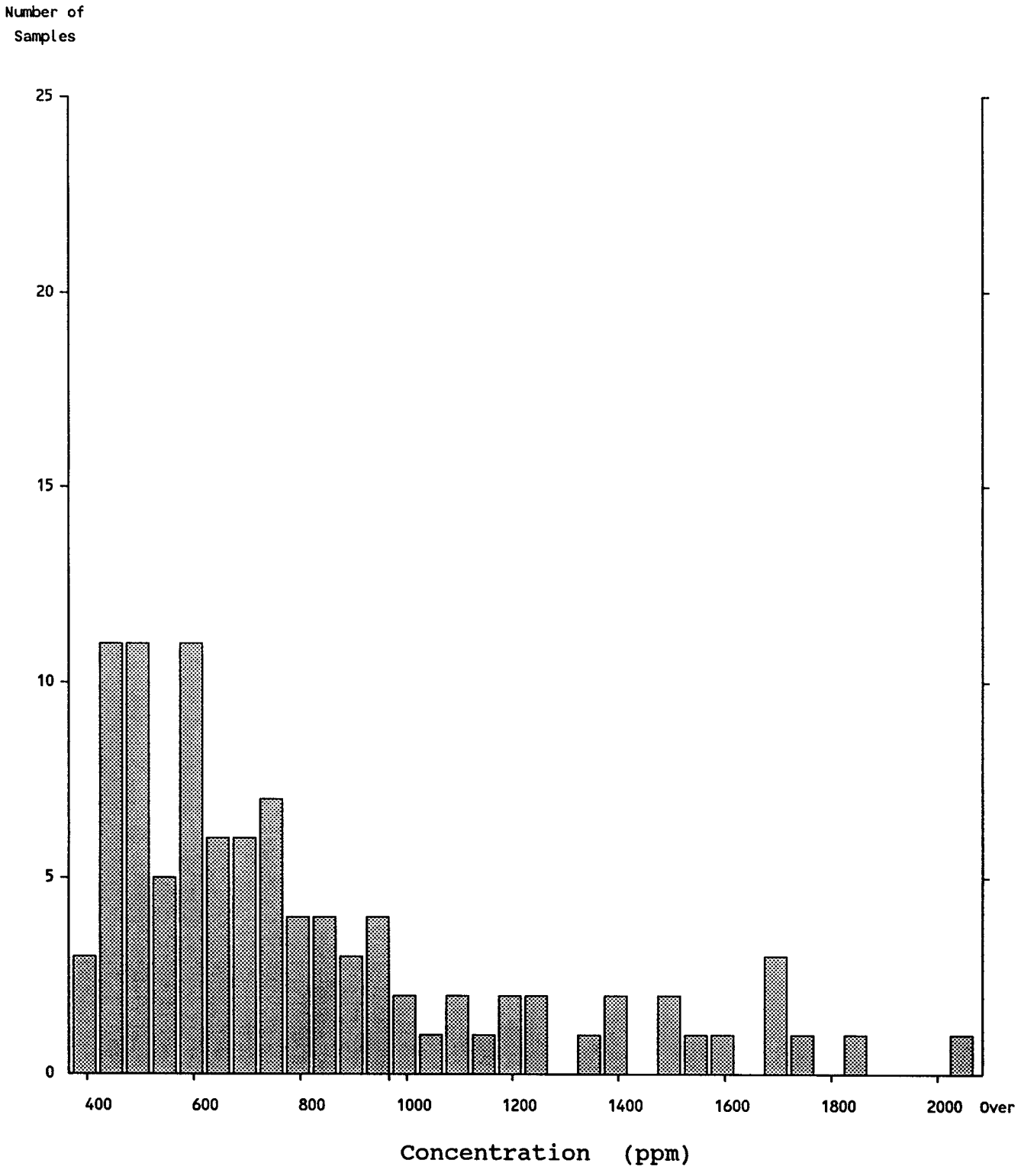
Co



98 Samples	Maximum:	100	Mean:	23
	Minimum:	8	Median:	20
			Standard Deviation:	12

HOMESTAKE MINERALS - 90-2100

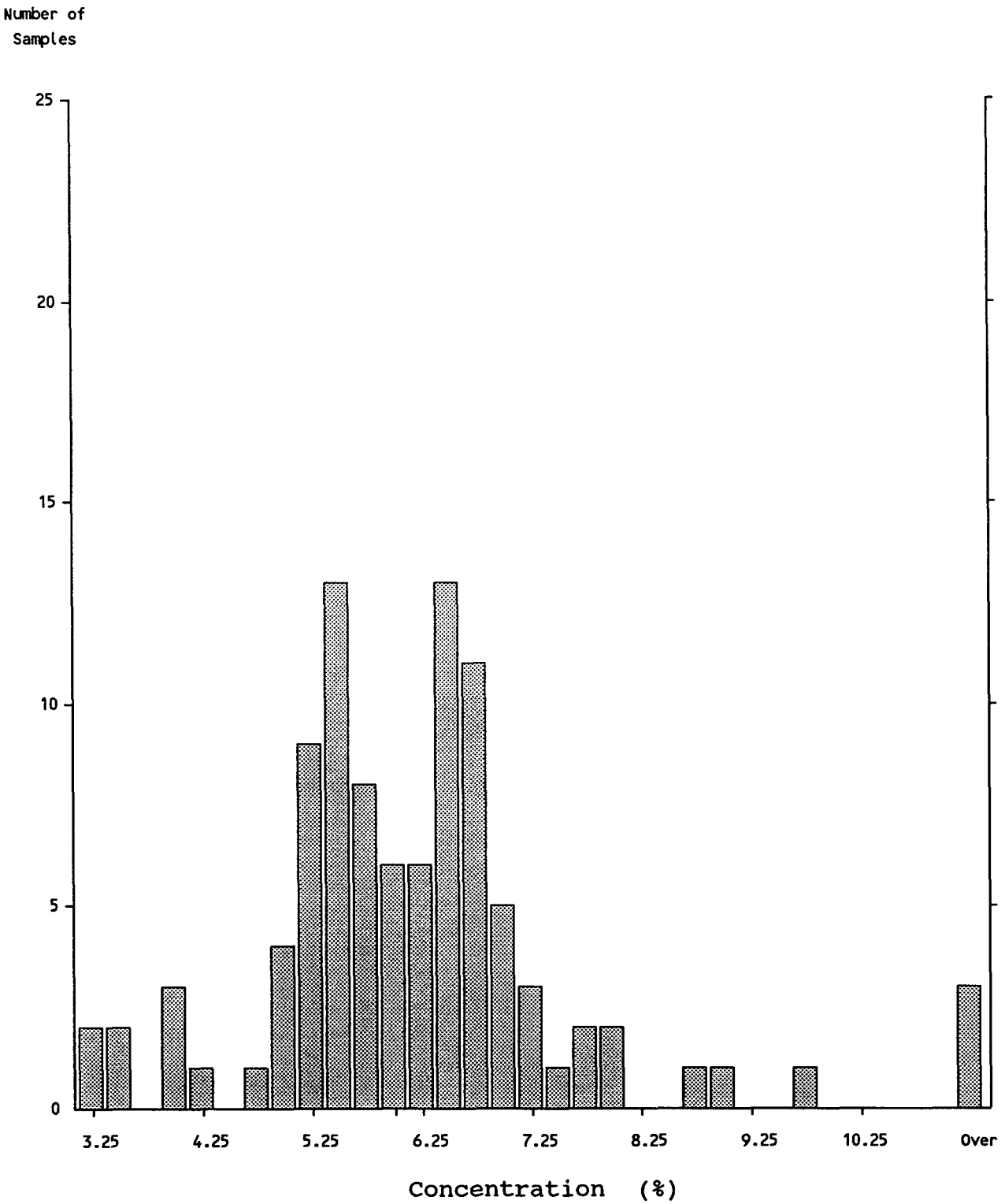
Mn



98 Samples	Maximum:	3337	Mean: 804
	Minimum:	374	Median: 665
			Standard Deviation: 444

HOMESTAKE MINERALS - 90-2100

Fe



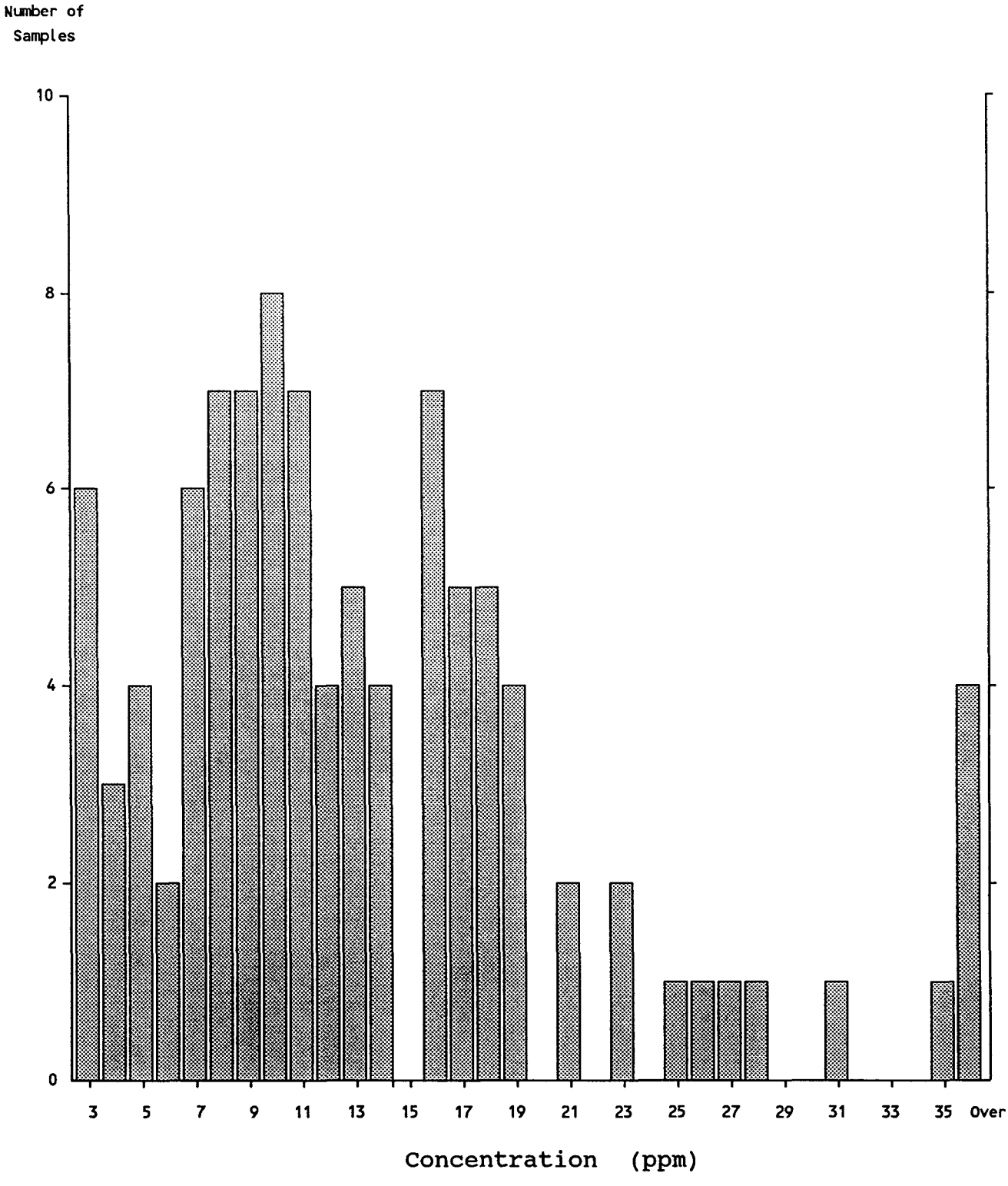
98 Samples

Maximum: 14.19
Minimum: 3.18

Mean: 6.13
Median: 5.95
Standard Deviation: 1.65

HOMESTAKE MINERALS - 90-2100

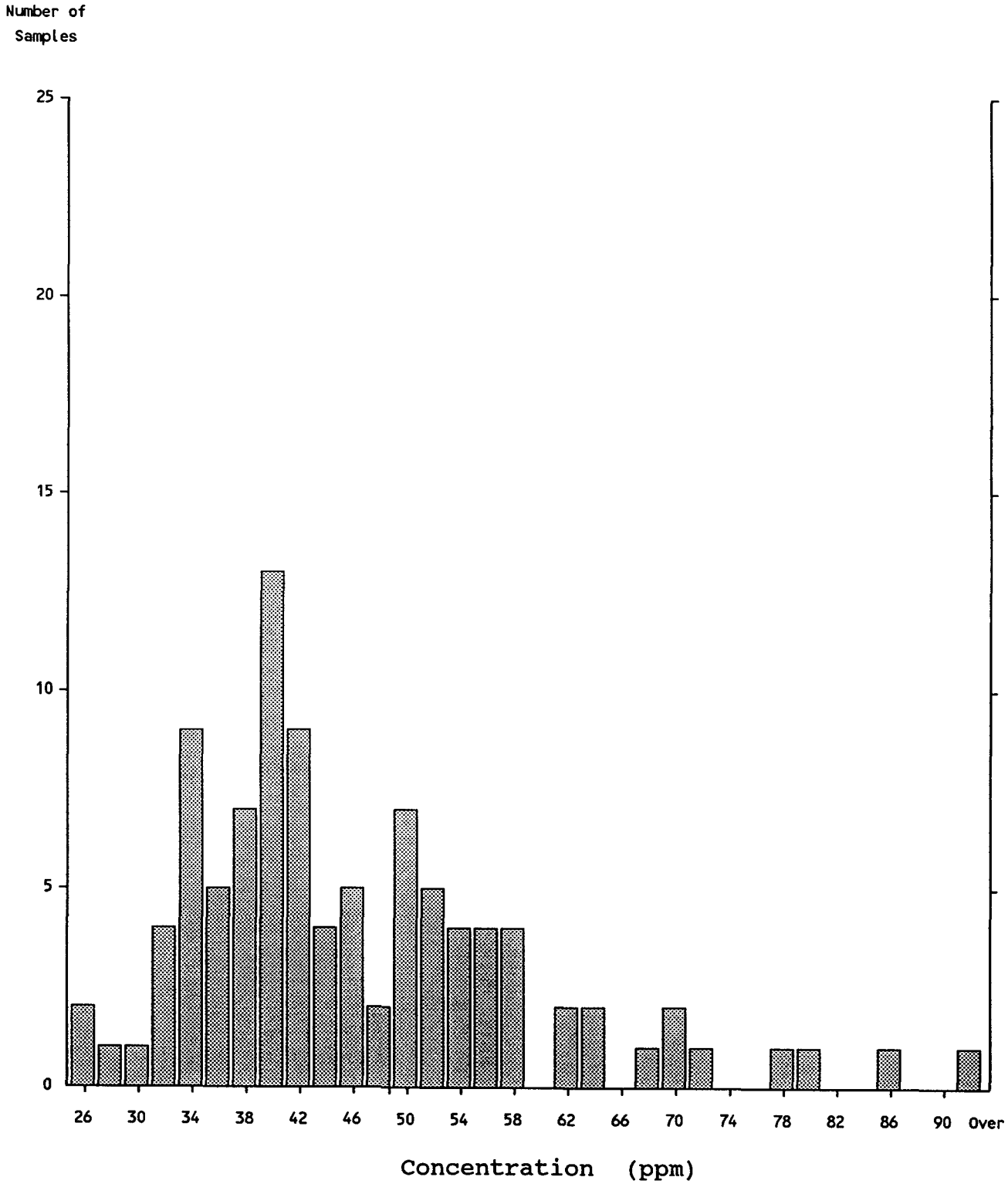
As



98 Samples	Maximum:	70		Mean:	14
	Minimum:	3		Median:	11
			Standard Deviation:		12

HOMESTAKE MINERALS - 90-2100

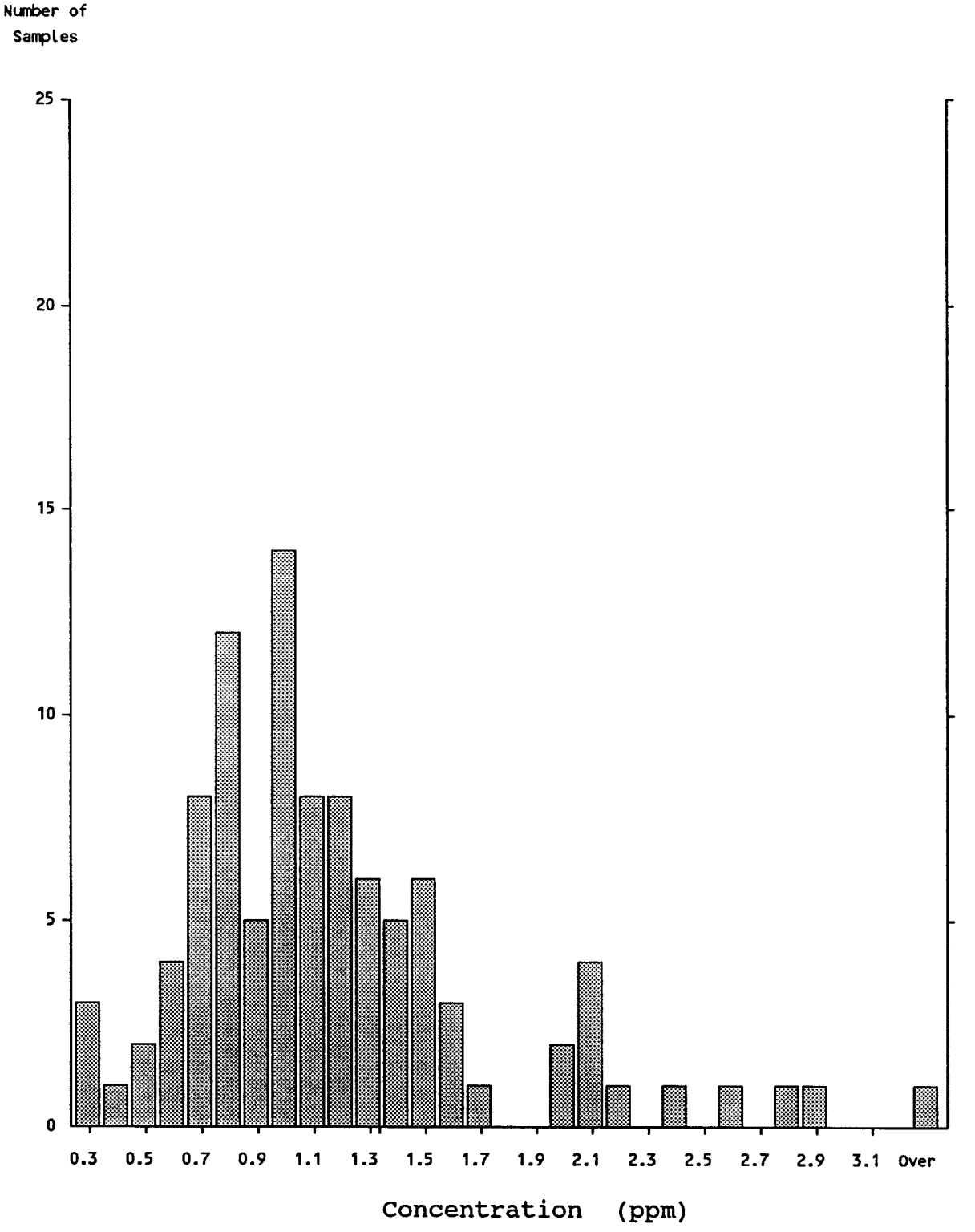
Sr



98 Samples	Maximum:	97	Mean:	46
	Minimum:	26	Median:	42
			Standard Deviation:	13

HOMESTAKE MINERALS - 90-2100

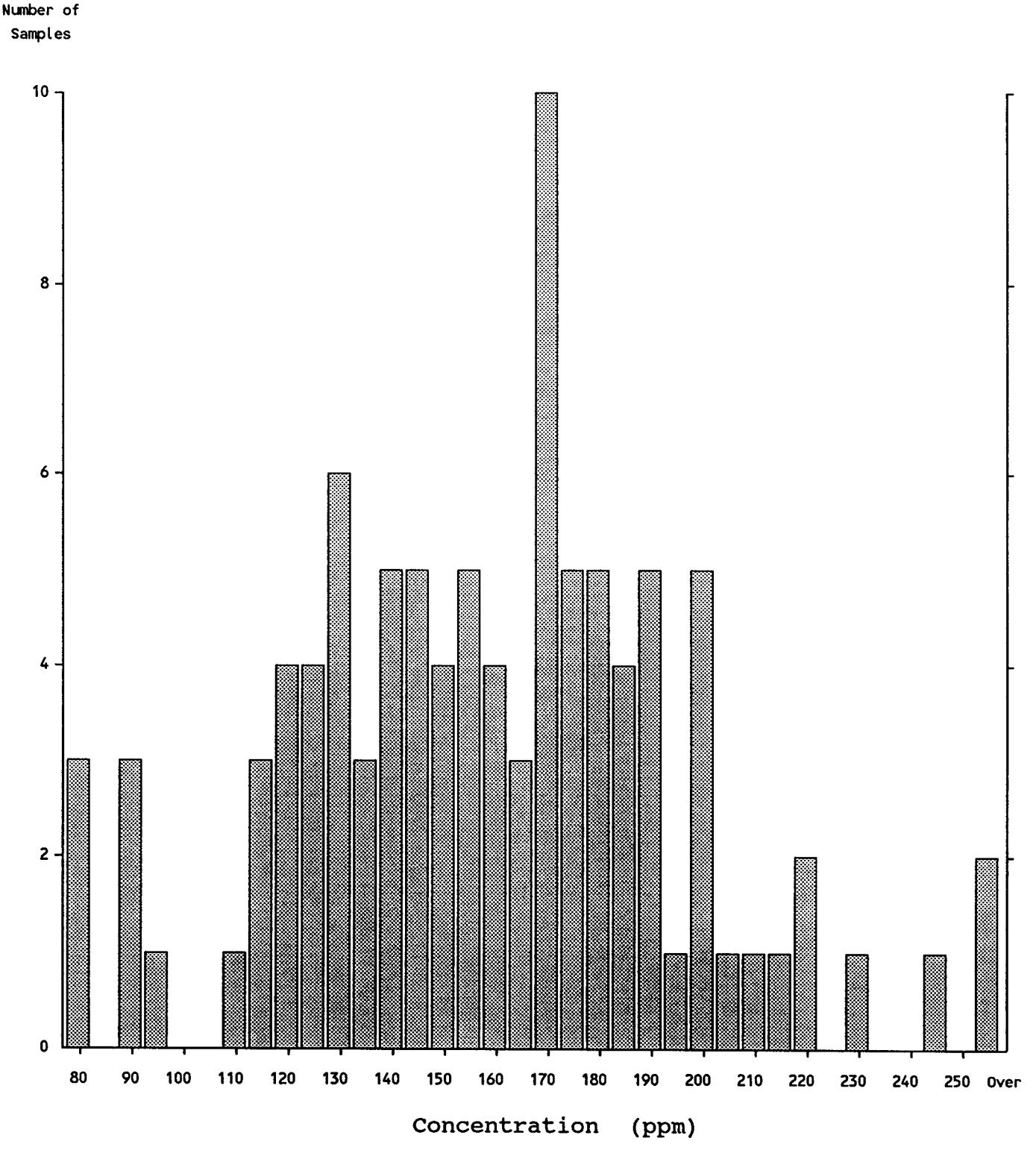
Cd



98 Samples	Maximum:	3.3	Mean:	1.2
	Minimum:	0.3	Median:	1.0
			Standard Deviation:	0.6

HOMESTAKE MINERALS - 90-2100

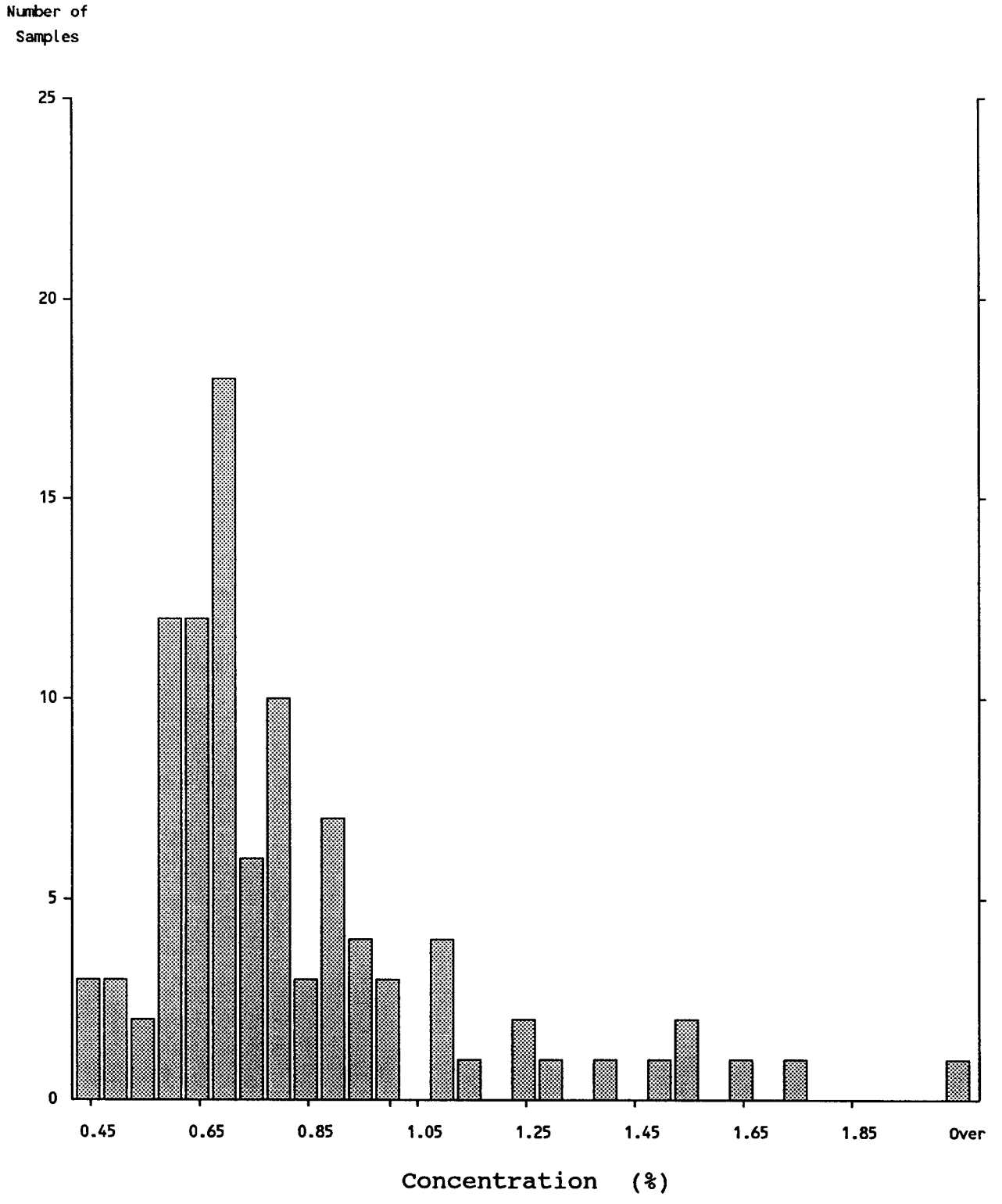
V



98 Samples	Maximum:	316		Mean:	157
	Minimum:	76		Median:	157
			Standard Deviation:		39

HOMESTAKE MINERALS - 90-2100

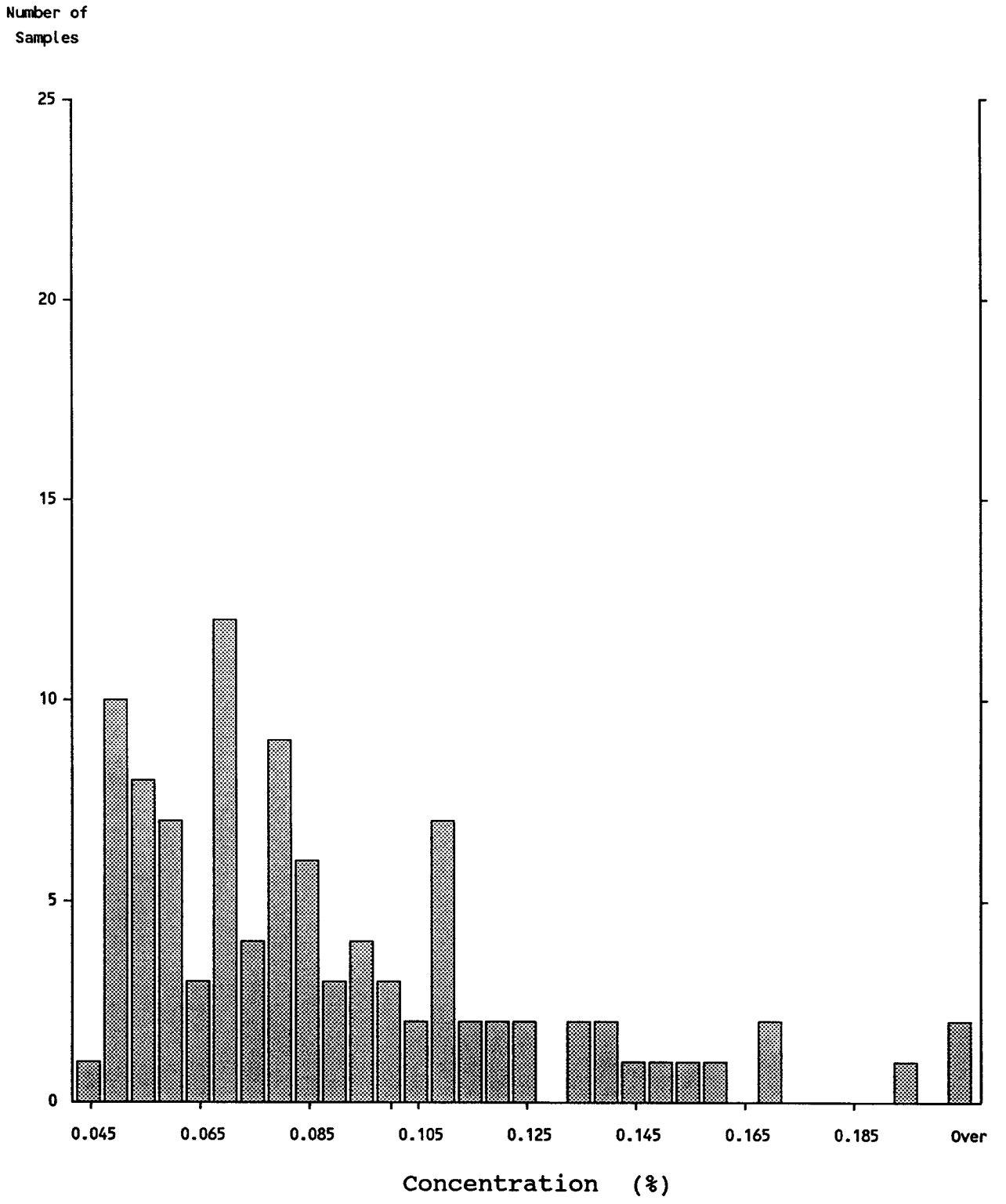
Ca



98 Samples	Maximum:	2.24	Mean:	0.81
	Minimum:	0.41	Median:	0.70
			Standard Deviation:	0.30

HOMESTAKE MINERALS - 90-2100

P



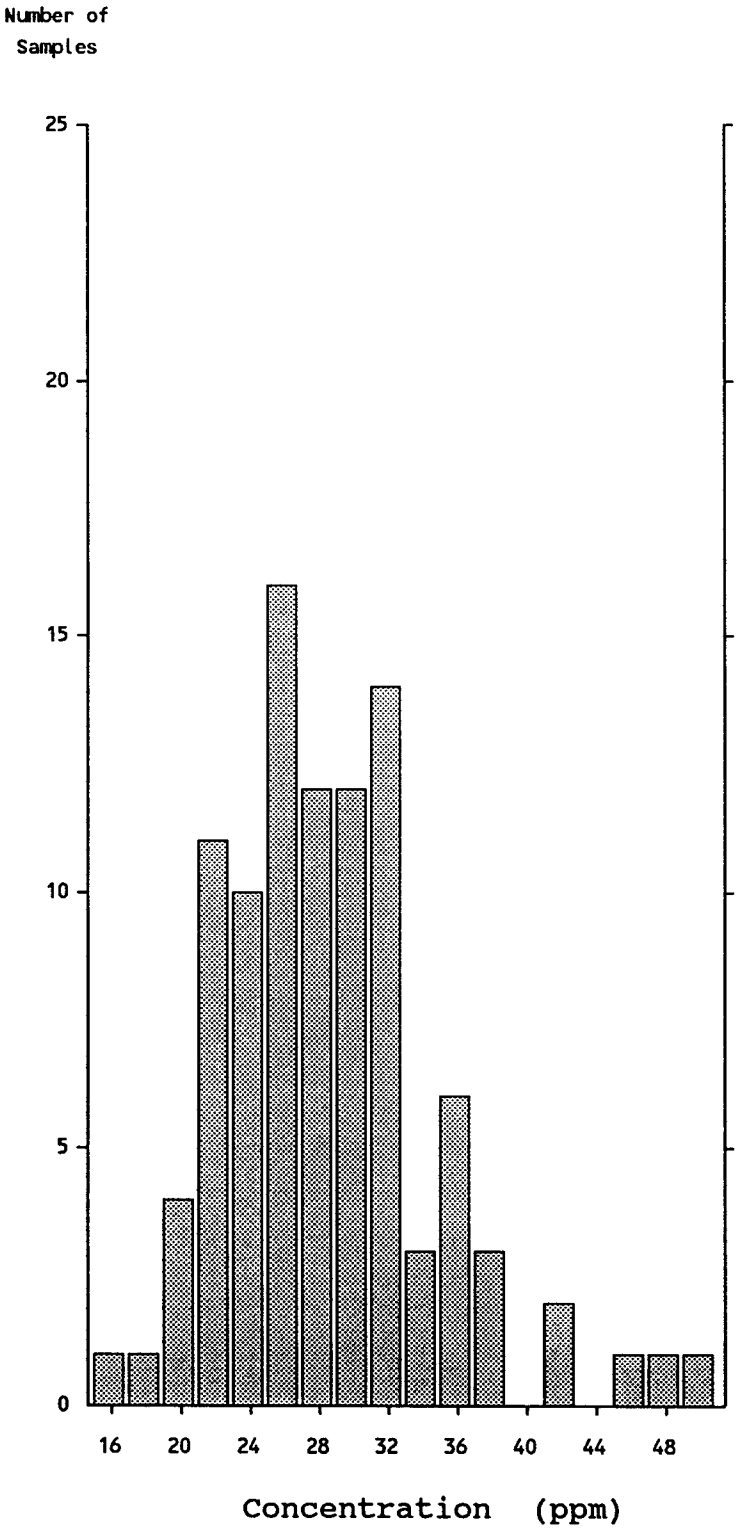
98 Samples

Maximum: 0.221
Minimum: 0.041

Mean: 0.087
Median: 0.078
Standard Deviation: 0.037

HOMESTAKE MINERALS - 90-2100

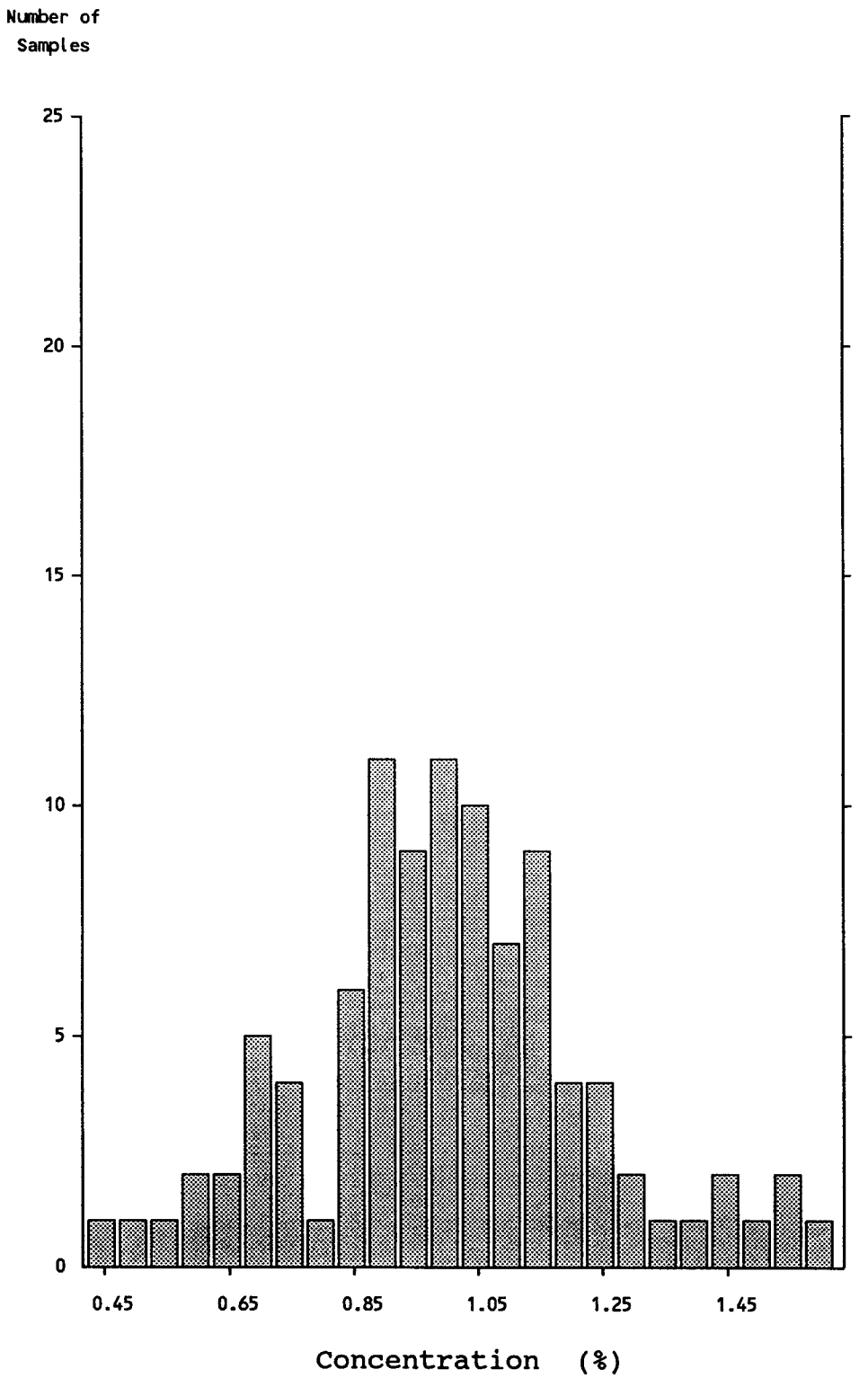
Cr



98 Samples	Maximum:	49		Mean:	28
	Minimum:	16		Median:	27
			Standard Deviation:		6

HOMESTAKE MINERALS - 90-2100

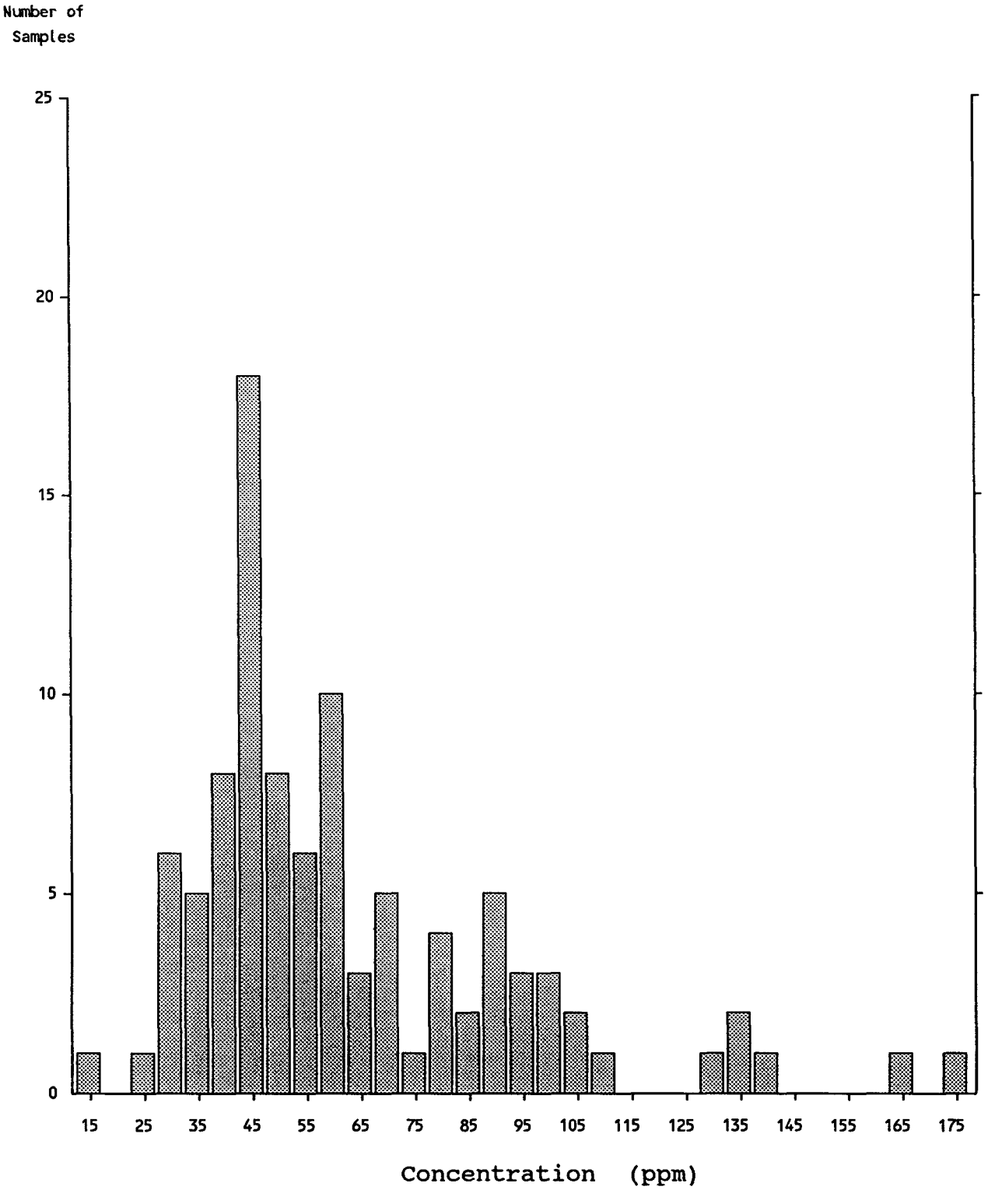
Mg



98 Samples	Maximum:	1.57	Mean:	0.99
	Minimum:	0.41	Median:	0.99
			Standard Deviation:	0.23

HOMESTAKE MINERALS - 90-2100

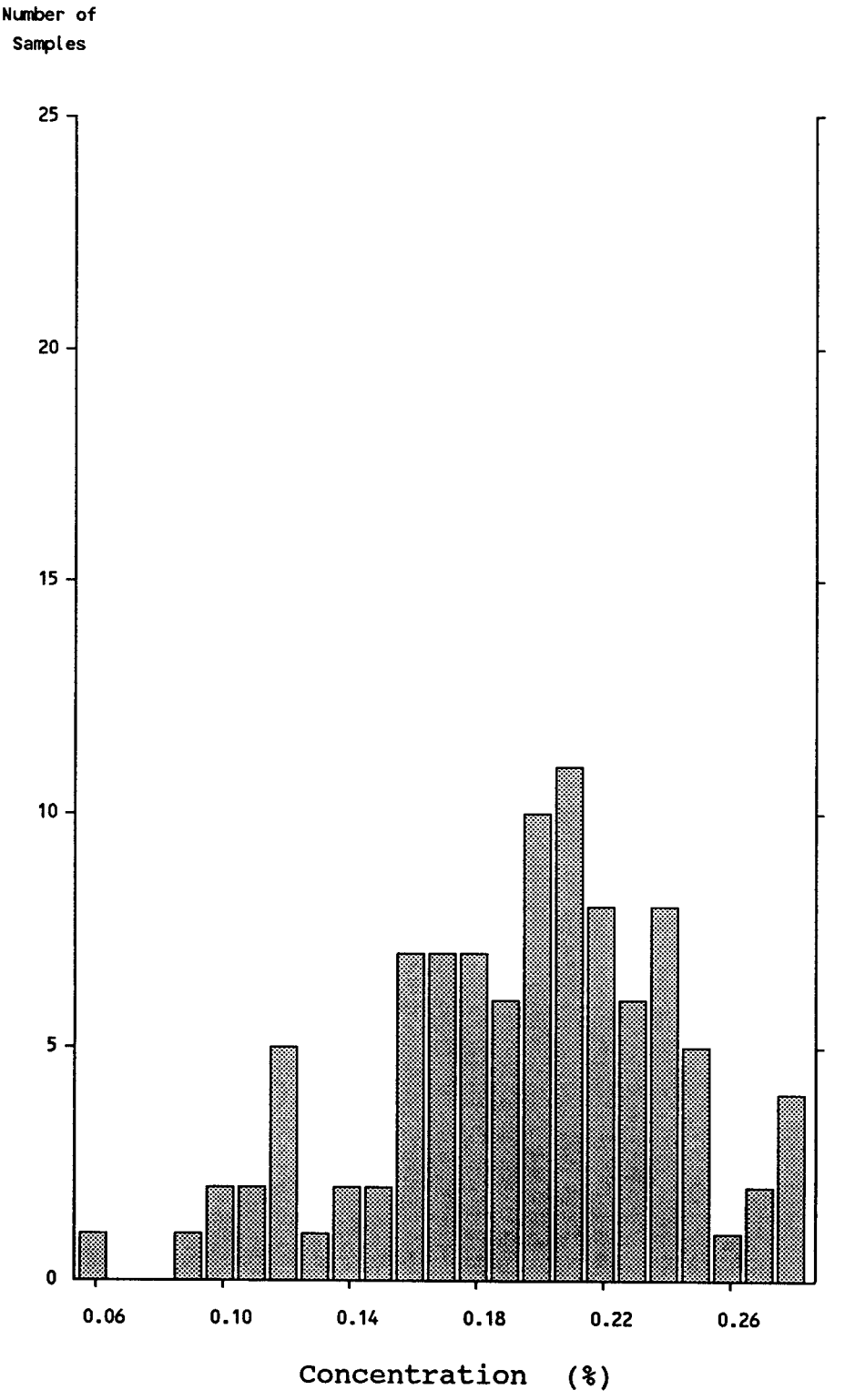
Ba



98 Samples	Maximum:	172		Mean:	61
	Minimum:	14		Median:	53
			Standard Deviation:		30

HOMESTAKE MINERALS - 90-2100

Ti



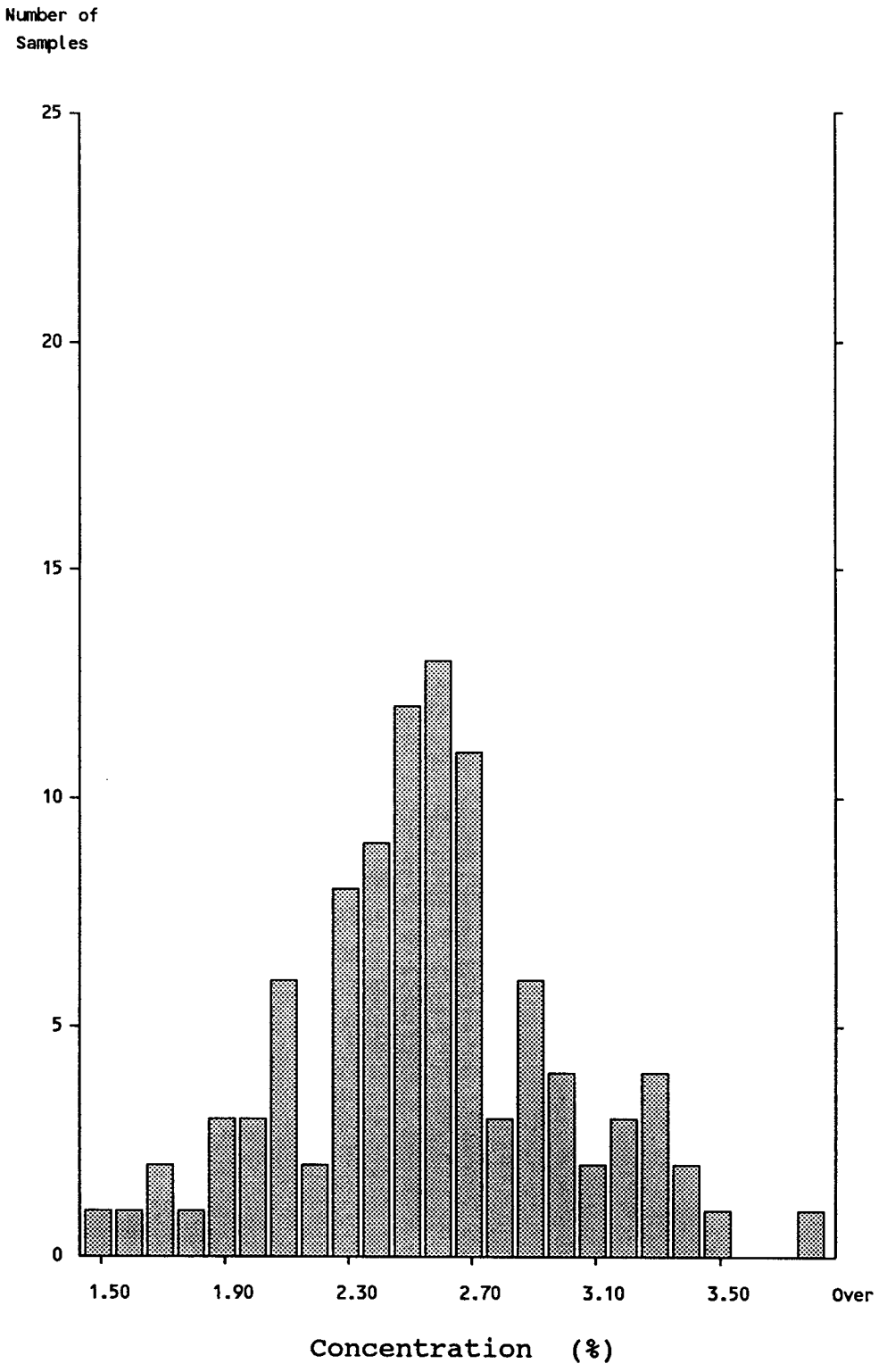
98 Samples

Maximum: 0.28
Minimum: 0.06

Mean: 0.20
Median: 0.20
Standard Deviation: 0.05

HOMESTAKE MINERALS - 90-2100

Al



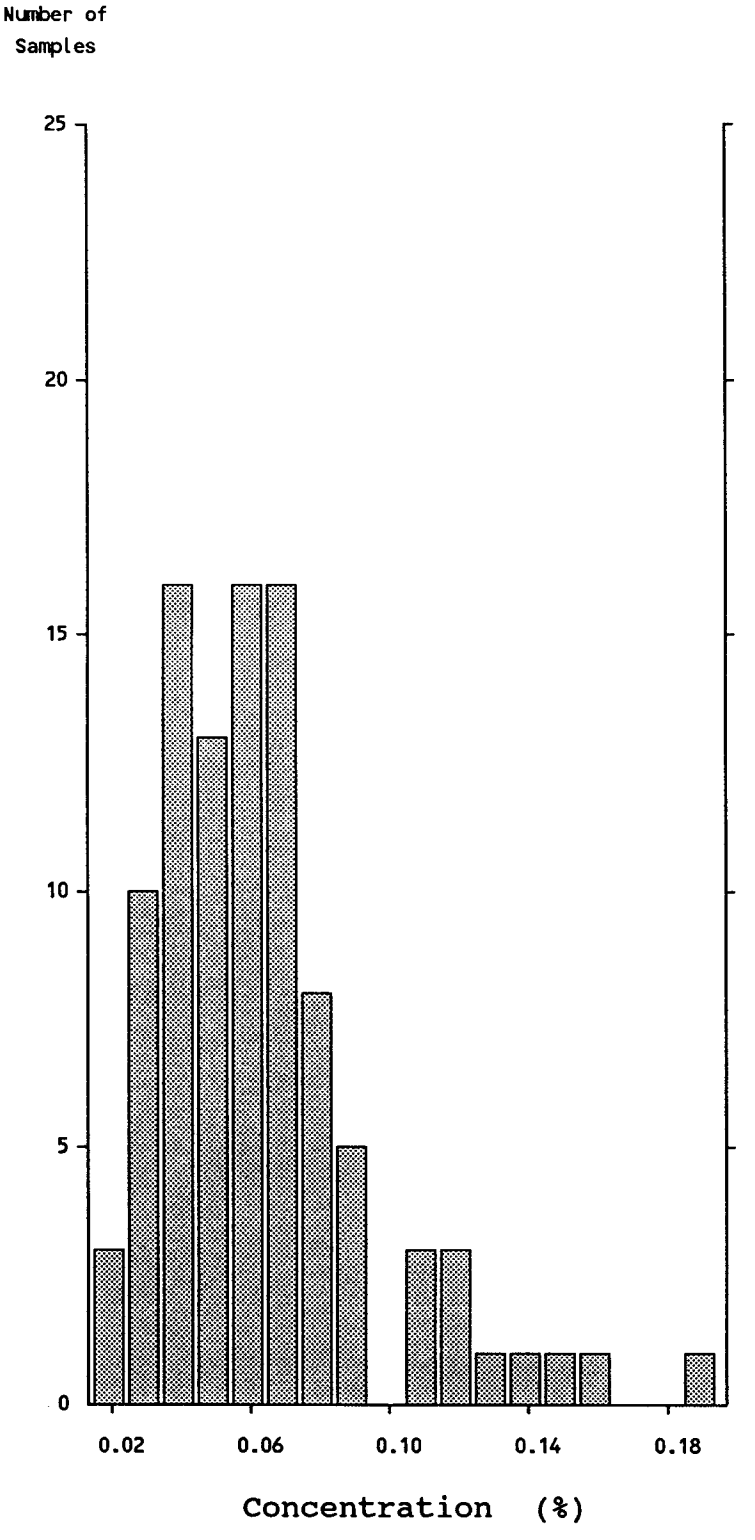
98 Samples

Maximum: 3.71
Minimum: 1.49

Mean: 2.52
Median: 2.51
Standard Deviation: 0.43

HOMESTAKE MINERALS - 90-2100

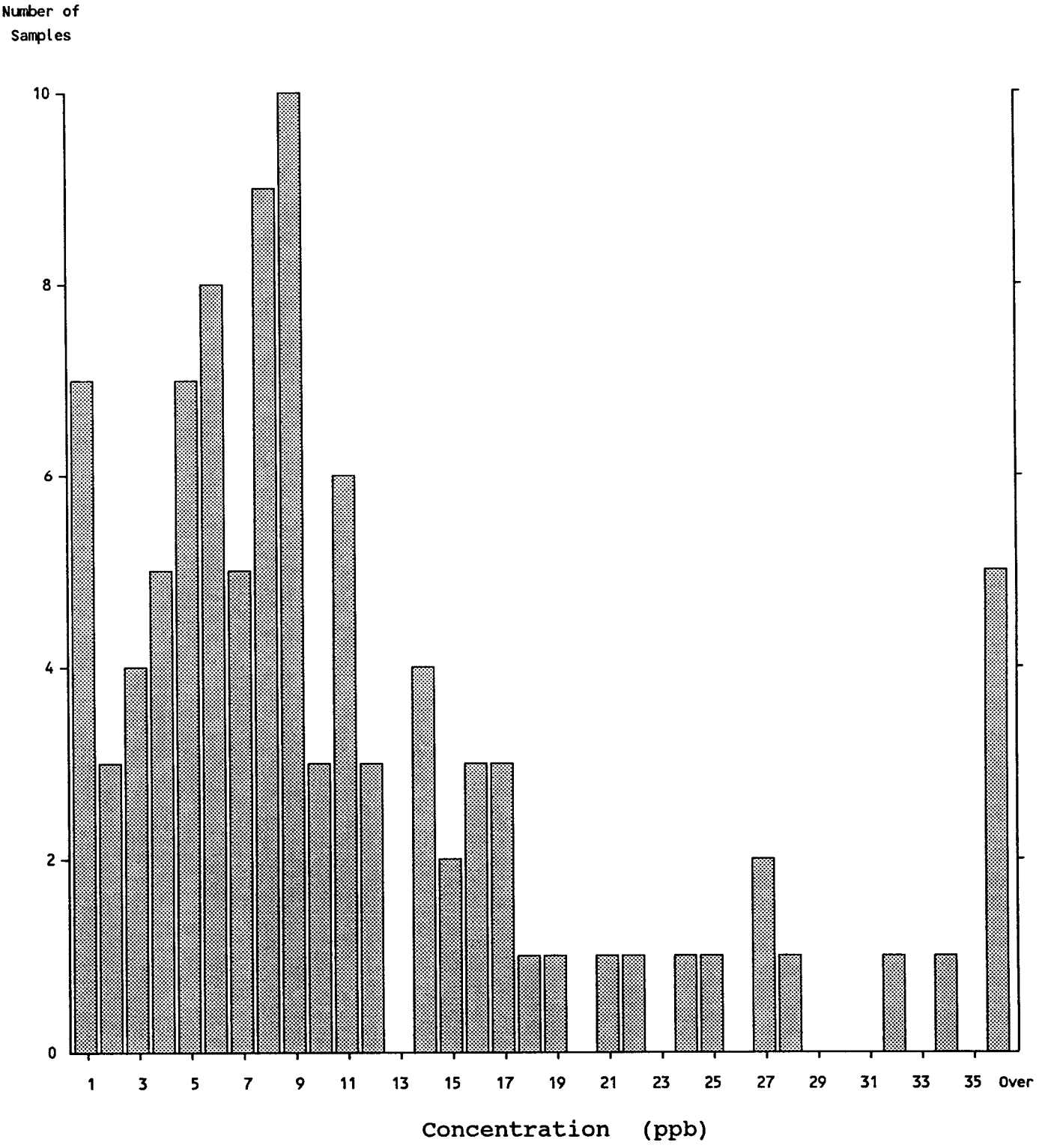
K



98 Samples	Maximum:	0.19	Mean:	0.06
	Minimum:	0.02	Median:	0.06
			Standard Deviation:	0.03

HOMESTAKE MINERALS - 90-2100

Au**



98 Samples	Maximum:	65		Mean:	12
	Minimum:	1		Median:	9
			Standard Deviation:		13

APPENDIX "D"

STATEMENT OF QUALIFICATIONS

STATEMENT OF QUALIFICATIONS

I, Darcy Edward Marud, of 2205 Graveley Street, Vancouver, British Columbia, Canada, hereby certify that:

1. I am a graduate of the University of Saskatchewan, having been granted the degree of Bachelor of Sciences - Honours degree in Geology in 1985.

2. I have practiced my profession as a geologist in mineral exploration since 1985.

3. I am presently employed as a geologist with Homestake Mineral Development Company of #1000 - 700 West Pender Street, Vancouver, British Columbia.

4. The work done in the accompanying report was done under my supervision and with my participation.

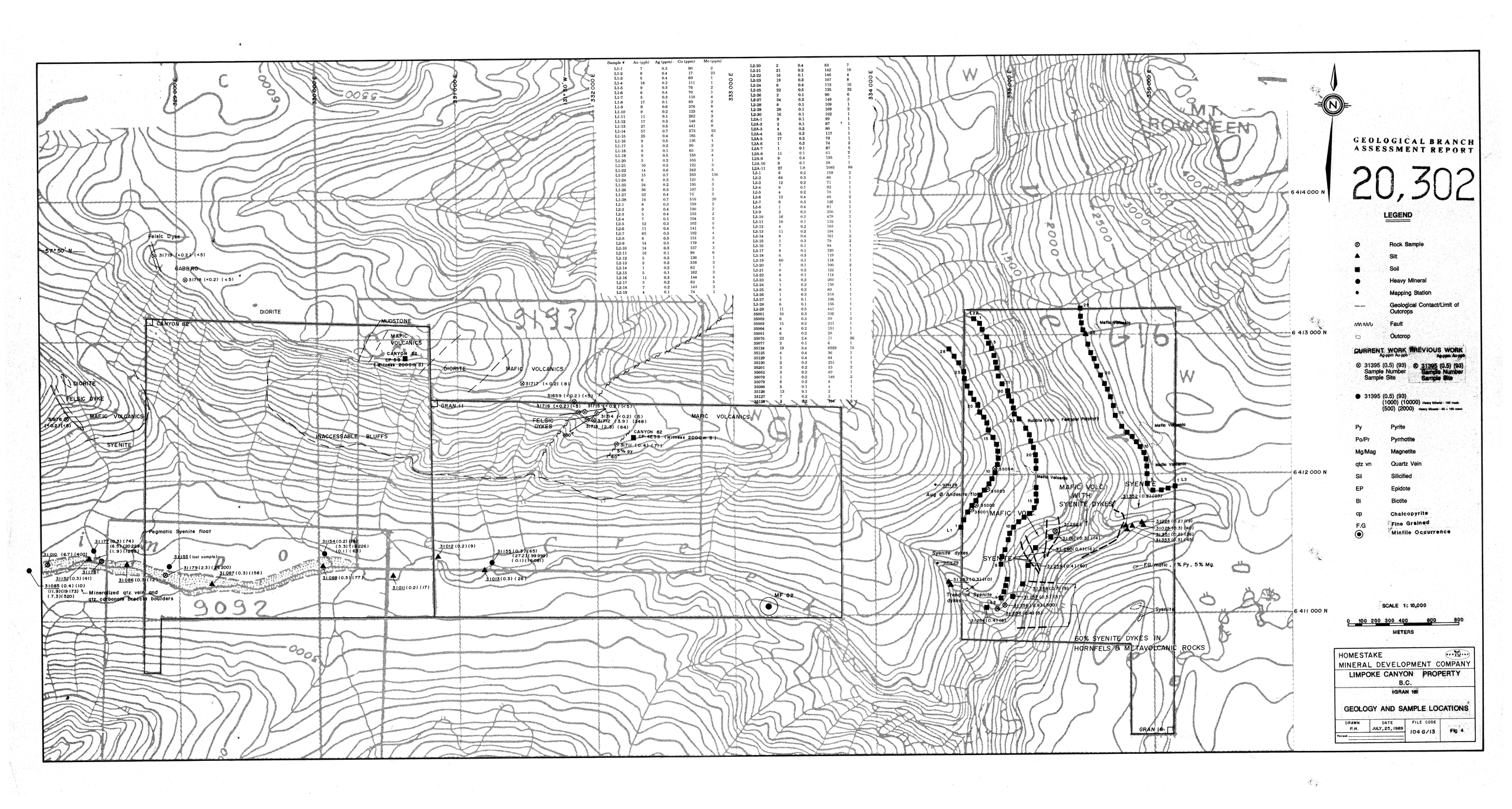
5. I am the author/co-author of the above report.

6. I have no direct or indirect financial interest in any companies known by me to have an interest in the mineral properties described by this report, nor do I expect to receive any such interest.

Dated at Vancouver, B.C. this 11th day of Sept 11 1990

Respectfully submitted

Darcy E. Marud



Sample #	Au (ppb)	Ag (ppm)	Cu (ppm)	Mo (ppm)
L1-1	7	0.3	80	2
L1-2	9	0.4	17	23
L1-3	5	0.4	69	1
L1-4	18	0.2	111	1
L1-5	9	0.3	76	2
L1-6	6	0.4	70	1
L1-7	5	0.3	110	4
L1-8	17	0.1	80	2
L1-9	9	0.6	276	8
L1-10	9	0.2	123	4
L1-11	11	0.3	262	3
L1-12	17	0.3	148	6
L1-13	27	0.5	441	8
L1-14	57	0.7	573	23
L1-15	25	0.4	185	6
L1-16	9	0.5	136	1
L1-17	3	0.2	90	2
L1-18	8	0.1	65	3
L1-19	9	0.5	158	4
L1-20	5	0.2	103	1
L1-21	10	0.5	122	3
L1-22	14	0.6	242	5
L1-23	15	0.7	253	136
L1-24	6	0.2	121	3
L1-25	24	0.2	195	3
L1-26	36	0.3	107	2
L1-27	32	0.4	75	3
L1-28	14	0.7	516	20
L2-1	8	0.3	159	2
L2-2	9	0.4	150	2
L2-3	5	0.4	153	2
L2-4	7	0.1	154	2
L2-5	12	0.3	102	5
L2-6	11	0.4	141	5
L2-7	65	0.3	102	4
L2-8	6	0.5	151	3
L2-9	14	0.5	179	4
L2-10	14	0.3	157	3
L2-11	10	0.1	98	6
L2-12	5	0.2	126	1
L2-13	3	0.3	336	3
L2-14	1	0.2	62	1
L2-15	5	0.1	162	3
L2-16	11	0.3	144	4
L2-17	3	0.2	62	5
L2-18	7	0.2	143	2
L2-19	4	0.1	74	1
L2-20	2	0.4	83	7
L2-21	21	0.2	142	16
L2-22	16	0.1	146	4
L2-23	19	0.3	107	8
L2-24	6	0.4	113	10
L2-25	22	0.5	135	32
L2-26	2	0.1	90	6
L2-27	34	0.2	149	3
L2-28	8	0.1	109	1
L2-29	28	0.1	169	2
L2-30	16	0.1	102	1
L2A-1	9	0.1	99	1
L2A-2	2	0.1	87	1
L2A-3	4	0.2	90	1
L2A-4	15	0.2	117	1
L2A-5	17	0.2	79	1
L2A-6	1	0.3	74	2
L2A-7	1	0.1	87	5
L2A-8	11	0.1	61	2
L2A-9	9	0.4	195	7
L2A-10	9	0.1	58	1
L2A-11	27	1.0	1085	88
L3-1	6	0.2	159	2
L3-2	64	0.3	86	1
L3-3	12	0.2	71	1
L3-4	9	0.1	92	1
L3-5	4	0.2	78	1
L3-6	12	0.4	48	2
L3-7	6	0.3	126	1
L3-8	1	0.4	81	1
L3-9	3	0.2	256	1
L3-10	16	0.2	478	1
L3-11	10	0.1	132	1
L3-12	4	0.2	103	1
L3-13	11	0.2	194	1
L3-14	8	0.4	161	2
L3-15	1	0.3	79	2
L3-16	7	0.1	94	1
L3-17	8	0.1	120	1
L3-18	6	0.3	119	1
L3-19	60	0.1	118	1
L3-20	7	0.1	100	2
L3-21	6	0.2	122	1
L3-22	8	0.1	114	1
L3-23	5	0.2	200	1
L3-24	1	0.2	156	1
L3-25	8	0.2	89	1
L3-26	7	0.3	318	1
L3-27	4	0.1	108	1
L3-28	6	0.1	156	1
L3-29	11	0.5	441	1
35001	10	0.3	336	1
35002	6	0.2	30	3
35003	15	0.2	231	1
35004	4	0.2	151	1
35051	6	0.2	28	1
35076	22	2.4	17	26
35077	3	0.1	6	1
35124	19	8.4	6929	15
35125	4	0.4	36	1
35129	1	0.4	84	1
35130	2	0.3	251	1
35201	5	0.2	33	2
35052	3	0.2	49	1
35078	1	0.2	148	2
35079	6	0.2	8	1
35080	6	0.1	4	1
35126	13	0.1	7	1
35127	7	0.2	3	1
35128	2	0.2	104	1