APPENDIX C

Chemical Analysis of Soil, Stream and
Whole Rock Samples (Trace Elements in ppm)

	Sample Number	Zn	Pb	cxMe
Grid I	84	78	13	9.5
	85	38	9	5.0
	86	80	10	3.0
	87	153	19	10.0
	88	144	11	3.0
	89	180	25	7.0
	90	60	11	3.0
	91	51	15	3.0
	92	138	36	7.5
	93	45	11	2.0
	94	130	34	5.0
	95	96	10	5.0
	96	60	8	3.5
	97	97	10	5.5
	98	140	16	15.0
	99	177	25	6.0
	100	43	7	5.0
	101	32	9	6.0
	102	100	12	5.0
	103	120	19	20.0
	104	121	12	6.0
	105	65	11	7.5
	106	65	11	3.0
	107	64	10	4.0
	108	124	6	5.5
	109	151	18	7.0
	110	162	30	9.0
	111	45	10	3.0
	112	58	10	2.0
	113	78	9	3.0
	114	53	44	9.5
	115	126	16	4.0
	116	92	10	5.0
	117	79	33	8.5
	118	76	9	3.0
	119	50	14	5.5
	120	222	12	11.0
	121	79	14	6.0
	122	65	8	5.0
	123	197	8	6.0
	124	90	10	7.0
	125	63	10	3.0
	126	71	6	6.0

Chemical Analysis of Soil, Stream and
Whole Rock Samples (Trace Elements in ppm)
(con't)

	Sample Number	Zn	Pb	cxMe
Grid I (con't)	127	72	10	3.0
	128*	221	15	6.5
	129*	115	13	4.0
	130*	154	14	4.5
	131*	220	14	5.5
	132*	193	13	5.0
	133	70	40	3.5
	134	41	9	3.0
	135	176	16	7.0
	136	161	21	6.0
	137	274	29	20.0
	138	44	10	3.5
	139*	53	13	3.0
	140*	44	11	3.0
	141*	39	11	2.5
	142*	23	12	3.0
	143*	49	11	3.5
	144	104	10	4.0
	145	69	9	4.0
	146	46	12	4.0
	147	134	16	14.0
	148*	33	9	3.5
	149*	41	27	3.0
	150*	44	18	3.0
	151*	41	10	2.5
	152*	40	11	3.0
	153	425	57	10.0
	154	70	17	7.0
	155	51	9	3.0
	156*	51	13	3.0
	157*	48	13	3.5
	158*	47	13	3.0
	159*	48	14	3.0
	160*	53	14	2.5
	161	135	16	13.0
	162	78	12	5.0
	163*	108	13	-3.5
	164*	80	12	3.0
	165*	111	11	3.5
	166*	106	13	4.0
	167*	181	19	5.0
	168	92	13	3.0
	169	43	11	2.0
	170	100	22	9.5

Chemical Analysis of Soil, Stream and
Whole Rock Samples (Trace Elements in ppm)
(con't)

	Sample Number	Zn	Pb	cxMe
Grid I (con't)	171*	66	17	2.5
	172*	42	10	3.0
	173*	33	11	2.0
	174*	37	9	2.5
	175*	38	14	3.0
	176	69	8	6.0
	177	75	15	4.0
	178*	331	22	8.0
	179*	100	11	5.5
	180*	131	18	6.5
	181*	92	9	3.5
	182*	68	10	4.0
	183*	131	9	5.0
	184*	599	44	20.0
	185*	421	41	16.0
	186*	180	17	5.5
	187*	157	10	10.0
	188*	151	44	5.0
	189*	88	19	6.0
	190*	77	14	2.0
	191*	77	13	2.0
	192*	65	12	3.0
	193*	66	12	5.0
	194*	66	18	3.0
	195*	46	12	3.0
	196*	40	11	3.0
	197*	51	10	2.5
	198	43	10	3.0
	199	77	9	4.5
	200*	42	7	4.0
	201*	50	7	3.0
	202*	62	12	3.5
	203*	55	10	6.0
	204*	73	12	4.5
	205*	183	9	8.5
	206*	38	8	2.5
	207	113	10	3.5
	208	57	9	2.5
	209	67	9	5.0
	210	131	12	7.0
	211*	42	10	2.5
	212*	32	8	3.0
	213*	28	6	2.5
	214*	30	10	3.0
	215*	31	8	2.0

Chemical Analysis of Soil, Stream and
Whole Rock Samples (Trace Elements in ppm)

	Sample Number	Zn	Pb	cxMe
Grid I (con't)	216	39	13	2.5
	217	60	16	4.0
	218*	38	8	4.5
	219*	42	11	4.5
	220*	67	9	5.0
	221*	67	10	5.5
	222*	62	11	6.5
	223	74	7	3.5
	224	45	9	2.0
	225*	42	11	3.0
	226*	43	10	2.5
	227*	71	12	2.5
	228*	43	8	3.0
	229*	41	10	2.5
	230	47	8	4.0
	231	105	16	5.5
	232*	81	9	3.0
	233*	73	10	2.5
	234*	55	9	2.0
	235*	67	9	2.0
	236*	61	11	2.0
	237	170	12	6.0
	238	63	8	10.5
	239	77	10	4.0
	240*	108	12	4.5
	241*	81	8	4.0
	242*	91	10	3.0
	243*	76	12	13.0
	244*	66	7	7.0
	245	73	8	5.0
	246	43	7	6.5
	247	48	8	5.0
	248*	30	7	3.5
	249*	39	11	5.5
	250*	38	8	4.5
	251*	36	9	5.0
	252*	37	9	3.5
	253	114	10	6.5
	254	95	11	8.5
	255	40	11	4.5
	256	44	10	3.0
	257*	84	10	4.0
	258*	55	10	5.0
	259*	37	10	5.0
	260*	45	14	5.0

Chemical Analysis of Soil, Stream and
Whole Rock Samples (Trace Elements in ppm)
(con't)

	Sample Number	Zn	Pb	cxMe
Grid I	261*	44	8	5.5
(con't)	262	53	10	3.5
	263	65	10	3.5
	264	60	10	4.0
	265*	43	8	4.0
	266*	60	10	6.0
	267*	48	10	4.0
	268*	98	16	9.5
	269*	51	8	6.5
	270	123	15	8.5
	271	102	13	5.5
	272	46	10	4.0
	273*	31	5	2.5
	274*	36	9	3.5
	275*	44	9	5.0
	276*	36	7	3.0
	277*	35	9	2.5
	278	39	6	4.5
	279	78	9	5.0
	280	46	7	5.5
	281	65	18	5.5
	282*	96	11	10.0
	283*	54	6	6.0
	284*	45	8	4.5
	285*	34	6	5.0
	286*	57	10	6.0
	287	37	9	5.5
	288*	33	9	3.5
	289*	43	8	5.5
	290*	38	7	6.0
	291*	48	8	4.0
	292*	64	10	5.5
	293	72	12	5.5
	294	94	9	5.5
	295	49	10	7.0
	296*	49	9	4.5
	297*	43	10	3.0
	298*	20	10	2.0
	299*	36	18	5.0
	300*	41	14	5.0
	301	32	7	4.5
	302	51	10	9.5
	303	28	7	6.0
	304	33	11	6.0

Chemical Analysis of Soil, Stream and
Whole Rock Samples (Trace Elements in ppm)
(con't)

	Sample Number	Zn	Pb	cxMe
Grid II	305	32	7	5.0
	306	42	9	10.0
	307	39	8	3.5
	308*	56	13	4.0
	309*	40	9	6.0
	310*	81	9	6.0
	311*	71	10	6.0
	312*	76	12	8.0
	313	22	6	2.5
	314*	13	5	2.0
	315*	39	12	6.0
	316*	40	20	7.0
	317*	61	12	20.0
	318*	36	10	4.5
	319	37	11	4.5
	320	33	14	4.0
	321	84	11	6.5
	322	60	25	10.0
	323*	41	8	3.5
	324*	74	22	3.5
	325*	50	10	4.0
	326*	46	9	5.0
	327*	41	9	8.0
	328	74	9	7.0
	329	28	5	5.5
	330	34	8	5.0
	331*	38	10	6.0
	332*	31	13	7.0
	333*	38	10	5.0
	334*	24	52	9.5
	335*	49	10	6.0
	336*	29	7	4.0
	337*	39	7	3.5
	338*	28	7	3.0
	339*	23	8	5.0
	340*	39	10	5.5
	341	38	5	5.0
	342	34	6	5.0
	343	55	8	9.0
	344	34	12	4.0
	345*	49	9	5.5
	346*	92	11	6.5
	347*	64	12	4.0

Chemical Analysis of Soil, Stream and Whole Rock Samples (Trace Elements in ppm) — (con't)

	Sample Number	Zn	Pb	cxMe
Grid II (con't)	348*	40	9	4.0
	349*	38	9	4.0
	350	74	12	4.0
	351	42	9	3.5
	352	35	9	4.5
	353*	36	8	4.0
	354*	39	10	4.0
	355*	30	7	4.5
	356*	35	9	4.0
	357*	37	9	4.0
	358	22	8	2.5
	359	33	7	5.5
	360	31	8	3.5
	361*	57	10	3.0
	362*	12	1	2.0
	363*	23	2	2.0
	364*	24	4	1.5
	365*	12	1	1.5
	366	24	4	3.0
	367	36	6	4.0
	368	49	6	7.0
	369*	38	7	5.0
	370*	29	5	3.5
	371*	37	7	3.0
	372*	33	6	3.5
	363*	28	6	2.5
	374	33	6	3.0
	375	18	6	2.5
	376	36	8	3.0
	377*	17	4	2.5
	378*	32	8	4.0
	379*	10	2	3.5
	380*	17	8	2.5
	381*	22	6	4.0
	382	22	4	3.0
	383	20	9	3.5
	384	18	4	6.0
	385	30	17	3.0
	386	36	7	2.5
	387*	37	10	5.0
	388*	66	16	9.5
	389*	56	17	5.0
	390*	76	21	7.5

Chemical Analysis of Soil, Stream and
Whole Rock Samples (Trace Elements in ppm)
(con't)

	Sample Number	Zn	Pb	cxMe
Grid II	391*	50	20	6.5
(con't)	392	31	9	6.0
	393	52	8	5.0
	394	99	7	7.0
	395	53	6	4.5
	396*	103	10	8.5
	397*	148	12	16.0
	398	83	10	5.5
	399*	76	8	6.5
	400*	47	8	4.0
	401	128	6	12.5
	402	252	8	11.0
	403	80	6	8.0
	404*	48	10	6.0
	405*	48	12	6.0
	406*	39	9	4.5
	407*	102	27	8.5
	408*	51	11	7.0
	409	39	15	2.5
	410	13	6	2.5
	411*	36	8	6.5
	412*	30	12	4.5
	413*	30	10	5.0
	414*	41	12	8.0
	415*	36	12	5.0
	416	52	12	5.0
	417	39	10	4.0
	418	33	8	6.5
	419*	38	8	4.0
	420*	36	6	3.0
	421*	90	6	3.5
	422*	35	7	2.5
	423*	30	4	3.5
	424	24	7	5.5
	425	15	3	2.5
	426*	230	11	20.0
	427*	82	6	9.5
	428*	121	9	10.0
	429*	148	8	7.0
	430*	113	10	8.5
	431	52	8	5.0
	432	31	10	5.0
	433	58	12	4.0

Chemical Analysis of Soil, Stream and
Whole Rock Samples (Trace Elements in ppm)
(con't)

	Sample Number	Zn	Pb	cxMe
Grid II (con't)	434	42	9	4.5
	435*	60	12	6.0
	436*	49	11	7.5
	437*	46	9	5.0
	438*	61	10	6.5
	439	30	9	5.0
	440	26	8	4.0
	441*	28	8	4.0
	442*	23	7	4.5
	443*	26	10	3.5
	444*	24	8	3.0
	445*	24	8	3.5
	446	33	12	3.0

	Sample Number	Zn	Cu	Pb
Whole Rock	7C	46	19	42
	8A	55	7	38
	8F	31	8	29
	8G	28	5	45
	21A	10	7	46
	31A	17	6	30
	38A	118	13	46
	41C	102	10	57
	50A	85	15	48
	51A	19	15	21
	90A	35	18	29
	106	10	6	10
	120A	18	5	25
	133A	149	6	40
	133A	31	4	22
	193A	27	5	50
	7C	92	12	47
	10C	27	2	19
	NC18	21	2	24
	NC20	18	4	20
	147	29	5	50
	1A	15	4	18
	23A	31	10	37
	30A	58	9	31

PLAN & DRILL

G-C Roosevelt
STATISTICS DATA
Test

Subfile
27

PLAN DRILL	2	3	4
	Zn	Pb	CxMe
1	78	13	9.5
2	153	19	10.0
3	180	25	7.0
4	138	36	7.5
5	130	34	5.0
6	140	16	15.0
7	43	7	5.0
8	65	11	7.5
9	151	18	7.0
10	53	44	9.5
11	50	14	5.5
12	71	6	6.0
13	70	40	3.5
14	176	16	7.0
15	161	21	6.0
16	274	29	20.0
17	134	16	14.0
18	51	9	3.0
19	135	16	13.0
20	92	13	3.0
21	100	22	9.5
22	77	9	4.5
23	67	9	5.0
24	131	12	7.0
25	63	8	10.5
26	43	7	6.5

	Zn	Pb	CxMe
27	114	10	6.5
28	95	11	8.5
29	123	15	8.5
30	39	6	4.5
31	32	7	4.5
32	51	10	9.5
33	28	7	6.0
34	42	9	10.0
35	28	5	5.5
36	38	5	5.0
37	55	8	9.0
38	33	7	5.5
39	49	6	7.0
40	99	7	7.0
41	80	6	8.0

TABLE 9

Parameters of Sample Frequency Distribution

	Element	N	$\bar{X}$	S	$\sqrt{b_1}$	b_2	X^2(d.f.)	$P(X^2)$	CV(%)
Grid I	Zn	188	72.53	69.14	4.117	25.436	225.07 (16)	0.000	95.33
	Pb	188	11.98	6.48	3.964	22.351	241.24 (16)	0.000	54.09
	cxMe	188	4.56	2.56	3.201	17.768	170.13 (16)	0.000	56.14
Grid II	Zn	134	47.40	35.09	3.121	15.968	104.22 (16)	0.000	74.82
	Pb	134	9.63	5.49	3.997	29.018	110.02 (16)	0.000	57.01
	cxMe	134	5.168	2.897	2.637	12.813	80.61 (16)	0.000	56.06
Stream Sediment	Zn	41	91.02	53.45	1.129	4.443	17.73 (12)	0.12399	58.72
	Pb	41	14.37	9.889	1.519	4.544	41.16 (12)	0.000046	68.82
	cxMe	41	7.70	3.435	1.4176	5.5987	18.22 (12)	0.109047	44.57
Grid I	log Zn	188	1.809	0.2446	1.100	4.595	50.36 (16)	0.00002	13.52
	log Pb	188	1.043	0.1561	1.671	7.586	93.01 (16)	0.000	14.97
	log cxMe	188	0.614	0.1870	0.743	4.204	122.001(16)	0.000	30.42
Grid II	log Zn	134	1.604	0.2427	0.485	4.002	31.81 (16)	0.010599	15.13
	log Pb	134	0.933	0.2202	-0.964	8.155	46.98 (16)	0.000069	23.60
	log cxMe	134	0.665	0.1990	0.457	3.865	35.64 (16)	0.003245	29.92
Stream Sediment	log Zn	41	1.889	0.2530	0.0335	2.041	12.761(12)	0.386595	13.39
	log Pb	41	1.077	0.2582	0.5515	2.378	15.989(12)	0.191738	23.97
	log cxMe	41	0.850	0.1806	0.1336	3.000	9.899 (12)	0.624788	21.24

SPEARMAN CORRELATIONS - ROOSEVELT

- Set exclusion = 1.0
- Multiple drill hole

Done 9/17/80

	subfile
52-21	21
14-2	5
72-16	9
9-1	17
GPCR-15	19

- Had to enter As* and Hg data into 52-21. Saved on Menge file #21. Deleted Subfile #1.

		channel	type
6	Fe	5	1
15	Cr	14	1
16	Mn	15	1
17	Co	16	1
18	Ni	17	1
19	Cu	18	1
20	Mo	19	1
21	Pb	20	1
22	Zn	21	1
24	Ag	23	1
25	Au	24	1
26	As	25	1
27	Sb	26	1
33	Li	32	1
34	Be	33	1
40	As*	41	1
41	Hg	41	1