



COMINCO LTD.

EXPLORATION

WESTERN DISTRICT



GEOLOGICAL AND GEOCHEMICAL REPORT

ON

BATTLE 1 - 64 MINERAL CLAIMS

SITUATED AT

62°40' N; 138°30' W

WHITEHORSE MINING DISTRICT, YUKON TERRITORY

NTS: 115J/9, 10

Period of Work: June 18 - June 27, 1980

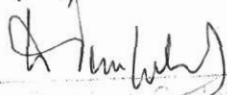
090792

10 DECEMBER 1980

A.S. DENTON

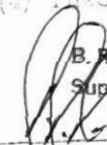
This report has been examined by the Geological Evaluation Unit and is recommended for consideration to be considered as representation work in the amount of


12,827.92



Registered Geologist or
Registered Mining Engineer

Considered as representation work under
Section 53 (4) Yukon Quartz Mining Act.


B. R. BAXTER
Supervising Mining Recorder



Commissioner of Yukon Territory

FROM Mining Recorder at ... *Whitehorse*

TO Supervising Mining Recorder at Whitehorse, Y.T.

FOR ACTION ARE:

NEW APPL'N for PLACER LEASE to PROSPECT: Name:

RENEWAL APPL'N PLACER LEASE to PROSPECT: Name:

AFFIDAVIT of EXPENDITURE on PLACER LEASE. Name:

ASSIGNMENT of PLACER LEASE No.
From: To:

GROUPING APPL'N UNDER SEC. 52(2) PLACER MINING ACT.
Owner:

DIAMOND DRILL LOGS:
Claims:

Claim sheet no:

QUARTZ ASSESSMENT REPORT
Claims: *Battle 1-64*

Claim sheet no. *115-J-9 & 10*

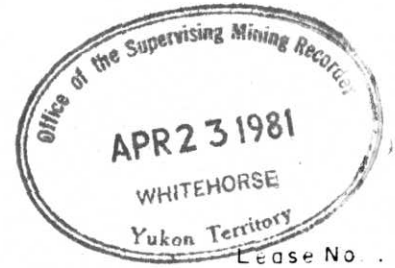
Type of report:
Geological + Geochemical.

Submitted by:
COMINCO Ltd.

Cl. work performed on:
Battle

\$ Req. for ren. application
\$ 12,827.92

Signature *[Signature]* *23 April 1981*



REPLY ACTION:

Date Ret.

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EXPLORATION

WESTERN DISTRICT

NTS: 115J/9, 10

10 DECEMBER 1980

GEOLOGICAL AND GEOCHEMICAL REPORT

ON

BATTLE 1 - 64 MINERAL CLAIMS

SITUATED AT

62°40'N; 138°30'W

WHITEHORSE MINING DISTRICT, YUKON TERRITORY

Located claims on which assessment credits are requested --

<u>Claim</u>	<u>Record No.</u>	<u>Date Recorded</u>	<u>Assessment Credit</u>	<u>Amount</u>
Battle 1	YA 48595	21 April 1980	2 years	\$200.
Battle 2	YA 48596	21 April 1980	"	"
Battle 3	YA 48597	21 April 1980	"	"
Battle 4	YA 48598	21 April 1980	"	"
Battle 5	YA 48599	21 April 1980	"	"
Battle 6	YA 48600	21 April 1980	"	"
Battle 7	YA 48601	21 April 1980	"	"
Battle 8	YA 48602	21 April 1980	"	"
Battle 9	YA 48603	21 April 1980	"	"
Battle 10	YA 48604	21 April 1980	"	"
Battle 11	YA 48605	21 April 1980	"	"
Battle 12	YA 48606	21 April 1980	"	"
Battle 13	YA 48607	21 April 1980	"	"
Battle 14	YA 48608	21 April 1980	"	"
Battle 15	YA 48609	21 April 1980	"	"
Battle 16	YA 48610	21 April 1980	"	"

<u>Claim</u>	<u>Record No.</u>	<u>Date Recorded</u>	<u>Assessment Credit</u>	<u>Amount</u>
Battle 17	YA 48611	21 April 1980	2 years	\$200.
Battle 18	YA 48612	21 April 1980	"	"
Battle 19	YA 48613	21 April 1980	"	"
Battle 20	YA 48614	21 April 1980	"	"
Battle 21	YA 48615	21 April 1980	"	"
Battle 22	YA 48616	21 April 1980	"	"
Battle 23	YA 48617	21 April 1980	"	"
Battle 24	YA 48618	21 April 1980	"	"
Battle 25	YA 48619	21 April 1980	"	"
Battle 26	YA 48620	21 April 1980	"	"
Battle 27	YA 48621	21 April 1980	"	"
Battle 28	YA 48622	21 April 1980	"	"
Battle 29	YA 48623	21 April 1980	"	"
Battle 30	YA 48624	21 April 1980	"	"
Battle 31	YA 48625	21 April 1980	"	"
Battle 32	YA 48626	21 April 1980	"	"
Battle 33	YA 48627	21 April 1980	"	"
Battle 34	YA 48628	21 April 1980	"	"
Battle 35	YA 48629	21 April 1980	"	"
Battle 36	YA 48630	21 April 1980	"	"
Battle 37	YA 48631	21 April 1980	"	"
Battle 38	YA 48632	21 April 1980	"	"
Battle 39	YA 48633	21 April 1980	"	"
Battle 40	YA 48634	21 April 1980	"	"
Battle 41	TA 48635	21 April 1980	"	"
Battle 42	YA 48636	21 April 1980	"	"
Battle 43	YA 48637	21 April 1980	"	"
Battle 44	YA 48638	21 April 1980	"	"
Battle 45	YA 48639	21 April 1980	"	"
Battle 46	YA 48640	21 April 1980	"	"
Battle 47	YA 48641	21 April 1980	"	"
Battle 48	YA 48642	21 April 1980	"	"
Battle 49	YA 48643	21 April 1980	"	"
Battle 50	YA 48644	21 April 1980	"	"

<u>Claim</u>	<u>Record No.</u>	<u>Date Recorded</u>	<u>Assessment Credit</u>	<u>Amount</u>
Battle 51	YA 48645	21 April 1980	2 years	\$200.
Battle 52	YA 48646	21 April 1980	"	"
Battle 53	YA 48647	21 April 1980	"	"
Battle 54	YA 48648	21 April 1980	"	"
Battle 55	YA 48649	21 April 1980	"	"
Battle 56	YA 48650	21 April 1980	"	"
Battle 57	YA 48651	21 April 1980	"	"
Battle 58	YA 48652	21 April 1980	"	"
Battle 59	YA 48653	21 April 1980	"	"
Battle 60	YA 48654	21 April 1980	"	"
Battle 61	YA 48655	21 April 1980	"	"
Battle 62	YA 48656	21 April 1980	"	"
Battle 63	YA 48657	21 April 1980	"	"
Battle 64	YA 48658	21 April 1980	"	"

Work was done on these claims between 18 June and 27 June 1980.

COMINCO LTD.

EXPLORATION

NTS: 115J/9, 10

WESTERN DISTRICT

10 DECEMBER 1980

GEOLOGICAL AND GEOCHEMICAL REPORT

ON THE BATTLE 1 - 64 CLAIMS

WHITEHORSE MINING DISTRICT, YUKON TERRITORY

INTRODUCTION

The BATTLE Claims were staked in April 1980 to cover the source area of anomalous heavy mineral concentrate samples collected from the headwaters of Battle Creek.

The area is underlain by Triassic granodiorite of the Klotassin Batholith, by volcanics and related intrusives of the Casino Volcanics which are believed to be Eocene in age and by Proterozoic Yukon Group schist.

The work described in this report was done between 18 June and 27 June 1980.

The object of the work was to determine the source of anomalous concentrations of heavy minerals found in Battle Creek, by prospecting, mapping and soil sampling.

Personnel employed during this program were:

<u>NAME</u>	<u>PERIOD</u>	<u>ADDRESS</u>
A.S. Denton	18 June - 27 June	5110 B - 5th Avenue Whitehorse, Yukon Y1A 1L4
L.J. Nagy	18 June - 27 June	5110 B - 5th Avenue Whitehorse, Yukon Y1A 1L4

LOCATION AND ACCESS

The BATTLE Claims are located 135 km northwest of Carmacks, Yukon Territory near the headwaters of Battle, Rude and Victor Creeks. All of the claims are situated in rugged country above tree line. Access is by helicopter based at Carmacks.

GEOLOGY

The BATTLE Group is predominantly underlain by granodiorite of the Klotassin Batholith (See plate 80-2). It intrudes muscovite-biotite schist of the Proterozoic Yukon Group which outcrops only in the northeast part of the property. A small raft of Nasina Quartzite, also of Proterozoic age, outcrops near the southern boundary of the claim group. The granodiorite contains biotite and abundant, occasionally porphyritic hornblende in a matrix of quartz and light grey feldspar. It is frequently foliated near contacts with the schist and carries occasional xenoliths. Minor amounts of pyrite give the granodiorite a slightly rusty grey weathered appearance.

A porphyritic quartz monzonite stock of probable Cretaceous age intrudes the Klotassin granodiorite and Yukon Group schists. The porphyry is light grey and contains grey to pink orthoclase phenocrysts up to 2 cm. long. It frequently contains up to 5% Pyrite and weathers to a deep rusty color. Narrow quartz veins and fractures cut this unit and occasionally carry chalcopyrite and molybdenite. No significant alteration has been observed.

The southern edge of the claim group overlaps the Casino Volcanics. These are pale, rusty weathering, pyritic rhyolites, felsites, as well as basalts and related dark phases. Their age is thought to be Eocene. Boulders of a similar rock type which occur near the northern boundary of the property are probably derived from another, smaller volcanic centre in the area.

Since most of the claim group is underlain by felsensmeer, little outcrop was observed.

MINERALIZATION

Parts of the Cockfield Stock and Casino Volcanics are gossanous, and although heavy mineral concentrate samples anomalous in Cu, Mo, W and Pb have been collected from the area, only minor mineralization has been observed in the rocks. Molybdenite and chalcopyrite occurs as blebs in narrow quartz veins and as smears along fractures and joint surfaces in rocks of the Cockfield Stock.

GEOCHEMISTRY

Sample Collection

A total of 304 contour soil samples were collected at 50m intervals around the three main drainage basins on the claim group. The samples were taken from the "C" horizon where possible at a depth of 10 - 30 cm. Extensive felsensmeer and scree covered slopes made it difficult to collect samples of consistent quality.

Sample Preparation

All soil samples were dried and sieved to - 80 mesh. Cu, Pb, and Zn analyses were performed by Atomic Absorption following digestion in 20% nitric acid.

For analysis of W, the samples were subjected to pyrosulphate fusion and Mo was digested in nitric acid and perchloric acid. Both W and Mo were subsequently analysed by colorimetric techniques.

The analyses were performed at Cominco's Exploration Research Laboratory in Vancouver under the supervision of Mr. Frank Kiss, Senior Chemist. The results are listed on computer printout sheets, copies of which are attached to this report.

Interpretation of Results

The Soil geochemical results are plotted on plates 80-3 and 80-4. The anomalies are quite encouraging, however there is the possibility that some of the samples taken in areas where the soil horizon is poorly developed, may be contaminated by mineralized rock material resulting in spuriously high values.

a) Cu, Mo and W (Plate 80-3)

Two Cu anomalies with values exceeding 500 ppm occur along the upper reaches of Battle Creek near the south boundary of the property. However, as only one contour line was run on each side of the valley, the results should be interpreted with caution. Several other anomalies were detected where Cu values exceed 250 ppm.

The Mo anomalies are roughly coincident with the Cu anomalies with two zones exceeding 100 ppm and larger areas in excess of 50 ppm. Cu and Mo values are rarely anomalous outside the outcrop area of the Cockfield Stock, the only unit in which Cu and Mo mineralization of any significance has been observed.

The anomalous values of W are scattered and although they coincide with some of the Cu-Mo anomalies, are too erratic to be considered significant.

b) Pb and Zn (Plate 80-4)

Anomalous Pb and Zn values are scattered and not considered significant.

CONCLUSION AND RECOMMENDATIONS

Anomalous Cu and Mo values from contour soil sampling are sufficiently encouraging to warrant detail soil sampling coverage over the Cockfield Stock. Rock geochemistry is recommended for felsenmeer covered areas where soil development is poor or non-existent.

Further mapping and detailed prospecting is also recommended for a better understanding of the geology and distribution of the mineralization on the claim group.

Submitted by:

ASDanton

A.S. Denton
Geologist

Endorsed by:

D.L. Cooke

D.L. Cooke
Senior Geologist, P. Eng.

Approved for Release by:

M. J. Wolfe for

G. Harden
Manager, Exploration
Western District

COMINCO LTD.

EXPLORATION

NTS: 115P/15

WESTERN DISTRICT

10 DECEMBER 1980

APPENDIX A

PRINTOUTS OF GEOCHEMICAL ANALYSES

REPORTING DATE 14 JUL 1980

PAGE

WHERE ANALYSIS REQUESTED BUT NO VALUES SHOWN, RESULTS ARE TO FOLLOW
C - ANALYSIS BEING CHECKED; CHECK RESULTS
WILL BE REPORTED AS SOON AS POSSIBLE

ANALYTICAL METHODS

Cu	Pb	Zn	20% HNO ₃ DIGESTION / AA
W			PYROSULPHATE FUSION / COLORIMETRIC
Mo			HNO ₃ - HClO ₄ DIGESTION / COLORIMETRIC

BATTLE CREEK

JOB V80 - 0517

REPORTING DATE 14 JUL 1980

SAMPLE NUMBER	FIELD NUMBER	TYPE	Cu PPM	Pb PPM	Zn PPM	Mo PPM	W PPM
S80 16221	N- 267	S	394	31	48	21	<2
S80 16222	N- 268	S	101	14	25	6	<2
S80 16223	N- 269	S	50	11	21	5	5
S80 16224	N- 270	S	848	23	42	40	<2
S80 16225	N- 271	S	310	12	32	16	2
S80 16226	N- 272	S	192	24	45	8	5
S80 16227	N- 273	S	183	29	39	10	4
S80 16228	N- 274	S	169	15	26	5	3
S80 16229	N- 275	S	299	20	53	4	<2
S80 16230	N- 276	S	93	28	40	7	2
S80 16231	N- 277	S	69	28	57	5	<2
S80 16232	N- 278	S	126	37	66	10	8
S80 16233	N- 279	S	195	16	43	12	9
S80 16234	N- 280	S	357	10	36	42	40
S80 16235	N- 281	S	179	9	45	10	<2
S80 16236	N- 282	S	371	15	54	39	8
S80 16237	N- 283	S	440	65	72	53	4
S80 16238	N- 284	S	79	11	24	40	20
S80 16239	N- 285	S	1150	29	67	193	30
S80 16240	N- 286	S	749	40	76	110	15
S80 16241	N- 287	S	884	41	94	154	6
S80 16242	N- 288	S	972	34	60	164	5
S80 16243	N- 289	S	523	68	56	38	6
S80 16244	N- 290	S	452	67	81	92	13
S80 16245	N- 291	S	241	20	42	67	4
S80 16246	N- 292	S	208	19	48	64	4
S80 16247	N- 293	S	29	13	15	43	50
S80 16248	N- 294	S	150	19	45	79	10
S80 16249	N- 295	S	89	21	56	61	12
S80 16250	N- 296	S	80	11	40	39	20
S80 16251	N- 297	S	33	8	20	15	6
S80 16252	N- 298	S	168	19	68	48	15
S80 16253	N- 299	S	173	16	54	49	2
S80 16254	N- 300	S	181	10	56	40	8
S80 16255	N- 301	S	178	13	56	28	20
S80 16256	N- 302	S	252	27	59	61	6
S80 16257	N- 303	S	651	74	73	120	6
S80 16258	N- 304	S	244	22	35	46	75

BATTLE CREEK

JOB V80 - 0517

REPORTING DATE 14 JUL 1980

SAMPLE NUMBER	FIELD NUMBER	TYPE	Cu PPM	Pb PPM	Zn PPM	Mo PPM	W PPM
980 16183	N- 229	S	631	44	84	15	15
980 16184	N- 230	S	268	29	73	12	35
980 16185	N- 231	S	42	12	21	5	13
980 16186	N- 232	S	193	13	50	14	15
980 16187	N- 233	S	170	9	45	9	16
980 16188	N- 234	S	88	12	30	7	2
980 16189	N- 235	S	35	7	21	5	6
980 16190	N- 236	S	220	32	40	9	7
980 16191	N- 237	S	39	7	13	3	7
980 16192	N- 238	S	113	15	39	2	5
980 16193	N- 239	S	150	11	30	3	9
980 16194	N- 240	S	152	14	37	3	10
980 16195	N- 241	S	68	12	53	2	<2
980 16196	N- 242	S	30	19	59	4	2
980 16197	N- 243	S	19	12	26	<2	<2
980 16198	N- 244	S	19	9	49	3	<2
980 16199	N- 245	S	27	15	58	3	<2
980 16200	N- 246	S	31	18	58	2	3
980 16201	N- 247	S	20	11	44	3	5
980 16202	N- 248	S	29	17	45	2	<2
980 16203	N- 249	S	21	15	45	2	8
980 16204	N- 250	S	33	14	54	2	<2
980 16205	N- 251	S	307	24	31	155	5
980 16206	N- 252	S	348	11	45	47	4
980 16207	N- 253	S	265	15	47	65	15
980 16208	N- 254	S	195	15	42	59	14
980 16209	N- 255	S	76	13	24	33	14
980 16210	N- 256	S	309	18	37	42	7
980 16211	N- 257	S	788	22	49	41	<2
980 16212	N- 258	S	446	8	46	16	20
980 16213	N- 259	S	561	12	56	18	15
980 16214	N- 260	S	385	15	34	16	<2
980 16215	N- 261	S	36	6	29	4	<2
980 16216	N- 262	S	52	10	27	7	<2
980 16217	N- 263	S	1570	33	81	44	8
980 16218	N- 264	S	1050	40	57	31	<2
980 16219	N- 265	S	1100	41	70	36	<2
980 16220	N- 266	S	553	36	58	67	c125

BATTLE CREEK

JOB V80 - 0517

REPORTING DATE 14 JUL 1980

SAMPLE NUMBER	FIELD NUMBER	TYPE	Cu PPM	Pb PPM	Zn PPM	Mo PPM	W PPM
S80 16145	N- 191	S	358	39	34	10	<2
S80 16146	N- 192	S	200	68	32	16	5
S80 16147	N- 193	S	245	60	35	15	6
S80 16148	N- 194	S	190	126	35	18	6
S80 16149	N- 195	S	203	15	40	14	4
S80 16150	N- 196	S	234	20	21	6	5
S80 16151	N- 197	S	188	16	38	7	4
S80 16152	N- 198	S	167	33	17	3	<2
S80 16153	N- 199	S	497	52	32	19	5
S80 16154	N- 200	S	430	32	40	10	<2
S80 16155	N- 201	S	351	21	40	11	5
S80 16156	N- 202	S	410	15	40	9	<2
S80 16157	N- 203	S	200	35	44	12	4
S80 16158	N- 204	S	213	12	37	4	4
S80 16159	N- 205	S	25	8	15	<2	10
S80 16160	N- 206	S	423	9	41	8	5
S80 16161	N- 207	S	319	39	62	5	5
S80 16162	N- 208	S	36	10	17	4	8
S80 16163	N- 209	S	120	43	38	8	35
S80 16164	N- 210	S	333	11	46	19	7
S80 16165	N- 211	S	102	13	36	3	6
S80 16166	N- 212	S	83	12	25	5	4
S80 16167	N- 213	S	62	40	28	6	13
S80 16168	N- 214	S	115	25	44	12	8
S80 16169	N- 215	S	23	5	7	3	6
S80 16170	N- 216	S	47	13	23	9	15
S80 16171	N- 217	S	188	15	38	10	6
S80 16172	N- 218	S	207	16	81	9	4
S80 16173	N- 219	S	497	19	65	15	6
S80 16174	N- 220	S	166	21	27	11	20
S80 16175	N- 221	S	442	19	48	12	4
S80 16176	N- 222	S	970	16	50	20	<2
S80 16177	N- 223	S	290	13	24	7	5
S80 16178	N- 224	S	123	13	44	8	28
S80 16179	N- 225	S	79	11	28	9	14
S80 16180	N- 226	S	243	17	41	9	70
S80 16181	N- 227	S	300	18	56	4	<2
S80 16182	N- 228	S	368	14	48	16	4

BATTLE CREEK

JOB V80 - 0517

REPORTING DATE 14 JUL 1980

SAMPLE NUMBER	FIELD NUMBER	TYPE	Cu PPM	Pb PPM	Zn PPM	Mo PPM	H PPM
S80 16107	N- 153	S	167	42	27	9	10
S80 16108	N- 154	S	329	29	32	8	15
S80 16109	N- 155	S	200	117	26	8	6
S80 16110	N- 156	S	267	29	27	12	7
S80 16111	N- 157	S	208	97	37	9	8
S80 16112	N- 158	S	217	43	42	10	10
S80 16113	N- 159	S	187	41	41	<2	c250
S80 16114	N- 160	S	95	18	41	<2	6
S80 16115	N- 161	S	22	8	21	12	8
S80 16116	N- 162	S	70	13	50	2	8
S80 16117	N- 163	S	141	17	38	<2	6
S80 16118	N- 164	S	111	12	41	<2	8
S80 16119	N- 165	S	67	23	47	<2	10
S80 16120	N- 166	S	66	89	63	<2	6
S80 16121	N- 167	S	52	32	27	2	4
S80 16122	N- 168	S	94	31	50	5	6
S80 16123	N- 169	S	94	10	41	5	5
S80 16124	N- 170	S	47	13	39	2	4
S80 16125	N- 171	S	43	8	22	2	<2
S80 16126	N- 172	S	29	13	17	4	2
S80 16127	N- 173	S	58	<4	22	<2	<2
S80 16128	N- 174	S	125	9	28	8	4
S80 16129	N- 175	S	117	<4	16	7	2
S80 16130	N- 176	S	154	6	21	5	4
S80 16131	N- 177	S	169	<4	21	<2	<2
S80 16132	N- 178	S	167	<4	40	6	5
S80 16133	N- 179	S	168	12	53	7	4
S80 16134	N- 180	S	110	13	45	5	4
S80 16135	N- 181	S	75	18	57	3	4
S80 16136	N- 182	S	77	31	57	2	3
S80 16137	N- 183	S	78	42	45	<2	<2
S80 16138	N- 184	S	98	23	49	<2	<2
S80 16139	N- 185	S	134	16	94	17	6
S80 16140	N- 186	S	166	21	40	8	4
S80 16141	N- 187	S	147	25	54	9	2
S80 16142	N- 188	S	131	19	53	5	3
S80 16143	N- 189	S	214	32	32	7	6
S80 16144	N- 190	S	332	48	35	5	5

BATTLE CREEK

JOB V80 - 0517

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SAMPLE NUMBER	FIELD NUMBER	TYPE	Cu PPM	Pb PPM	Zn PPM	Mo PPM	W PPM
S80 16069	N- 115	S	29	12	57	6	2
S80 16070	N- 116	S	22	12	50	3	4
S80 16071	N- 117	S	25	10	45	7	19
S80 16072	N- 118	S	23	16	52	15	6
S80 16073	N- 119	S	20	10	41	4	6
S80 16074	N- 120	S	9	10	31	13	6
S80 16075	N- 121	S	81	12	62	10	5
S80 16076	N- 122	S	27	12	66	8	15
S80 16077	N- 123	S	40	20	52	30	<2
S80 16078	N- 124	S	32	20	50	31	<2
S80 16079	N- 125	S	134	10	55	16	4
S80 16080	N- 126	S	98	12	59	27	<2
S80 16081	N- 127	S	120	18	59	24	4
S80 16082	N- 128	S	306	23	53	73	20
S80 16083	N- 129	S	221	25	42	81	18
S80 16084	N- 130	S	197	41	60	154	14
S80 16085	N- 131	S	147	36	54	200	10
S80 16086	N- 132	S	133	44	82	101	5
S80 16087	N- 133	S	311	40	74	213	4
S80 16088	N- 134	S	509	43	69	280	5
S80 16089	N- 135	S	288	28	45	49	7
S80 16090	N- 136	S	192	24	36	46	100
S80 16091	N- 137	S	370	34	56	12	5
S80 16092	N- 138	S	315	9	40	6	6
S80 16093	N- 139	S	258	17	42	23	25
S80 16094	N- 140	S	405	12	47	31	10
S80 16095	N- 141	S	201	9	26	16	25
S80 16096	N- 142	S	597	13	39	36	20
S80 16097	N- 143	S	55	4	15	4	4
S80 16098	N- 144	S	248	20	28	10	6
S80 16099	N- 145	S	384	5	42	21	7
S80 16100	N- 146	S	201	14	34	14	5
S80 16101	N- 147	S	171	9	36	15	5
S80 16102	N- 148	S	179	32	36	13	10
S80 16103	N- 149	S	101	47	48	4	5
S80 16104	N- 150	S	105	10	29	5	6
S80 16105	N- 151	S	225	10	35	8	9
S80 16106	N- 152	S	118	29	27	6	10

REPORTING DATE 14 JUL 1980

SAMPLE NUMBER	FIELD NUMBER	TYPE		Cu PPM	Pb PPM	Zn PPM	Mo PPM	W PPM
S80 16031	N- 77	S	S	298	66	47	15	<2
S80 16032	N- 78	S	S	156	108	54	7	11
S80 16033	N- 79	S	S	64	19	48	6	7
S80 16034	N- 80	S	S	297	17	60	9	4
S80 16035	N- 81	S	S	167	51	40	7	25
S80 16036	N- 82	S	S	170	64	66	13	22
S80 16037	N- 83	S	S	305	12	59	11	13
S80 16038	N- 84	S	S	52	35	27	5	7
S80 16039	N- 85	S	S	119	47	50	7	12
S80 16040	N- 86	S	S	94	30	59	5	10
S80 16041	N- 87	S	S	92	28	45	5	7
S80 16042	N- 88	S	S	81	14	40	3	20
S80 16043	N- 89	S	S	226	21	73	6	11
S80 16044	N- 90	S	S	245	105	66	15	10
S80 16045	N- 91	S	S	103	7	33	5	6
S80 16046	N- 92	S	S	154	15	52	12	8
S80 16047	N- 93	S	S	146	17	49	6	23
S80 16048	N- 94	S	S	123	27	53	4	6
S80 16049	N- 95	S	S	78	15	58	4	4
S80 16050	N- 96	S	S	58	16	71	5	5
S80 16051	N- 97	S	S	15	<4	12	3	<2
S80 16052	N- 98	S	S	117	14	50	9	7
S80 16053	N- 99	S	S	92	14	53	5	6
S80 16054	N- 100	S	S	47	13	45	3	8
S80 16055	N- 101	S	S	96	13	48	6	6
S80 16056	N- 102	S	S	47	10	53	2	6
S80 16057	N- 103	S	S	32	9	60	8	6
S80 16058	N- 104	S	S	18	13	63	4	<2
S80 16059	N- 105	S	S	16	11	75	6	4
S80 16060	N- 106	S	S	26	10	81	5	<2
S80 16061	N- 107	S	S	23	19	65	7	<2
S80 16062	N- 108	S	S	19	9	72	4	<2
S80 16063	N- 109	S	S	76	24	44	5	<2
S80 16064	N- 110	S	S	53	14	26	7	<2
S80 16065	N- 111	S	S	61	20	44	10	10
S80 16066	N- 112	S	S	28	16	69	6	6
S80 16067	N- 113	S	S	49	30	34	3	4
S80 16068	N- 114	S	S	28	12	57	5	12

BATTLE CREEK

JOB V80 - 0517

REPORTING DATE 14 JUL 1980

SAMPLE NUMBER	FIELD NUMBER	TYPE	Cu PPM	Pb PPM	Zn PPM	Mo PPM	W PPM
S80 15993	N- 39	S	243	12	54	24	25
S80 15994	N- 40	S	155	15	49	33	30
S80 15995	N- 41	S	324	59	65	47	40
S80 15996	N- 42	S	215	27	71	34	90
S80 15997	N- 43	S	620	64	77	137	35
S80 15998	N- 44	S	970	85	117	119	10
S80 15999	N- 45	S	48	6	24	18	4
S80 16000	N- 46	S	194	116	91	94	6
S80 16001	N- 47	S	50	13	46	21	5
S80 16002	N- 48	S	54	11	31	11	<2
S80 16003	N- 49	S	151	60	102	24	30
S80 16004	N- 50	S	377	33	71	29	2
S80 16005	N- 51	S	392	33	68	49	3
S80 16006	N- 52	S	46	5	37	6	<2
S80 16007	N- 53	S	130	15	55	12	6
S80 16008	N- 54	S	156	21	61	19	35
S80 16009	N- 55	S	140	12	47	23	6
S80 16010	N- 56	S	132	17	55	20	9
S80 16011	N- 57	S	155	8	54	18	50
S80 16012	N- 58	S	103	9	46	23	20
S80 16013	N- 59	S	87	8	39	38	20
S80 16014	N- 60	S	194	6	42	21	7
S80 16015	N- 61	S	463	12	38	22	4
S80 16016	N- 62	S	401	15	52	48	4
S80 16017	N- 63	S	477	16	66	42	4
S80 16018	N- 64	S	218	12	49	40	2
S80 16019	N- 65	S	154	14	56	38	4
S80 16020	N- 66	S	219	22	57	77	5
S80 16021	N- 67	S	400	134	63	69	7
S80 16022	N- 68	S	108	29	59	37	25
S80 16023	N- 69	S	283	15	59	40	10
S80 16024	N- 70	S	384	17	59	38	9
S80 16025	N- 71	S	418	8	31	20	3
S80 16026	N- 72	S	266	20	62	17	6
S80 16027	N- 73	S	509	31	58	37	4
S80 16028	N- 74	S	404	16	54	28	6
S80 16029	N- 75	S	294	19	44	29	10
S80 16030	N- 76	S	279	9	38	23	14

BATTLE CREEK

JOB V80 - 051

REPORTING DATE 14 JUL 1980

SAMPLE NUMBER	FIELD NUMBER	TYPE	Cu PPM	Pb PPM	Zn PPM	Mo PPM	W PPM
S80 15955	N- 1	S	20	12	57	3	<2
S80 15956	N- 2	S	23	25	74	2	<2
S80 15957	N- 3	S	16	16	48	3	<2
S80 15958	N- 4	S	16	11	51	3	<2
S80 15959	N- 5	S	22	17	50	2	<2
S80 15960	N- 6	S	19	29	62	5	<2
S80 15961	N- 7	S	10	26	50	3	<2
S80 15962	N- 8	S	9	14	35	4	<2
S80 15963	N- 9	S	19	11	59	2	<2
S80 15964	N- 10	S	17	32	68	3	<2
S80 15965	N- 11	S	24	13	55	7	2
S80 15966	N- 12	S	20	17	56	6	<2
S80 15967	N- 13	S	19	9	48	5	<2
S80 15968	N- 14	S	28	10	55	5	2
S80 15969	N- 15	S	54	8	63	5	<2
S80 15970	N- 16	S	45	13	44	4	4
S80 15971	N- 17	S	50	10	40	6	4
S80 15972	N- 18	S	93	12	45	5	8
S80 15973	N- 19	S	97	17	47	4	c35
S80 15974	N- 20	S	98	14	49	5	6
S80 15975	N- 21	S	111	16	49	6	6
S80 15976	N- 22	S	115	13	46	12	8
S80 15977	N- 23	S	144	15	53	8	6
S80 15978	N- 24	S	70	12	41	3	5
S80 15979	N- 25	S	159	10	48	6	5
S80 15980	N- 26	S	231	28	55	<2	4
S80 15981	N- 27	S	130	8	42	7	5
S80 15982	N- 28	S	196	15	50	6	3
S80 15983	N- 29	S	55	11	28	13	6
S80 15984	N- 30	S	118	17	40	8	7
S80 15985	N- 31	S	189	13	44	3	7
S80 15986	N- 32	S	142	15	42	9	5
S80 15987	N- 33	S	219	13	46	12	8
S80 15988	N- 34	S	162	63	50	13	15
S80 15989	N- 35	S	186	45	56	10	15
S80 15990	N- 36	S	334	28	60	18	8
S80 15991	N- 37	S	292	18	46	16	6
S80 15992	N- 38	S	201	5	53	13	2

COMINCO LTD.

EXPLORATION

WESTERN DISTRICT

NTS: 115J/9, 10

10 DECEMBER 1980

APPENDIX B

IN THE MATTER OF THE YUKON QUARTZ
MINING ACT AND IN THE MATTER OF A
GEOCHEMICAL AND GEOLOGICAL SURVEY
CARRIED OUT ON MINERAL CLAIMS
BATTLE 1 - 64 LOCATED IN THE WHITE-
HORSE MINING DIVISION, YUKON
TERRITORY, MORE PARTICULARLY NTS:
115J/9, 10:

AFFIDAVIT

I, A.S. Denton, of the City of Whitehorse, in the Yukon Territory, Geologist,
make oath and say -

- 1) THAT I am employed as a geologist by Cominco Ltd. and, as such have a personal knowledge of the facts to which I hereinafter depose;
- 2) THAT annexed hereto and marked as "Appendix C" to this my affidavit is a true copy of expenditures on a geochemical and geological survey carried out on mineral claims BATTLE 1 - 64;
- 3) THAT the said expenditures were incurred between the 18th day of June 1980 and the 27th day of June 1980, for the purpose of mineral exploration on the above noted claim group.

A.S. Denton

A.S. Denton
Geologist

COMINCO LTD.

EXPLORATION

WESTERN DISTRICT

STATEMENT OF EXPENDITURES

BATTLE MINERAL CLAIMS

WHITEHORSE, M.D., YUKON

GEOLOGICAL AND GEOCHEMICAL REPORT

GEOCHEMISTRY (Assays)	\$ 2,356.00
TRANSPORTATION (Helicopter)	3,374.92
SALARIES	
L. N. Nagy 10 days @ \$175.00	1,750.00
A.S. Denton 10 days @ \$120.00	1,200.00
CAMP COSTS AND SUPPLIES	2,497.00
ADMINISTRATION SERVICES	1,050.00
REPORT PREPARATION	600.00
	<hr/>
	\$ 12,827.92

COMINCO LTD.

EXPLORATION

WESTERN DISTRICT

NTS: 115J/9, 10

10 DECEMBER 1980

APPENDIX D

STATEMENT OF QUALIFICATIONS

I, Alexander Denton, with business address at 5110 B - 5th Avenue, Whitehorse, Yukon Territory, do hereby certify that I have performed the field work and have assessed and interpreted the data resulting from this geochemical and geological survey on the BATTLE mineral claims.

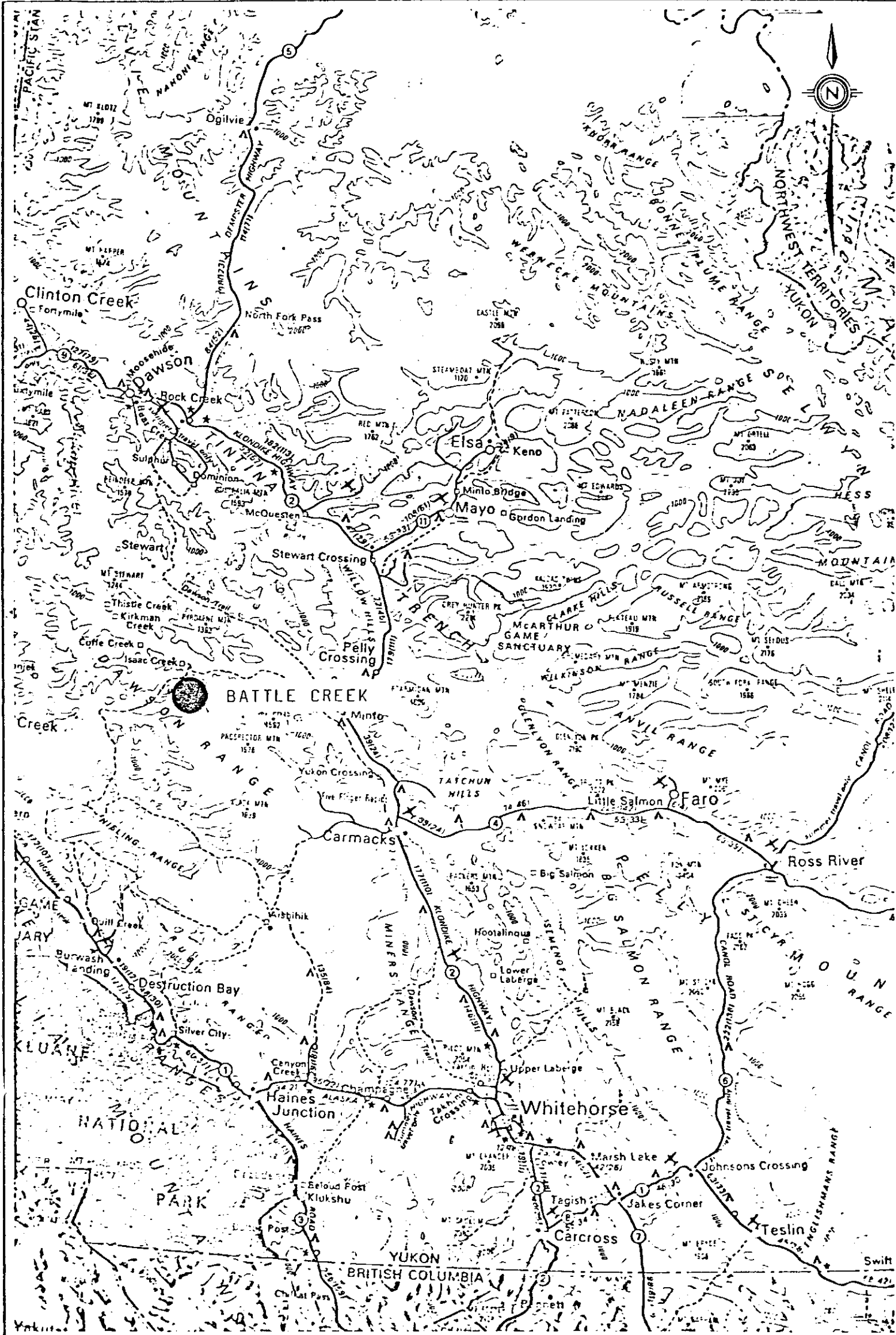
I also certify -

- 1) THAT I am a graduate of the University of Calgary, B.Sc. Geology (1978).
- 2) THAT I have engaged in mineral exploration in Canada since graduation.

Respectfully Submitted:

Alexander S. Denton

Alexander S. Denton



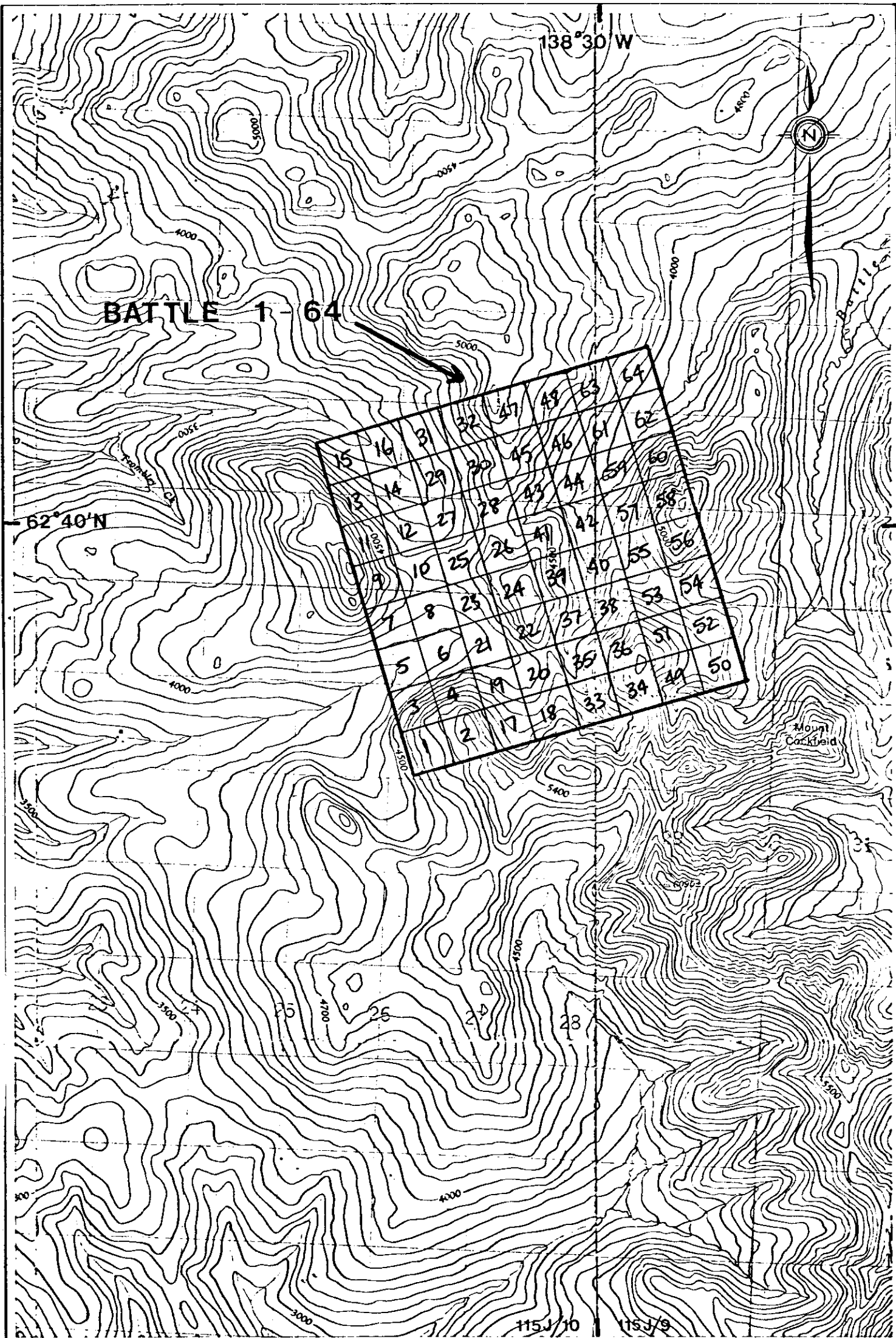
Drawn by: ASD		Traced by:	
Revised by	Date	Revised by	Date

BATTLE CREEK PROPERTY LOCATION MAP

Scale: 1:2,500,000

Date: NOV. 1980

Plate: 80-1a



0 1000 2000
METRES



Drawn by: CS		Traced by:	
Revised by	Date	Revised by	Date

BATTLE CLAIMS

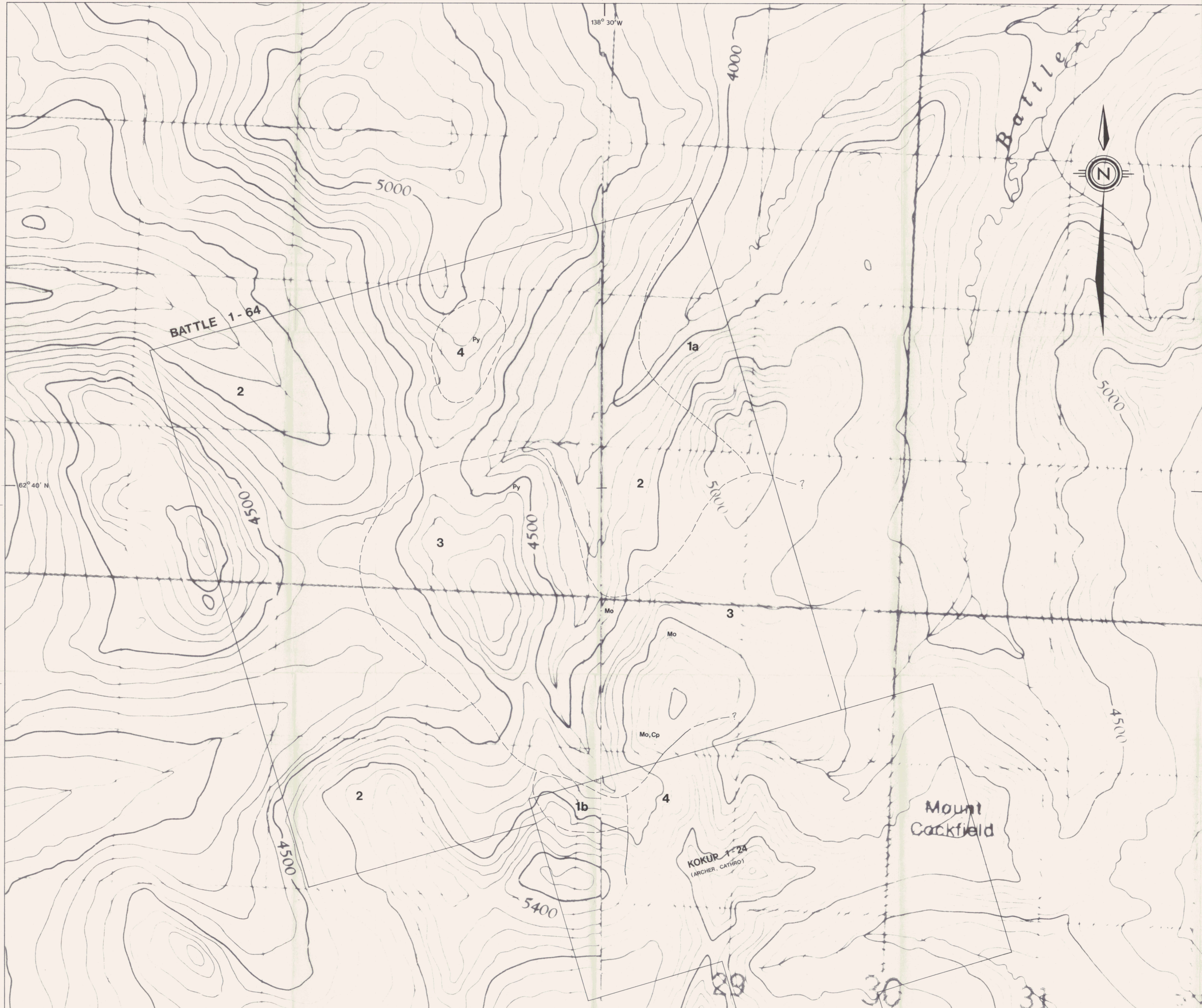
WHITEHORSE M.D., Y.T.

NTS 115J/9,10

Scale: 1:50,000

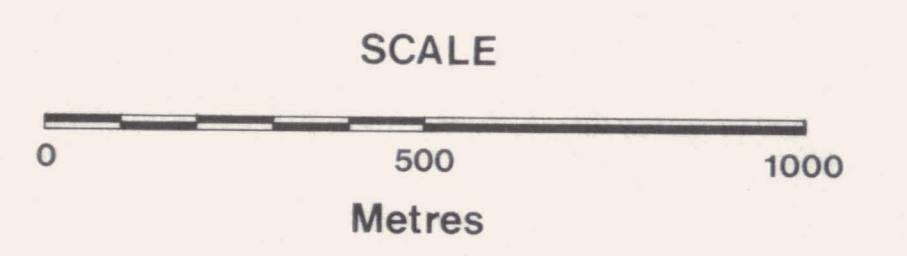
Date: 10 DEC 80

Plate: 80-1b



LEGEND

- 4** CASINO VOLCANICS EOCENE (?)
Pale, rusty weathering pyritic rhyolite and felsite; basalts and related dark phases.
 - 3** COCKFIELD STOCK CRETACEOUS (?)
Porphyritic quartz monzonite, rusty weathering in places; weakly quartz veined with occasional molybdenite in veins and fractures.
 - 2** KLOTASSIN BATHOLITH TRIASSIC
Granite, granodiorite.
 - 1** YUKON GROUP METASEDIMENTS PROTEROZOIC (?)
1b Nasina Quartzite
1a Biotite-muscovite schist
- Cp** Chalcopyrite
Mo Molybdenite
Py Pyrite
- Claim boundary (approximate)

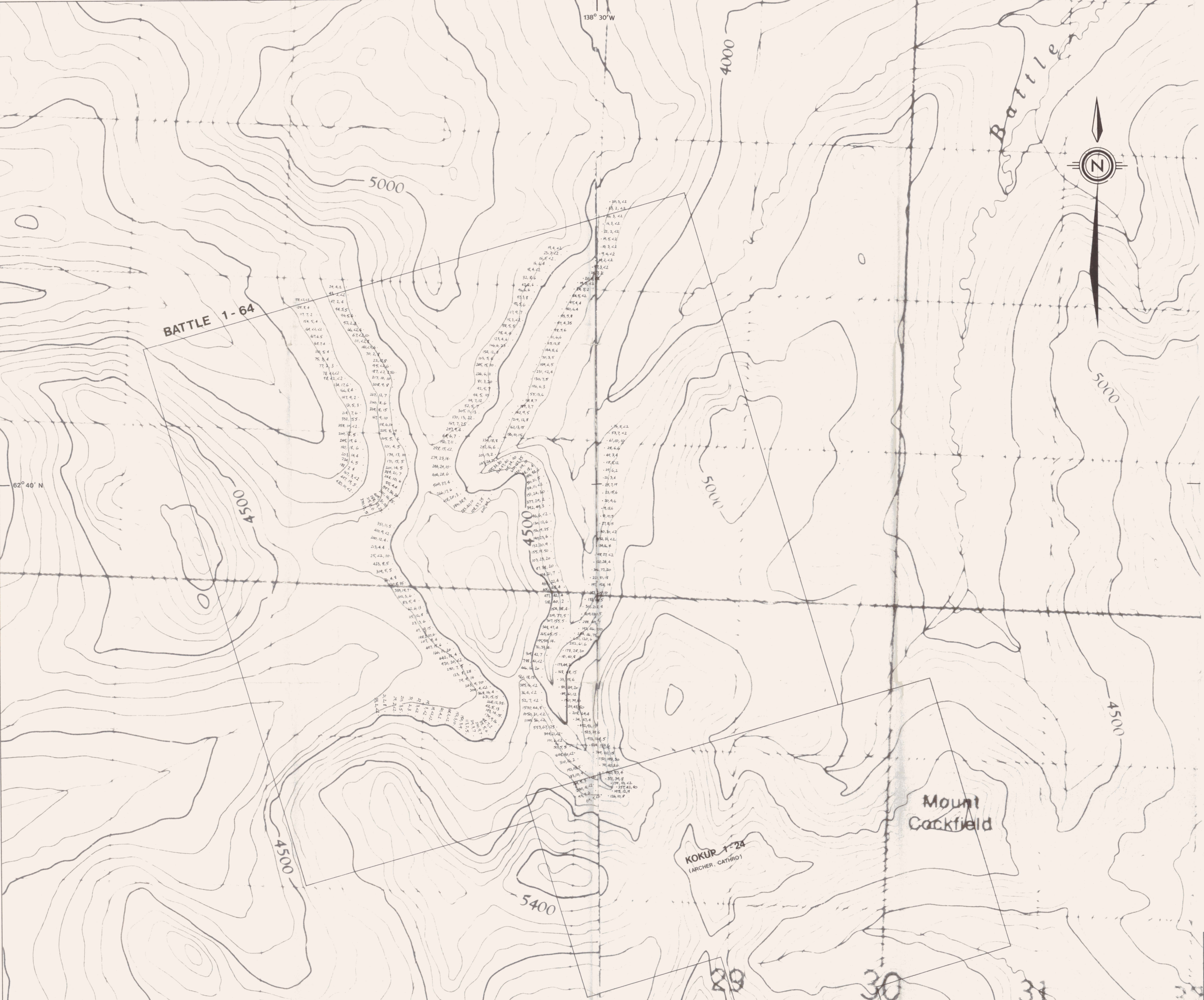


BATTLE CREEK PROPERTY

Drawn by ASD	Traced by
Checked by	Checked by

GEOLOGY

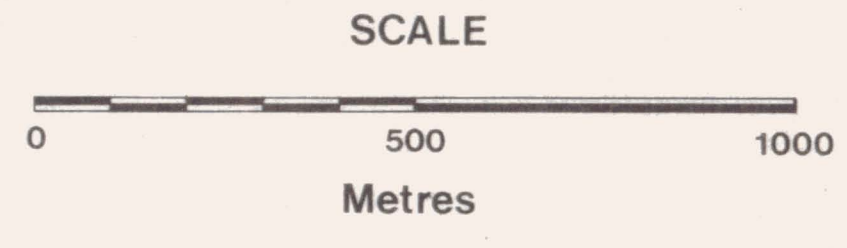




LEGEND

• Soil Sample Location, Cu, Mo, W (ppm)

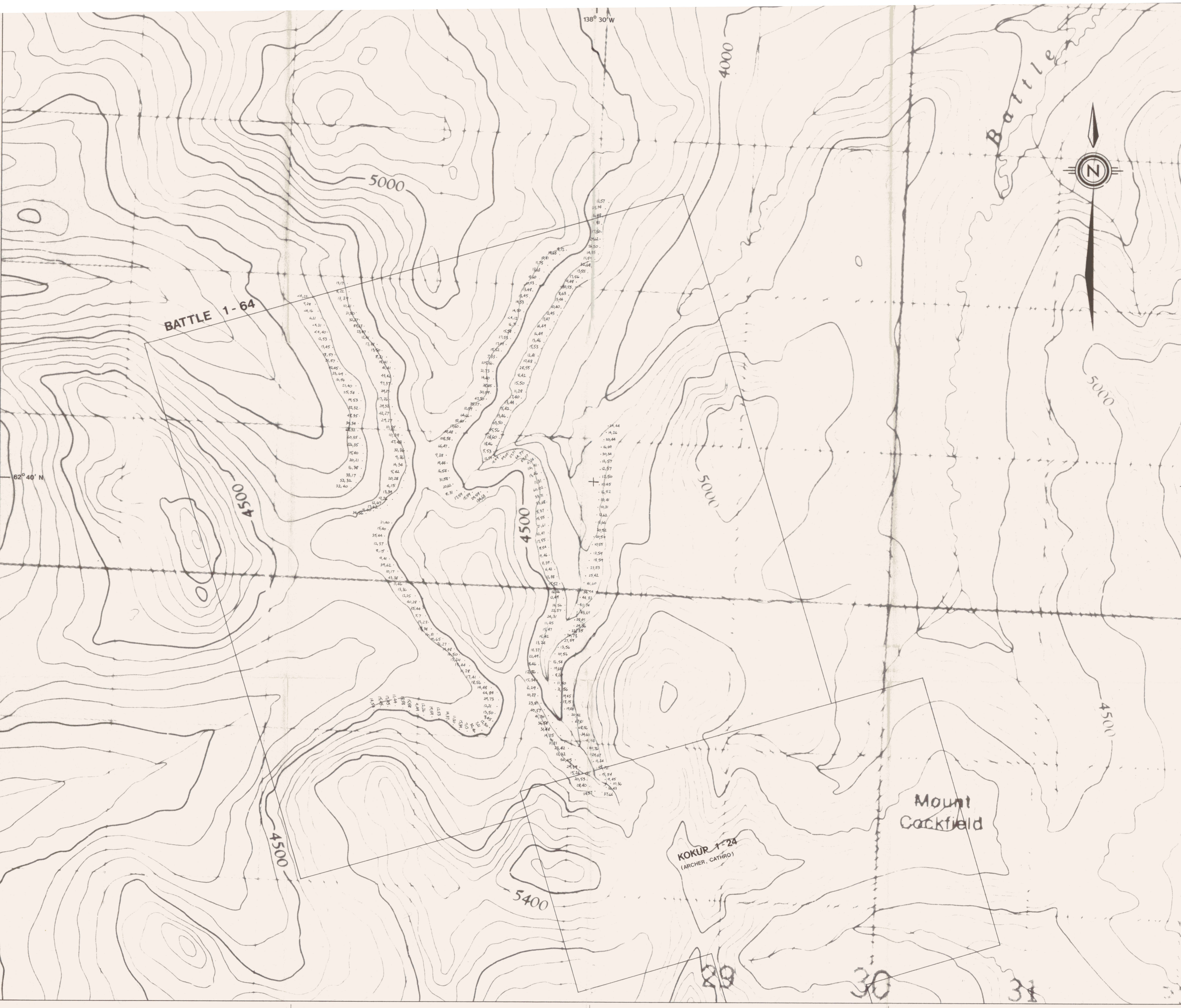
✓ Claim Boundary



BATTLE CREEK PROPERTY

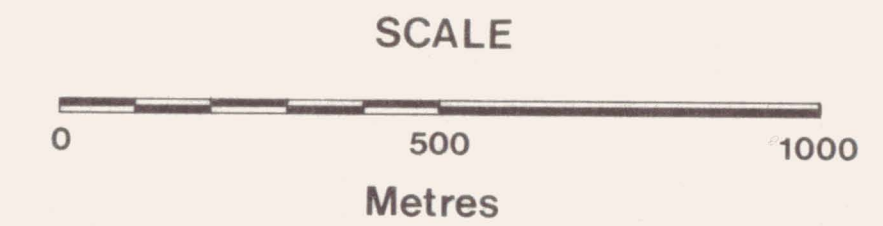
Drawn by: ASD	Traced by:
Checked by:	Checked by:

SOIL GEOCHEMISTRY
Cu, Mo, W



LEGEND

- Soil Sample Location, Pb, Zn (ppm)
- Claim Boundary



BATTLE CREEK PROPERTY

Drawn by: ASD	Traced by:
Checked by:	Date:

SOIL GEOCHEMISTRY
Pb, Zn

Scale: 1:10,000 Date: SEPT. 1980 Plate: 80-4

KOKUP 1-24
(ARCHER, CATHRO)

Mount
Cockfield

BATTLE 1-64

29

30

31

5400

5000

5000

4500

4500

4500

4500

4000

5000

138° 30' W

62° 40' N