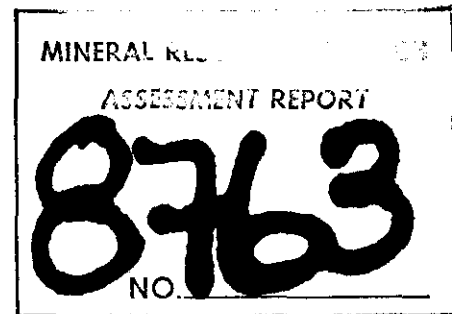


GEOCHEMICAL AND GEOPHYSICAL REPORT
ON THE
QUINTO CLAIM
KAMLOOPS MINING DIVISION, B.C.
Lat. $50^{\circ}47'N$; Long. $121^{\circ}01'W$.

for

QUINTO MINING CORP.
211 - 543 Granville Street
Vancouver, B.C.

by



J.P. ELWELL ENGINEERING LTD.
1026 - 510 West Hastings Street
Vancouver, B.C.

April 3rd, 1981

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APPENDIX

Copies of I.C.P. Geochemical Sample Results.

MAPS

Location Map of Quinto Claims	follows pg.1.
Geochemistry, Quinto Claim - Cu, p.p.m.....	in pocket
" " " - Zn, p.p.m.....	in pocket
" " " - Ag, p.p.m.....	in pocket
Electromagnetic Survey Quinto Claim-Filter.....	in pocket
" " " " - Dip Angle..	in pocket
" " " " - Field Strength..	in pocket

INTRODUCTION

This report consists of an evaluation of the results of a V.L.F. E.M. survey and a geochemical survey conducted on the Quinto claim in the Kamloops Mining Division during September and October 1980 by Strato Geological Ltd., Vancouver, B.C. As the writer has not personally visited the property, the background information on its location, access, regional geology etc. has been taken from other reports which are acknowledged, and the evaluation of the results is based on the field data supplied by Strato Geological Ltd.

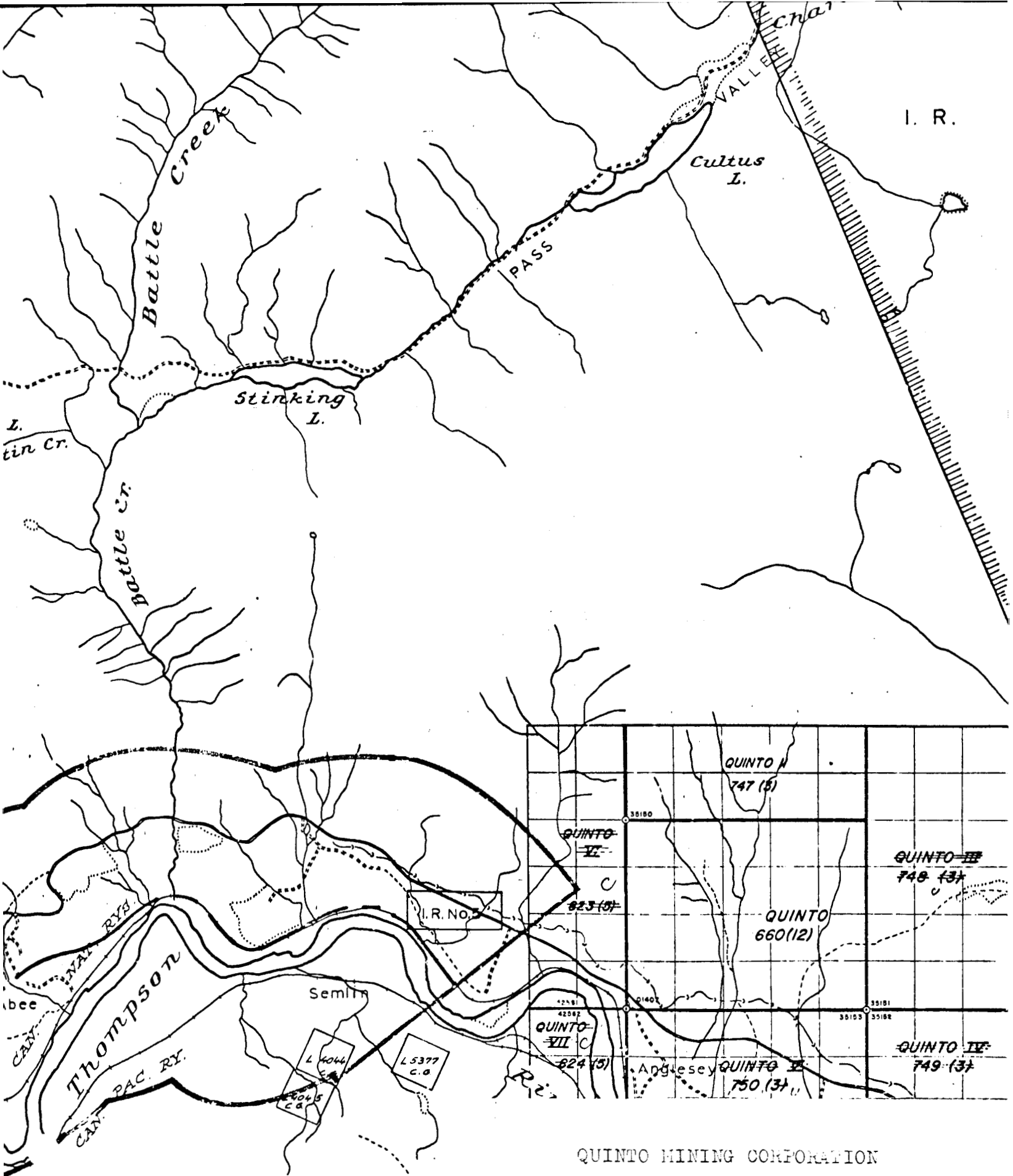
LOCATION AND ACCESS

The Quinto claims are situated approximately 22 km east of Cache Creek, B.C. Access to the claims is by way of Highway No. 1 which passes through the southeast corner of the Quinto claim near the Legal Corner Post, and by some rough ranch roads which cross the property. A location map accompanies this report.

TOPOGRAPHY, ETC.

The Quinto claims are situated on a south facing slope between 1200 and 3000 ft. in elevation. Creek valleys and gulleys are generally of a north-south trend, and are dry except during the spring run-off. Vegetation consists of sagebrush with some sparse pine timber at the higher elevations.

Residual and glacial overburden is general over the entire claim area varying in depth from 0.25 m to over 2 m.



QUINTO MINING CORPORATION

LOCATION MAP
 of
 QUINTO CLAIMS
 Kamloops Min. Div., B.C.
 Scale - 1:50000
 Map M921/14E

PROPERTY

The property consists of two located claims as follows:-

Quinto (20 units) Rec.No. 660 (2)
Quinto (II) (10 units) Rec.No. 747 (3)

GENERAL GEOLOGY

The following description of the geology of the claim area has been summarized from the report by Kerr, Dawson and Associates Ltd. of Kamloops, B.C. as written by W. Gruenwald, B.Sc., geol.

The main part of the Quinto claim is underlain by the Nicola group of volcanics and related rocks of Upper Triassic age. These rocks have been intruded in places by the plutonics of the Guichon batholith, consisting of granite, granodiorite, quartz diorite, and diorite.

The northern part of the property comprising the Quinto II claim and the northern edge of the Quinto have been mapped as being entirely underlain by the Kamloops group of basalt, rhyolite, andesite and related rocks of Miocene age.

GEOCHEMICAL SURVEY

In October 1980 Strato Geological Ltd., conducted a reconnaissance geochemical sampling program over the Quinto claim. Eight lines of 2000 m were run in an east-west direction on a 200 m spacing with samples being taken from the 'B' horizon at 100 m intervals. A total of 160 samples in all were collected and submitted to Acme Analytical Labs. Ltd. for analysis by the Multi-Element ICP Process (Inductively Coupled Argon Plasma Process).

Analysis Procedure

0.5 g samples are digested with hot aqua regia for one hour, and the sample is diluted to 10 ml. The diluted sample is aspirated by ICP and the analytical results are printed by Telex, either in Percent or p.p.m.

Discussion of Results

The analytical results for Cu, Pb, and Ag were plotted by Strato Geological on the 1:2500 scale base maps which accompany this report.

A - Copper - Background appears to be in the 25-30 p.p.m. range. Taking 4X background as being possibly anomalous the plot show only two small spot anomalies which occur on line 16 at stations 1100 and 1200. These occur in dry creek beds and may represent enrichment by silt.

B - Zinc - Background appears to be in the 80-100 p.p.m. range. Taking 4X background as being possibly anomalous only one spot anomaly is indicated in line 16 station 1100, and coincident with one of the copper anomalies.

C - Silver - Background is in the 0.3 to 0.35 range. Again taking 4X background as being of possible interest, the same spot anomaly on line 16, station 1100 is indicated. As previously mentioned, this station is shown as being in a dry creek bed, and there may be some concentration of Cu, Zn, and Ag in the silts which has originated from very low values in the surrounding rocks.

GEOPHYSICAL SURVEY

A VLF EM survey was conducted on the Quinto claim by Strato Geological Ltd. during the period of October 9th to 18th, 1980, the work being supervised by Mr. H. Leis. The Field Strength, Dip Angle, and Filters results are plotted on the 1:2500 scale maps accompanying this report. The instrument used was a VLF Sabre.

Discussion of Results

The plot of the Filter readings indicate a possible linear anomaly parallel to the westside of the dry stream valley shown on the map. However, Mr. Leis states that the high voltage B.C. Hyrdo power line caused a great deal of interference and distortion of the readings and in his opinion the results of the survey are not reliable.

SUMMARY AND CONCLUSIONS

1. The geochemical survey resulted in only one possible coincident spot anomaly for Copper, Zinc, and Silver. This occurs in a dry stream bed and may be due to mineral enrichment of the stream silts.
2. The VLF EM results are considered unreliable due to interference from the power line.

J.P. ELWELL ENGINEERING LTD.

April 3rd, 1981

J.P. ELWELL, P. Eng.

REFERENCES

Geochemical, Geological and Geophysical Report, Quinto claims,
Kamloops Mining Division, B.C. - Kerr, Dawson & Associates
Ltd., Kamloops, B.C. - October 1977.

G.S.C. Map 886 A - Nicola.

G.S.C. Map 1010A - Ashcroft.

STATEMENT OF COSTS

(As submitted by Strato Geological Ltd., and Quinto Mining Corp.)

Flagging and Picketing Lines - 15 km @ \$150.00/km	\$2,250.00
Soil sampling and EM Survey 15 km @ \$300.00/km	4,500.00
Drafting	462.10
Transportation	476.21
Assaying - Geochem samples	1,468.00
" Rock samples	493.69
Car Rental, gas, hotel, food	780.00
Supervision by Director of Company - 2 trips of 2 days each, car, food, lodging	870.00
2 men, 8 days June and July, 1980.	<u>1,600.00</u>
TOTAL	<u><u>\$12,900.00</u></u>

CERTIFICATE

I, James Paul Elwell, of 4744 Caulfield Drive, West Vancouver, B.C., do hereby certify that:

1. I am a Consulting Mining Engineer residing at 4744 Caulfield Drive, West Vancouver, B.C. and with an office at 1026 - 510 West Hastings Street, Vancouver, B.C. V6B 1L8.
2. I am a graduate in Mining Engineering from the University of Alberta in 1940, and am a Registered Professional Engineer in the Province of British Columbia.
3. I have no personal interest, directly or indirectly in the properties or in Quinto Mining Corporation.
4. The findings of the report are from data acknowledged.

DATED at VANCOUVER, B.C. this 3rd day of April, 1981.

JAMES PAUL ELWELL, P. Eng.

A P P E N D I X

Copies of I.C.P.
Geochemical Sample Results

ICP GEOCHEMICAL ANALYSIS

4.500 GRAM OF SAMPLE IS DIGESTED WITH 3 ML OF 3:1:3 NITRIC ACID
 AND HYDROCHLORIC ACID TO WATER AT 90 DEG C FOR 1 HOUR. THE SAMPLE
 IS DILUTED WITH WATER TO 10.0 ML.

THE RESULTS ARE REPORTED IN PPM EXCEPT FOR FE, CA, P, MG, BA, AND
 AL WHICH IS IN PERCENT.

THIS LEACH IS PARTIAL FOR CA, P, MG, AL, TI, LA. AND W.

VERY LITTLE BA IS DISSOLVED.

IS = INTERNAL STANDARD.

*HO/L2 OE
 EGC

Sample number
 QUINTO

FILE# 80-1289

PAGE 1

BURN # 1 GE16

135:04

computer instruction

IS
 1340

MO	CU	PB	ZN	AG	NI	CO	MN	FE %	AS
1.71	41.1	8.68	87.7	.336	28.4	13.4	454	3.380	6.13
U	IS	TH	IS	CD	SB	BI	V	CA %	P %
1.61	-3.1	.803	-1167	.140	3.94	1.42	77.5	.5608	.074
LA	IN	MG %	BA %	TI %	B	AL %	IS	IS	W
7.81	.338	.4647	.0187	.1010	-5.5	1.510	39.8	31.8	.726

*HO/L2 100E
 EGC

BURN # 1 GE16

135:05

1340

1.74	43.7	8.42	194	.108	11.0	11.7	977	3.837	1.74
-1.1	-3.0	.341	-6108	.489	1.88	1.96	44.7	2.133	.069
8.81	.828	.4263	.0217	.0162	-6.5	.9875	27.1	20.3	-.55

*O/L2 200E
 EGC

BURN # 1 GE16

135:06

1340

2.05	84.1	13.9	191	.561	23.7	13.4	661	3.613	5.46
-2.9	-2.8	.218	*	.677	3.16	1.89	67.9	4.261	.080
8.14	1.46	.7439	.0381	.0622	-3.4	1.606	45.3	27.5	.116

*O/L2 300E
 EGC

BURN # 1 GE16

135:07

1340

1.88	69.6	10.9	104	.439	35.6	14.8	614	3.740	6.92
4.01	-2.9	1.04	-2226	.194	4.35	1.33	80.6	.9300	.065
8.75	.482	.6453	.0265	.1045	-5.8	2.116	53.0	32.6	.444

*

Handwritten signature

*H0/L2 400E
EGC

BURN # 1 GE16 135:08

IS
1340
MO CU PB ZN AG NI CO MN FE AS
1.75 47.5 6.38 99.3 .407 36.2 14.5 495 3.319 7.34
U IS TH IS CD SB BI V CA P
3.41 -3.0 1.03 -1624 .385 4.69 1.49 69.1 .7153 .062
LA IN MG BA TI B AL IS IS W
7.83 .027 .6138 .0195 .1084 -5.1 1.814 44.3 33.0 1.03

*H0/L2 500E
EGC

BURN # 1 GE16 135:09

1340
1.61 43.5 7.09 93.0 .325 39.7 14.5 407 3.450 6.03
4.11 -3.2 1.22 -1353 .336 3.08 1.63 73.7 .6139 .051
7.59 -.58 .6582 .0150 .1189 -5.6 1.838 47.9 34.4 .478

*0/L2 600E
EGC

BURN # 1 GE16 135:10

1340
1.76 45.0 10.1 106 .311 36.5 14.2 421 3.525 6.19
3.07 -3.1 1.11 -1382 .373 3.26 1.49 75.8 .6315 .064
8.33 .344 .6086 .0171 .1211 -6.1 1.898 50.1 34.8 .571

*0/L2 700E
EGC

BURN # 1 GE16 135:11

1340
1.68 56.6 11.5 137 .362 26.9 15.0 455 3.881 4.56
1.90 -2.9 1.43 -1756 .564 4.12 1.49 91.0 .7632 .075
9.61 .296 .6578 .0121 .1332 -7.4 2.107 48.6 36.7 .507

*0/L2 800E
EGC

BURN # 1 GE16 135:12

1340
1.80 53.8 8.82 148 .288 25.6 15.0 542 3.718 5.07
2.39 -3.2 1.71 -1727 .493 3.36 .974 84.3 .7458 .066
9.27 -.70 .6179 .0133 .1284 -6.8 2.049 44.3 35.9 -.33

*

*HO/L2 900E
EGC

BURN # 1 GE16 135:13

IS
1340
MO CU PB ZN AG NI CO MN FE AS
1.78 48.1 10.2 141 .240 24.7 14.4 508 3.565 4.58
U IS TH IS CD SB BI V CA P
2.10 -3.3 1.25 -1572 .357 3.13 1.52 81.9 .6929 .062
LA IN MG BA TI B AL IS IS W
8.65 -.17 .5676 .0131 .1241 -6.4 1.875 43.6 35.2 .202

*HO/L2 1000E
EGC

BURN # 1 GE16 135:14

1340
2.07 56.2 9.35 152 .314 26.1 15.2 539 3.815 5.36
2.09 -2.6 1.30 -1921 .473 3.72 1.26 91.2 .8212 .078
9.37 .310 .6186 .0128 .1334 -6.1 1.998 48.8 36.7 .492

*O/L2 1100E
EGC

BURN # 1 GE16 135:15

1340
1.87 44.1 8.18 108 .239 23.8 14.4 491 3.682 4.03
.866 -2.9 1.18 -1934 .302 3.11 1.19 93.0 .8186 .075
8.76 -.04 .5267 .0127 .1450 -5.7 1.869 41.3 38.3 .711

*O/L2 1200E
EGC

BURN # 1 GE16 135:16

1340
1.88 51.1 11.9 122 .300 24.3 15.6 519 3.885 8.17
1.65 -2.8 .933 -1960 .421 3.60 1.13 94.5 .8341 .077
8.95 -.24 .5958 .0148 .1373 -5.5 1.840 42.4 37.3 .841

*O/L2 1300E
EGC

BURN # 1 GE16 135:17

1340
1.60 57.5 7.97 89.3 .325 27.6 16.3 498 3.761 6.22
-1.3 -2.8 1.35 -8365 .504 4.14 .991 102 2.798 .081
10.1 -.01 .9040 .0102 .1241 -6.8 1.843 39.8 35.8 .614

*

*H0/L2 400E
EGC

BURN # 1 GE16 135:18

IS
1340
MO CU PB ZN AG NI CO MN FE AS
2.08 60.0 14.6 97.2 .365 10.4 13.9 887 4.544 9.00
U IS TH IS CD SB BI V CA P
-5.4 -2.2 .498 * .537 3.28 1.81 135 5.914 .045
LA IN MG BA TI B AL IS IS W
7.61 .960 .8598 .0118 .0191 -7.2 2.312 22.7 22.1 .724

*H0/L2 1500E
EGC

BURN # 1 GE16 135:20

1340
1.91 56.7 10.2 118 .253 24.5 16.7 554 4.124 8.77
1.62 -2.9 1.74 -2047 .390 3.35 1.35 108 .8738 .073
9.23 -.60 .6334 .0117 .1389 -6.1 2.245 46.9 37.5 1.05

*0/L2 1600E
EGC

BURN # 1 GE16 135:21

1340
1.99 53.2 12.5 105 .353 29.4 17.0 551 4.268 12.4
.573 -2.5 1.70 -5291 .443 3.28 1.56 110 1.899 .084
10.1 .775 .8882 .0134 .1306 -6.1 2.430 43.4 36.6 1.10

*0/L2 1700E
EGC

BURN # 1 GE16 135:22

1340
1.61 48.4 12.0 84.3 .287 26.9 15.7 479 3.654 7.81
-2.1 -2.5 1.54 * .520 3.07 .937 90.9 3.427 .089
10.2 -.11 .7147 .0119 .1414 -6.0 1.870 35.9 38.6 .557

*0/L2 1800E
EGC

BURN # 1 GE16 135:23

1340
2.70 44.4 8.11 85.9 .366 24.2 15.4 462 3.828 6.97
3.58 -2.8 1.43 -2254 .359 4.66 1.43 100 .9356 .068
8.92 -.02 .7406 .0061 .1356 -2.7 1.830 38.4 36.9 .653

*

*HO/L2 1900E
EGC

BURN # 1 GE16 135:24

IS

1340

MO	CU	PB	ZN	AG	NI	CO	MN	FE	AS
2.08	70.2	20.8	149	.408	27.5	19.9	1028	4.478	11.9
U	IS	TH	IS	CD	SB	BI	V	CA	P
.526	-2.8	1.37	-3146	.970	5.49	1.46	106	1.226	.095
LA	IN	MG	BA	TI	B	AL	IS	IS	W
10.7	.586	.8630	.0121	.1280	-5.8	2.410	45.1	36.3	.464

*HO/L2 2000E
EGC

BURN # 1 GE16 135:25

1340

1.38	41.8	9.50	94.4	.206	28.1	15.1	480	3.676	7.70
5.95	-2.9	1.35	-2061	.294	2.08	1.33	91.3	.8607	.066
9.35	-.89	.5507	.0117	.1309	-5.5	2.126	41.3	36.3	.014

*O/L4 200E
EGC

BURN # 1 GE16 135:26

1341

1.84	96.3	26.5	260	.286	28.6	15.1	1212	4.303	3.91
1.11	-3.0	1.37	-2187	1.55	1.84	1.54	80.0	.9134	.093
11.6	.898	.6945	.0431	.0907	-6.0	2.036	50.8	30.8	-1.1

*O/L4 300E
EGC

BURN # 1 GE16 135:27

1340

1.69	89.2	14.4	135	.643	26.3	15.1	874	4.239	6.66
-1.3	-2.3	1.08	-4246	.606	3.54	1.50	84.1	1.571	.071
10.6	1.81	.8222	.0355	.0994	-6.8	2.200	41.1	32.0	.351

*O/L4 400E
EGC

BURN # 1 GE16 135:28

1340

1.84	61.2	15.9	104	.490	23.3	13.4	560	3.510	7.61
-3.0	-2.8	.712	*	.464	2.68	1.44	70.5	4.023	.074
9.36	.968	.7207	.0332	.0856	-4.4	1.908	35.9	30.7	.528

*

*HO/L4 500E
EGC

BURN # 1 GE16 135:29

IS										
1341										
MO	CU	PB	ZN	AG	NI	CO	MN	FE	AS	
1.91	49.6	14.0	132	.429	30.8	13.9	491	3.706	6.94	
U	IS	TH	IS	CD	SB	BI	V	CA	P	
5.20	-2.8	1.14	-1748	.411	4.16	1.72	80.7	.7562	.081	
LA	IN	MG	BA	TI	B	AL	IS	IS	W	
9.98	-.12	.6121	.0201	.1143	-5.9	2.054	58.7	33.7	1.05	

*HO/L4 600E
EGC

BURN # 1 GE16 135:30

1340										
1.73	47.0	10.6	130	.339	32.7	15.0	536	3.832	7.21	
1.65	-2.9	1.35	-1682	.413	5.05	1.08	82.2	.7358	.074	
9.56	-.09	.6314	.0188	.1367	-6.5	2.084	52.6	37.0	.540	

*O/L4 700E
EGC

BURN # 1 GE16 135:31

1340										
2.35	66.4	12.5	118	.467	67.7	18.5	452	4.033	8.91	
1.73	-2.8	1.67	-4792	.666	4.80	1.53	88.3	1.741	.088	
11.1	-.54	1.068	.0167	.1298	-3.4	2.360	78.3	36.4	.911	

*O/L4 800E
EGC

BURN # 1 GE16 135:31

1340										
2.16	64.4	18.2	263	.374	28.3	16.6	650	3.823	6.32	
5.00	-2.8	1.08	-2273	1.13	3.47	1.22	86.9	.9415	.069	
8.02	.266	.6934	.0174	.1262	-5.6	1.795	55.4	35.5	-.16	

*O/L4 900E
EGC

BURN # 1 GE16 135:32

1340										
1.66	50.0	7.35	136	.288	25.5	15.9	582	3.654	4.52	
4.43	-3.0	1.45	-1625	.534	3.38	1.21	84.7	.7241	.054	
9.26	-.15	.6155	.0120	.1406	-6.8	1.892	45.4	37.5	-.01	

*

*HO/L4 1000E
EGC

BURN # 1 GE16 135:34

IS
1340
MO CU PB ZN AG NI CO MN FE AS
1.83 49.4 10.6 126 .355 27.4 15.8 548 3.745 3.64
U IS TH IS CD SB BI V CA P
2.14 -2.6 1.87 -1821 .399 3.38 1.56 84.9 .7882 .068
LA IN MG BA TI B AL IS IS W
10.0 .163 .6591 .0122 .1370 -6.1 2.047 43.9 37.0 .424

*HO/L4 1100E
EGC

BURN # 1 GE16 135:35

1340
1.73 45.2 10.5 106 .380 24.3 14.4 479 3.727 6.41
.769 -2.5 1.20 -2055 .391 4.19 1.19 95.5 .8722 .079
9.27 .531 .5693 .0123 .1490 -5.5 1.947 42.1 38.8 .563

*O/L4 1200E
EGC

BURN # 1 GE16 135:36

1340
1.69 54.5 10.7 108 .417 24.1 14.6 470 3.573 9.38
-3.8 -2.8 1.34 * .707 3.61 .885 99.5 3.735 .079
9.35 -.14 .7418 .0107 .1453 -4.3 1.861 43.0 39.1 .685

*O/L4 1300E
EGC

BURN # 1 GE16 135:37

1340
1.19 66.1 12.8 134 .465 13.1 10.6 603 2.666 6.76
-.74 -2.9 .462 -5316 .601 1.03 1.67 46.0 1.876 .048
6.77 .505 .3662 .0215 .0294 -.60 1.393 24.6 21.3 -.20

*O/L4 1400E
EGC

BURN # 1 GE16 135:37

1340
1.97 75.5 16.7 102 .326 32.8 20.9 654 4.114 8.32
2.98 -2.7 1.53 -2179 .481 3.51 1.22 105 .9184 .072
9.55 -.51 .8247 .0166 .1501 -4.9 2.821 46.0 39.1 .928

*

*HO/L4 1500E
EGC

BURN # 1 GE16 135:38

IS
1340
MO CU PB ZN AG NI CO MN FE AS
1.69 56.9 10.1 76.4 .394 27.1 14.8 408 3.617 10.9
U IS TH IS CD SB BI V CA P
-3.6 -2.7 1.28 * .415 3.42 1.21 100 4.032 .090
LA IN MG BA TI B AL IS IS W
10.1 .122 .7799 .0104 .1394 -1.8 2.113 38.3 38.5 1.32

*HO/L4 1600E
EGC

BURN # 1 GE16 135:40

1340
1.89 54.6 11.5 116 .278 28.4 16.9 582 4.287 6.35
3.94 -3.1 1.38 -1731 .354 4.58 1.08 93.1 .7626 .065
12.0 -.37 .6061 .0152 .1344 -7.1 2.545 50.9 36.9 .681

*O/L4 1700E
EGC

BURN # 1 GE16 135:41

1340
2.00 43.7 11.0 99.1 .302 26.3 16.7 525 3.706 4.28
.759 -2.9 1.50 -1520 .435 3.90 1.37 79.9 .6849 .045
11.2 -.22 .4701 .0166 .1310 -6.5 2.266 48.3 36.1 .987

*O/RE L2 2000E
EGC

BURN # 1 GE16 135:42

1340
1.53 41.4 9.24 93.1 .299 27.6 14.9 474 3.615 10.2
1.00 -3.0 1.02 -2027 .373 4.15 1.54 92.1 .8481 .064
9.16 -.56 .5444 .0116 .1297 -5.6 2.097 41.0 36.0 .954

*O/STD M1 (over std)
EGC

BURN # 1 GE16 135:42

1340
1.56 33.3 34.4 201 .378 35.6 14.3 640 2.982 7.48
2.15 -3.4 1.64 -1324 .755 1.61 1.77 66.0 .5911 .077
6.69 -.78 .4715 .0167 .0929 -4.9 2.038 83.5 30.4 -.57

*

ICP GEOCHEMICAL ANALYSIS

A .500 GRAM OF SAMPLE IS DIGESTED WITH 3 ML OF 3:1:3 NITRIC ACID TO HYDROCHLORIC ACID TO WATER AT 90 DEG C FOR 1 HOUR. THE SAMPLE IS DILUTED WITH WATER TO 10.0 MLS. THE RESULTS ARE REPORTED IN PPM EXCEPT FOR FE, CA, P, MG, BA, AND AL WHICH IS IN PERCENT. THIS LEACH IS PARTIAL FOR CA, P, MG, AL, TI, LA. AND W. VERY LITTLE BA IS DISSOLVED. IS = INTERNAL STANDARD.

*HO/L4 1800E *sample number* QUINTO FILE# 80-1289 PAGE 2
EGC

BURN # 1 GE16 135:48

IS
1340

MO	CU	PB	ZN	AG	NI	CO	MN	FE	AS
1.71	46.4	8.71	85.3	.203	25.1	13.7	500	3.127	3.20
U	IS	TH	IS	CD	SB	BI	V	CA %	P
2.52	-3.1	1.35	-1317	.277	2.25	1.53	67.3	.5966	.042
LA	IN	MG %	BA %	TI %	B	AL %	IS	IS	W
9.86	-.18	.4228	.0132	.0775	-6.0	1.728	38.7	28.2	.243

*HO/L4 1900E
EGC

BURN # 1 GE16 135:50 *Computer instructions*

1340

1.93	47.6	10.0	82.2	.176	29.9	16.0	492	4.012	6.30
-.99	-2.6	2.00	-1440	.184	4.15	.484	84.7	.6563	.045
9.99	-.21	.6193	.0090	.1220	-7.4	2.053	37.5	34.8	.949

*O/L4 2000E
EGC

BURN # 1 GE16 135:50

1340

1.62	40.3	7.19	85.5	.144	24.3	14.8	551	3.515	4.21
1.87	-3.0	1.48	-1329	.216	2.59	1.61	73.6	.6038	.057
9.21	.590	.4894	.0124	.1121	-6.5	1.793	33.3	33.3	.699

*

O/L6 100E
EGC

BURN # 1 GE16 135:51

1340

1.60	47.5	28.4	147	.212	31.9	14.8	621	3.436	3.86
3.57	-3.3	1.38	-1425	.796	2.01	1.52	68.4	.6311	.063
9.55	.130	.5059	.0227	.0944	-6.0	1.902	47.4	30.8	-.61

*

*H0/L6 200E
EGC

BURN # 1 GE16 135:52
IS

1340

MO	CU	PB	ZN	AG	NI	CO	MN	FE	AS
1.75	44.3	14.8	134	.345	35.5	14.8	488	3.455	4.82
U	IS	TH	IS	CD	SB	BI	V	CA	P
3.73	-2.9	1.23	-1297	.437	3.06	1.51	69.4	.5853	.075
LA	IN	MG	BA	TI	B	AL	IS	IS	W
8.93	.592	.5360	.0256	.1044	-5.5	1.854	54.8	32.1	.318

*H0/L6 300E
EGC

BURN # 1 GE16 135:54
1340

1.66	94.7	23.7	107	1.07	26.5	16.0	606	3.861	2.73
.568	-2.5	.476	-2507	.281	1.82	1.47	80.7	1.005	.073
8.50	1.27	.7041	.0412	.0702	-6.1	2.108	38.6	27.5	.471

*0/L6 400E
EGC

BURN # 1 GE16 135:54
1340

1.76	39.2	13.1	117	.301	28.3	12.7	467	3.037	4.09
.592	-3.1	.876	-1286	.436	2.52	1.28	58.6	.5848	.068
9.10	-.15	.4481	.0198	.0904	-5.3	1.819	47.1	29.9	.369

*0/L6 500E
EGC

BURN # 1 GE16 135:55
1340

1.81	42.5	12.3	134	.293	24.9	13.7	573	3.406	4.17
3.61	-2.7	.939	-1256	.458	2.52	1.44	68.6	.5772	.073
8.31	.398	.5534	.0172	.0908	-5.9	1.706	40.2	30.0	.690

*0/L6 600E
EGC

BURN # 1 GE16 135:56
1340

2.01	55.0	15.5	133	.341	29.1	14.4	605	3.563	5.27
2.00	-3.1	.836	-1381	.583	2.96	1.28	71.5	.6267	.069
9.58	.248	.5609	.0161	.0935	-6.2	1.878	44.8	30.5	.371

*

*HO/L6 700E
EGC

BURN # 1 GE16 135:57

IS
1340

MO	CU	PB	ZN	AG	NI	CO	MN	FE	AS
2.66	77.6	17.7	285	.656	26.1	14.3	777	3.438	7.46
U	IS	TH	IS	CD	SB	BI	V	CA	P
3.35	-2.5	.430	-2516	1.37	2.61	1.45	71.3	1.015	.080
LA	IN	MG	BA	TI	B	AL	IS	IS	W
7.86	-.06	.5967	.0182	.0846	-3.3	1.763	51.9	29.4	-.35

*HO/L6 800E
EGC

BURN # 1 GE16 135:58

1340

2.17	63.2	16.9	239	.392	26.9	15.5	578	3.502	6.99
-1.2	-2.7	.767	-2197	1.10	3.79	1.29	78.5	.9014	.062
7.15	.981	.6233	.0165	.1071	-5.9	1.560	52.5	32.5	-.21

*O/L6 900E
EGC

BURN # 1 GE16 135:59

1340

1.74	46.1	11.1	167	.330	25.9	14.5	587	3.445	5.81
3.02	-2.7	.929	-2144	.730	2.88	1.50	78.9	.8794	.093
8.06	.624	.6740	.0115	.1070	-3.7	1.598	44.5	32.6	.146

*O/L6 1000E
EGC

BURN # 1 GE16 136:01

1340

2.13	57.0	13.0	151	.425	32.3	15.4	519	3.604	4.69
2.39	-2.5	1.47	-1550	.635	4.34	1.10	83.1	.6861	.077
8.70	.671	.7098	.0114	.1237	-6.5	1.715	48.2	34.8	.751

*O/L6 1100E
EGC

BURN # 1 GE16 136:01

1340

2.47	67.5	21.9	365	.615	28.2	16.0	663	3.747	11.5
-2.5	-2.5	1.27	-7053	1.69	2.57	1.30	91.1	2.401	.081
8.81	.883	.8336	.0132	.1048	-6.1	1.955	64.6	32.6	-1.4

*

*HO/L6 1200E
EGC

BURN # 1 GE16 136:02
IS
1340
MO CU PB ZN AG NI CO MN FE AS
1.63 48.0 8.61 81.9 .142 27.9 15.3 460 3.800 1.30
U IS TH IS CD SB BI V CA P
1.44 -3.0 2.06 -1399 .236 2.59 .901 78.1 .6288 .035
LA IN MG BA TI B AL IS IS W
8.78 -.17 .5960 .0084 .1371 -6.8 1.932 38.0 36.7 .671

*HO/L6 1300E
EGC

BURN # 1 GE16 136:03
1340
1.52 58.3 8.73 84.2 .289 32.4 15.9 511 3.723 4.84
.043 -3.1 2.12 -1529 .272 3.50 1.11 77.3 .6707 .044
10.8 -.81 .6017 .0099 .1281 -8.0 2.086 41.6 35.5 .504

*O/L6 1400E
EGC

BURN # 1 GE16 136:04
1340
1.80 45.6 10.4 99.6 .252 24.2 14.2 494 3.457 4.76
1.39 -2.9 1.47 -1468 .460 3.30 .991 74.4 .6490 .063
8.88 .221 .5251 .0112 .1019 -5.7 1.843 36.6 31.6 .814

*O/L6 1500E
EGC

BURN # 1 GE16 136:05
1340
1.52 38.9 7.54 86.7 .190 21.6 13.4 516 3.388 3.89
2.47 -3.2 1.22 -1463 .245 2.43 .962 75.3 .6473 .050
8.60 .465 .4788 .0101 .1087 -5.9 1.676 34.1 32.5 .455

*O/L6 1600E
EGC

BURN # 1 GE16 136:06
1340
1.52 30.5 5.76 76.6 .106 23.6 14.3 500 3.363 .824
-1.1 -3.0 1.61 -1155 .241 1.81 .966 68.3 .5317 .026
9.33 -.54 .4481 .0094 .1165 -6.2 1.629 32.6 33.7 .388

*

*HO/L6 1700E
EGC

BURN # 1 GE16 136:07

IS

1340

MO	CU	PB	ZN	AG	NI	CO	MN	FE	AS
1.45	34.6	6.29	85.5	.172	28.5	14.3	481	3.423	5.87
U	IS	TH	IS	CD	SB	BI	V	CA	P
1.03	-2.8	1.81	-1409	.282	2.85	1.31	69.0	.6274	.035
LA	IN	MG	BA	TI	B	AL	IS	IS	W
9.26	.101	.5125	.0099	.1119	-6.3	1.762	37.6	33.1	.490

*HO/L6 1800E
EGC

BURN # 1 GE16 136:08

1340

1.21	35.4	3.42	84.3	.199	27.3	14.6	524	3.313	4.25
4.68	-3.1	1.56	-1281	.279	3.55	1.04	71.5	.5747	.042
9.44	.315	.4724	.0105	.1209	-6.8	1.675	35.7	34.3	.552

*O/L6 1900E
EGC

BURN # 1 GE16 136:09

1340

1.49	36.1	8.97	89.9	.151	22.6	14.2	672	3.402	3.50
2.35	-3.1	1.86	-1263	.210	1.96	1.16	68.5	.5679	.040
10.1	-.36	.4517	.0167	.0987	-6.4	1.993	34.7	31.2	.215

*O/L6 2000E
EGC

BURN # 1 GE16 136:10

1340

1.66	40.3	7.16	92.7	.216	22.9	12.4	487	3.237	5.74
2.94	-2.9	1.10	-1500	.268	2.47	1.35	66.6	.6561	.076
9.11	-.10	.5063	.0163	.0882	-4.7	1.921	35.0	29.5	.723

*O/STD MI
EGC

600 Standard

BURN # 1 GE16 136:10

1340

1.79	29.5	33.0	187	.396	32.0	12.5	609	2.682	7.41
1.53	-3.4	.993	-1124	.788	2.97	2.03	60.0	.5180	.072
5.64	.185	.4342	.0161	.0786	-4.9	1.811	75.2	28.0	-.11

*

*HO/L8 100E
EGC

BURN # 1 GE16 136:12

IS
1340

MO	CU	PB	ZN	AG	NI	CO	MN	FE	AS
1.75	53.3	12.3	172	.247	22.9	16.2	1028	4.052	2.60
U	IS	TH	IS	CD	SB	BI	V	CA	P
1.55	-2.8	.891	-1322	.385	2.53	1.70	61.2	.5970	.076
LA	IN	MG	BA	TI	B	AL	IS	IS	W
7.69	2.04	.5030	.0456	.0614	-6.9	1.427	35.8	25.9	-.33

*HO/L8 200E
EGC

BURN # 1 GE16 136:13

1340

1.77	58.4	12.8	118	.416	33.1	15.0	768	3.583	5.09
3.16	-2.9	1.11	-1438	.348	3.33	1.31	67.5	.6342	.070
8.94	.614	.6090	.0300	.0942	-7.4	1.642	38.7	30.5	.273

*O/L8 300E
EGC

BURN # 1 GE16 136:14

1340

1.56	38.9	8.57	122	.228	26.3	14.3	638	3.250	4.41
.342	-2.8	1.23	-1094	.419	2.94	1.67	65.5	.5064	.031
8.49	.715	.4832	.0152	.1130	-6.4	1.689	41.6	33.0	.083

*O/L8 400E
EGC

BURN # 1 GE16 136:14

1341

2.13	38.6	21.5	210	.446	16.6	11.2	625	3.270	8.14
2.43	-2.7	.721	-1112	.991	1.59	1.71	52.8	.5086	.055
7.15	.162	.5915	.0164	.0559	-5.9	1.611	35.4	24.8	-.36

*O/L8 500E
EGC

BURN # 1 GE16 136:15

1340

1.56	56.0	16.4	203	.363	23.6	12.6	770	3.223	5.00
-2.5	-3.0	.877	-1581	.886	1.68	1.35	59.5	.6796	.074
7.46	-.11	.6143	.0151	.0738	-5.2	1.764	40.2	27.3	-.23

*

*HO/L8 600E
EGC

BURN # 1 GE16 136:16

IS
1340
MO CU PB ZN AG NI CO MN FE AS
1.67 53.0 17.3 195 .390 29.5 14.8 728 3.518 5.28
U IS TH IS CD SB BI V CA P
2.45 -2.4 1.42 -1455 .938 3.84 1.42 69.0 .6462 .057
LA IN MG BA TI B AL IS IS W
8.36 .607 .6638 .0125 .0972 -7.0 1.757 42.3 30.8 -.22

*HO/L8 700E
EGC

BURN # 1 GE16 136:17

1340
1.37 59.2 29.9 261 .749 14.2 9.01 598 2.097 9.75
6.71 -3.2 -.29 * 1.69 1.57 1.79 46.0 10.72 .059
4.82 .371 .4361 .0112 .0527 -1.4 1.138 46.7 27.4 -.90

*O/L8 800E
EGC

BURN # 1 GE16 136:18

1340
1.71 79.4 19.3 290 .240 23.9 15.1 638 4.012 4.73
1.24 -2.8 1.34 -2007 1.06 3.68 1.00 80.9 .8380 .029
7.49 .539 .6038 .0124 .1187 -9.1 1.948 57.8 34.0 -.36

*O/L8 900E
EGC

BURN # 1 GE16 136:19

1341
1.97 60.8 22.1 278 .368 25.6 14.9 611 3.460 6.42
-1.3 -2.5 .605 -2928 1.26 3.36 .978 77.8 1.129 .065
7.42 .027 .6762 .0144 .0955 -6.5 1.511 57.6 30.6 -.80

*O/L8 1000E
EGC

BURN # 1 GE16 136:20

1340
1.88 57.6 10.8 106 .352 20.8 14.5 515 3.628 8.74
-1.5 -2.6 .983 -7942 .418 4.29 1.11 93.3 2.651 .079
8.38 .100 .7611 .0088 .1067 -5.9 1.867 35.9 32.8 .875

*

*HO/L8 1100E
EGC

BURN # 1 GE16 136:20
IS

1340

MO	CU	PR	ZN	AG	NI	CO	MN	FE	AS
1.57	37.5	6.16	80.0	.295	36.3	14.4	350	3.243	3.44
U	IS	TH	IS	CD	SB	BI	V	CA	P
1.53	-2.8	1.34	-1210	.295	4.08	1.09	74.3	.5515	.068
LA	IN	MG	BA	TI	B	AL	IS	IS	W
7.38	-.11	.6401	.0085	.1121	-5.3	1.342	36.2	32.7	.678

*HO/L8 1200E
EGC

BURN # 1 GE16 136:22
1340

1.26	47.1	7.55	68.2	.333	20.1	12.9	402	3.266	7.18
-2.7	-2.6	1.23	*	.450	2.34	.925	88.2	3.472	.079
7.95	-.41	.6597	.0091	.1127	-4.7	1.668	30.9	33.8	.967

*O/L8 1300E
EGC

BURN # 1 GE16 136:22
1341

1.46	62.4	10.4	77.4	.395	25.3	14.7	467	3.788	5.65
-.14	-2.4	1.59	-3485	.491	2.94	.721	88.8	1.310	.098
9.11	.464	.6925	.0096	.1114	-7.3	1.940	35.6	33.2	1.04

*O/RE L6 2000E
EGC

BURN # 1 GE16 136:23
1340

1.57	39.0	8.84	89.3	.179	22.0	12.0	468	3.109	4.48
.453	-2.7	1.22	-1466	.442	.845	1.55	63.9	.6328	.074
8.62	.328	.4899	.0157	.0843	-5.0	1.858	34.9	28.8	.293

*

ICP GEOCHEMICAL ANALYSIS

A .500 GRAM OF SAMPLE IS DIGESTED WITH 3 ML OF 3:1:3 NITRIC ACID TO HYDROCHLORIC ACID TO WATER AT 90 DEG C FOR 1 HOUR. THE SAMPLE IS DILUTED WITH WATER TO 10.0 MLS.

THE RESULTS ARE REPORTED IN PPM EXCEPT FOR FE, CA, P, MG, BA, AND AL WHICH IS IN PERCENT.

THIS LEACH IS PARTIAL FOR CA, P, MG, AL, TI, LA. AND W. VERY LITTLE BA IS DISSOLVED.

IS = INTERNAL STANDARD.

*

✓

ICP GEOCHEMICAL ANALYSIS

A .500 GRAM OF SAMPLE IS DIGESTED WITH 3 ML OF 3:1:3 NITRIC ACID TO HYDROCHLORIC ACID TO WATER AT 90 DEG C FOR 1 HOUR. THE SAMPLE IS DILUTED WITH WATER TO 10.0 MLS.

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THIS LEACH IS PARTIAL FOR CA, P, MG, AL, TI, LA. AND W.

VERY LITTLE BA IS DISSOLVED.

IS = INTERNAL STANDARD.

*0

*HO/L8 1400E

QUINTO

FILE# 80-1289

PAGE 3

E GC

BURN # 1 GE16 136:32

IS

1340

MO

CU

PB

ZN

AG

NI

CO

MN

FE

AS

1.23 46.0 ✓ 7.00 71.6 .256 15.7 11.7 425 3.122 3.71

U IS TH IS CD SB BI V CA P

3.04 -2.8 .492 -2395 .285 3.41 .590 83.3 .9482 .052

LA IN MG BA TI B AL IS IS W

6.52 -.52 .4964 .0067 .1102 -6.4 1.449 27.3 32.6 .930

*HO/L8 1500E

EGC

BURN # 1 GE16 136:33

1340

1.57 55.1 ✓ 11.3 119 .288 22.0 16.1 605 4.161 7.38

-1.6 -2.5 1.60 -2541 .413 4.56 1.14 99.2 1.016 .091

8.56 -.55 .8513 .0098 .0982 -7.3 2.352 38.1 31.2 .863

*O/L8 1600E

EGC

BURN # 1 GE16 136:34

1340

1.65 42.8 ✓ 9.62 82.6 .261 25.3 15.6 529 3.733 3.89

1.08 -2.9 1.61 -1831 .200 4.70 .956 88.4 .7673 .060

9.56 .010 .6881 .0100 .1203 -7.6 1.865 35.1 34.3 1.25

*O/L8 1700E

EGC

BURN # 1 GE16 136:35

1340

.898 31.2 ✓ 4.64 63.6 .135 27.9 14.7 413 3.024 1.79

.197 -3.1 1.83 -1043 .126 2.31 .612 71.9 .4720 .048

8.91 -.44 .4669 .0082 .1397 -7.0 1.303 35.0 36.8 .470

*

*HC/L8 1800E

EGC

BURN # 1 GE16 136:35

IS

1340

MO	CU	PB	ZN	AG	NI	CO	MN	FE	AS
1.54	34.2 ✓	7.62	75.1	.180	25.1	12.9	383	3.052	4.07
U	IS	TH	IS	CD	SB	BI	V	CA	P
3.50	-2.9	1.14	-1451	.207	1.66	.717	68.5	.6272	.073
LA	IN	MG	BA	TI	B	AL	IS	IS	W
8.10	.254	.4385	.0113	.1047	-5.6	1.509	35.4	31.8	.681

*HO/L8 1900E

EGC

BURN # 1 GE16 136:37

1341

1.43	33.9 ✓	7.18	69.2	.197	27.5	14.5	419	3.419	4.30
1.19	-3.1	1.88	-1218	.305	3.18	.524	72.5	.5558	.039
9.92	-.64	.5008	.0095	.1231	-7.6	1.661	34.9	34.5	.759

*O/L8 2000E

EGC

BURN # 1 GE16 136:37

1340

1.17	44.8 ✓	8.91	72.9	.148	34.3	16.9	483	3.768	3.66
1.25	-2.8	1.80	-1373	.243	3.12	.816	77.3	.6051	.065
10.7	.224	.6796	.0096	.1143	-8.8	1.969	39.7	33.3	.432

*O/STD M1

EGC

BURN # 1 GE16 136:38

1340

1.43	30.9	33.0	193	.316	32.6	12.7	618	2.718	6.60
3.05	-3.4	1.73	-1256	.754	1.47	1.81	60.0	.5492	.073
6.22	-.46	.4429	.0163	.0838	-5.8	1.881	79.8	28.7	-.87

*O/L10 100E

EGC

BURN # 1 GE16 ✓ 136:39

1341

1.40	33.7 ✓	9.55	98.6	.174	29.2	12.2	365	3.230	3.36
.780	-2.9	1.16	-913	.068	2.88	.862	63.5	.4337	.040
7.51	.127	.4751	.0157	.1098	-8.0	1.425	38.2	32.4	.555

*

*HO/L10 200E
EGC

BURN # 1 GE16 136:40

IS
1341
MO CU PB ZN AG NI CO MN FE AS
1.12 29.4✓ 9.82 107 .207 22.4 12.0 566 2.710 1.84
U IS TH IS CD SB BI V CA P
-2.0 -2.9 1.25 -977 .237 1.07 .995 54.4 .4455 .023
LA IN MG BA TI B AL IS IS W
6.86 .767 .3985 .0126 .1037 -5.7 1.390 35.4 31.5 -.06

*HO/L10 300E
EGC

BURN # 1 GE16 136:41

1340
.936 42.4✓ 7.86 119 .125 24.0 12.1 631 2.891 1.38
2.83 -3.1 1.50 -1144 .421 1.12 .369 58.1 .5085 .026
7.43 .218 .3974 .0117 .1164 -6.5 1.699 37.5 33.3 -.16

*O/L10 400E
EGC

BURN # 1 GE16 136:42

1340
1.92 30.1✓ 10.1 79.6 .240 19.1 16.2 566 4.365 12.2
7.95 -2.2 .587 -5671 .474 5.34 .362 92.0 1.972 .096
7.64 1.04 1.348 .0082 .1551 -3.8 1.723 27.8 39.7 1.24

*O/L10 500E
EGC

BURN # 1 GE16 136:45

1340
1.36 41.6✓ 10.4 91.0 .268 30.6 14.0 535 3.227 4.87
4.37 -2.8 1.01 -1500 .282 2.25 .859 72.8 .6400 .070
8.92 .559 .5577 .0166 .1074 -7.4 1.662 36.6 32.1 .391

*O/L10 600E
EGC

BURN # 1 GE16 136:45

1341
1.37 33.0✓ 11.2 110 .223 29.6 14.9 746 3.215 6.89
3.68 -2.8 1.53 -1406 .324 2.46 1.36 64.0 .6025 .070
8.31 .484 .5870 .0346 .1031 -7.9 1.550 36.6 31.5 .220

*

*HO/L10 700E
EGC

BURN # 1 GE16 136:46

IS
1340
MO CU PB ZN AG NI CO MN FE AS
1.63 47.6✓ 16.4 135 .399 27.0 13.5 586 3.251 5.76
U IS TH IS CD SB EI V CA P
3.13 -2.4 .856 -3372 .602 2.87 .774 68.7 1.253 .075
LA IN MG BA TI B AL IS IS W
7.84 .779 .6706 .0153 .0898 -5.7 1.698 39.6 29.8 .457

*HO/L10 800E
EGC

BURN # 1 GE16 136:47

1340
1.91 76.7✓ 14.8 154 .385 23.3 14.7 804 3.432 5.17
2.19 -2.8 .750 -1502 .539 3.15 1.56 74.1 .6346 .055
8.05 .398 .5486 .0316 .0605 -7.5 1.878 40.0 25.4 .666

*O/L10 900E
EGC

BURN # 1 GE16 136:48

1340
1.46 48.1✓ 10.0 126 .239 31.6 15.3 496 3.389 6.88
-.34 -2.7 .975 -3022 .579 3.12 .811 77.0 1.136 .090
7.97 .197 .7181 .0099 .1125 -5.1 1.697 46.0 33.2 .009

*O/L10 1000E
EGC

BURN # 1 GE16 136:49

1340
1.48 49.8✓ 10.3 145 .235 26.1 14.2 461 3.263 3.96
.412 -3.0 1.14 -1084 .525 1.45 1.32 75.4 .4841 .060
7.37 -.17 .5310 .0129 .1033 -8.2 1.526 45.1 31.4 .156

*O/L10 1100E
EGC

BURN # 1 GE16 136:50

1341
.801 44.4✓ 8.01 109 .151 12.5 11.6 529 3.152 5.98
-6.8 -2.6 .641 -7897 .644 1.68 1.29 76.5 2.598 .064
7.86 -.05 .7038 .0072 .0746 -7.1 1.633 28.1 27.8 .298

*

*HO/L10 1200E
EGC

BURN # 1 GE16 136:51
IS

1341

MO	CU	PB	ZN	AG	NI	CO	MN	FE	AS
1.86	55.0√	9.46	84.5	.142	6.32	21.7	668	3.990	4.89
U	IS	TH	IS	CD	SB	BI	V	CA	P
.300	-2.6	.312	-2386	.404	2.32	1.59	66.2	.9350	.100
LA	IN	NG	BA	TI	B	AL	IS	IS	W
12.1	1.07	.6941	.0091	.0112	-8.9	1.881	15.6	18.8	.811

*HO/L10 1300E
EGC

BURN # 1 GE16 136:52

1341

1.64	74.7√	11.2	93.4	.347	25.1	14.2	596	3.252	5.67
1.62	-2.8	1.23	-1531	.319	1.16	.761	73.8	.6464	.062
8.06	1.53	.4774	.0390	.0988	-7.7	1.892	40.3	30.8	.422

*O/L10 1400E
EGC

BURN # 1 GE16 136:53

1341

1.57	31.6√	7.09	90.8	.175	23.4	13.1	454	2.835	5.68
-.66	-2.8	.927	-1180	.299	2.24	.832	61.8	.5186	.070
7.36	.327	.3972	.0106	.1075	-3.7	1.500	38.0	32.1	.459

*O/L10 1500E
EGC

BURN # 1 GE16 136:54

1340

1.42	30.1√	6.22	72.6	.310	24.2	12.6	364	2.914	1.59
2.11	-2.7	1.05	-987	.219	2.82	.762	65.3	.4505	.060
8.20	.410	.4272	.0111	.1143	-6.5	1.537	35.4	32.9	.605

*O/L10 1600E
EGC

BURN # 1 GE16 136:55

1340

1.41	34.6	6.45	75.7	.171	25.4	12.5	362	2.977	4.93
.836	-2.8	1.18	-1294	.274	2.62	.822	63.9	.5593	.069
8.38	.794	.4413	.0125	.1046	-6.9	1.633	38.0	31.6	.544

*

*HO/L10 1700E
EGC

BURN # 1 GE16 136:55

IS
1340
MO CU PB ZN AG NI CO MN FE AS
1.35 36.3[✓] 9.63 89.7 .238 24.4 12.3 380 3.286 5.47
U IS TH IS CD SB BI V CA P
.128 -3.0 1.69 -1345 .349 1.81 .742 70.7 .5789 .062
LA IN MG BA TI B AL IS IS W
8.87 .421 .4262 .0158 .0913 -8.0 1.779 43.6 29.7 .768

*HO/L10 1800E
EGC

BURN # 1 GE16 136:57

1340
1.65 38.7[✓] 7.20 67.7 .213 32.6 15.1 395 3.271 5.23
3.38 -2.9 1.76 -1593 .270 2.64 .897 74.3 .6653 .072
9.19 .254 .6365 .0105 .1259 -7.7 1.666 37.5 34.9 .975

*O/L10 1900E
EGC

BURN # 1 GE16 136:57

1340
1.49 44.9[✓] 8.24 88.6 .247 23.6 12.5 497 3.038 4.50
4.14 -2.8 1.30 -1601 .453 1.92 1.38 65.1 .6696 .066
9.15 -.20 .4684 .0191 .0797 -7.2 1.834 35.7 28.2 .683

*O/L10 2000E
EGC

BURN # 1 GE16 136:58

1340
1.48 29.1[✓] 6.19 76.8 .178 24.5 13.9 476 3.051 3.62
.488 -3.0 1.50 -962 .165 2.67 1.15 68.2 .4469 .035
8.81 -.34 .4036 .0108 .1201 -7.9 1.462 37.1 33.9 .855

*O/RE L10 1500E 2
EGC

BURN # 1 GE16 136:59

1340
1.40 31.2 5.31 75.1 .282 24.8 13.0 379 3.038 3.86
1.35 -3.2 1.40 -1056 .197 2.69 .845 67.2 .4703 .063
8.42 -.30 .4422 .0116 .1189 -6.9 1.588 37.3 33.7 .428

*

*HO/L12 200E
EGC

BURN # 1 GE16 137:00

IS
1340
MO CU PB ZN AG NI CO MN FE AS
1.53 46.0✓ 13.5 110 .268 27.5 15.2 1078 3.446 5.34
U IS TH IS CD SB BI V CA P
3.69 -2.9 1.72 -1379 .300 2.06 1.64 79.5 .5958 .063
LA IN MG BA TI B AL IS IS W
9.16 .631 .4332 .0255 .0968 -9.1 1.986 44.1 31.1 .135

*
HO/L12 300E
EGC

BURN # 1 GE16 137:02

1340
1.55 62.9 87.6 424 .792 23.6 14.1 1090 3.210 7.26
2.70 -2.7 .661 -1961 3.70 2.73 1.60 62.1 .8103 .075
11.7 1.97 .5096 .0348 .0676 -6.8 2.046 66.9 26.9 -1.4

*HO/L12 400E
EGC

BURN # 1 GE16 137:04

1340
1.25 25.9 5.64 73.7 .234 28.5 13.2 429 2.851 3.40
2.02 -3.1 1.46 -979 .277 3.44 1.21 64.1 .4482 .042
7.96 .078 .4359 .0116 .1242 -7.1 1.436 33.4 34.5 .498

*HO/L12 500E
EGC

BURN # 1 GE16 137:04

1340
1.43 31.2 11.0 88.6 .206 25.9 14.1 567 3.072 5.47
3.08 -3.2 1.40 -1126 .369 1.95 1.17 66.8 .4995 .050
8.86 -.12 .3926 .0163 .1089 -7.5 1.792 39.4 32.5 .783

*HO/L12 600E
EGC

BURN # 1 GE16 137:05

1340
1.38 32.1 8.53 98.1 .267 29.7 12.5 403 2.911 5.00
2.53 -2.9 1.03 -1295 .366 2.06 .947 64.2 .5661 .071
8.27 .238 .4432 .0144 .1020 -6.7 1.489 39.2 31.5 .691

*

*HO/L12 700E
EGC

BURN # 1 GE16 137:06
IS
1340
MO CU PB ZN AG NI CO MN FE AS
1.57 41.4 11.0 105 .273 29.7 14.4 527 3.245 5.24
U IS TH IS CD SB BI V CA P
-.23 -2.9 1.38 -1349 .365 2.93 .655 69.4 .5844 .067
LA IN MG BA TI B AL IS IS W
8.96 .390 .5064 .0143 .1101 -7.9 1.719 41.9 32.7 .387

*HO/L12 800E
EGC

BURN # 1 GE16 137:08
1340
1.46 39.9 10.8 125 .254 26.2 13.1 517 2.920 3.74
1.87 -2.9 .989 -1962 .395 1.84 1.05 60.3 .7910 .085
8.03 -1.2 .4860 .0138 .0895 -4.3 1.635 39.1 29.8 -.07

*O/L12 900E
EGC

BURN # 1 GE16 137:08
1340
1.50 56.4 9.46 162 .386 24.0 12.9 485 3.018 4.84
3.13 -2.8 .875 -1169 .697 1.93 1.08 67.8 .5131 .054
7.82 -.29 .4638 .0137 .0863 -7.4 1.681 47.4 29.1 -.25

*O/L12 1000E

EGC

BURN # 1 GE16 137:10
1340
1.50 102 18.5 238 .373 33.1 17.4 854 4.243 6.00
2.65 -2.8 1.72 -1605 .685 4.75 1.14 92.8 .6855 .040
9.78 -.38 .8176 .0112 .0994 -12 2.514 68.9 31.5 .140

*

ICP GEOCHEMICAL ANALYSIS

A .500 GRAM OF SAMPLE IS DIGESTED WITH 3 ML OF 3:1:3 NITRIC ACID
TO HYDROCHLORIC ACID TO WATER AT 90 DEG C FOR 1 HOUR. THE SAMPLE
IS DILUTED WITH WATER TO 10.0 MLS.

THE RESULTS ARE REPORTED I--CEPT FOR FE, CA, P, MG, BA, AND
AL WHICH IS IN PERCENT.

THIS LEACH IS PARTIAL FOR CA, P, MG, AL, TI, LA. AND W.

VERY LITTLE BA IS DISSOLVED.

IS = INTERNAL STANDARD.

ICP GEOCHEMICAL ANALYSIS

A .500 GRAM OF SAMPLE IS DIGESTED WITH 3 ML OF 3:1:3 NITRIC ACID TO HYDROCHLORIC ACID TO WATER AT 90 DEG C FOR 1 HOUR. THE SAMPLE IS DILUTED WITH WATER TO 10.0 MLS.

THE RESULTS ARE REPORTED IN PPM EXCEPT FOR FE, CA, P, MG, BA, AND AL WHICH IS IN PERCENT.

THIS LEACH IS PARTIAL FOR CA, P, MG, AL, TI, LA. AND W.

VERY LITTLE BA IS DISSOLVED.

IS = INTERNAL STANDARD.

*0/L12 1100E
EGC

QUINTO

FILE# 80-1289

PAGE 4

BURN # 1 GE16 209:35

1340

2.20	57.0	8.31	111	.442	25.5	15.1	457	3.973	6.57
-.04	-4.3	1.38	-2358	.401	3.61	2.95	82.5	1.046	.064
10.0	.668	.7545	.0098	.1182	-2.5	1.863	31.8	37.1	.559

*H0/L12 1200E
EGC

BURN # 1 GE16 209:36

IS

1340

MO	CU	PB	ZN	AG	NI	CO	MN	FE	AS
1.62	36.6	6.09	82.4	.221	11.2	9.35	553	3.343	3.11
U	IS	TH	IS	CD	SB	BI	V	CA	P
.014	-4.4	1.00	-805	.265	1.16	3.73	50.6	.4625	.039
LA	IN	MG	BA	TI	B	AL	IS	IS	W
13.8	-.11	.3497	.0212	.0407	-2.4	1.334	13.4	26.1	.486

*H0/L12 1300E
EGC

BURN # 1 GE16 209:37

1340

1.48	27.8	6.01	77.2	.379	20.2	11.5	368	2.835	5.52
3.59	-4.3	.756	-1211	.347	1.69	3.43	54.6	.6164	.068
9.07	-.12	.3780	.0145	.0901	-1.7	1.483	26.7	32.8	.795

*0/L12 1400E
EGC

BURN # 1 GE16 209:38

1340

1.86	31.5	5.82	70.5	.319	25.4	12.0	323	3.143	5.29
1.58	-4.3	1.17	-1263	.325	.494	3.44	62.9	.6353	.074
10.2	.092	.4627	.0135	.1047	-2.1	1.648	29.1	34.8	.985

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*HO/L12 1500E
EGC

BURN # 1 GE16 209:39
IS

1340

MO	CU	PB	ZN	AG	NI	CO	MN	FE	AS
1.79	25.6	4.50	67.2	.332	23.0	12.6	383	3.019	2.35
U	IS	TH	IS	CD	SB	BI	V	CA	P
-5.7	-4.2	1.72	-1108	.283	1.71	3.28	60.2	.5851	.043
LA	IN	MG	BA	TI	B	AL	IS	IS	W
9.83	-.74	.4408	.0096	.1246	-.44	1.421	27.5	37.6	.718

*HO/L12 1600E
EGC

BURN # 1 GE16 209:41
1340

1.83	21.9	5.21	76.4	.371	20.2	13.3	434	3.111	3.58
2.32	-4.3	1.34	-1075	.392	2.12	3.06	71.8	.5707	.031
9.61	-.22	.3740	.0096	.1482	-2.8	1.305	28.5	41.1	.857

*O/L12 1700E
EGC

BURN # 1 GE16 209:41
1340

1.78	25.0	5.07	71.8	.391	23.7	13.1	395	3.184	4.51
1.61	-4.3	1.76	-1134	.394	2.06	3.31	61.1	.5966	.035
11.0	.282	.4143	.0102	.1229	-2.1	1.530	29.1	37.6	.331

*O/L12 1800E
EGC

BURN # 1 GE16 209:42
1340

2.64	42.1	12.0	80.2	.398	13.3	13.2	536	4.469	8.50
3.29	-4.1	3.06	-1798	.523	1.000	3.70	76.0	.8600	.068
12.1	-.19	.5874	.0211	.1123	-3.8	2.635	18.7	36.7	.952

*O/L12 1900E
EGC

BURN # 1 GE16 209:43
1340

1.65	23.5	5.17	69.0	.326	23.7	12.6	432	3.219	3.25
.875	-4.3	1.92	-1062	.473	1.37	3.04	58.9	.5634	.030
11.6	-.79	.4511	.0101	.1129	-2.6	1.651	26.1	35.8	.397

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*HO/L12 2000E
EGC

BURN # 1 GE16 209:44

IS
1340
MO CU PB ZN AG NI CO MN FE AS
1.92 22.2 5.88 76.7 .379 23.2 13.1 444 3.248 3.57
U IS TH IS CD SB BI V CA P
.020 -4.2 1.78 -949 .443 2.13 3.23 63.9 .5247 .039
LA IN MG BA TI B AL IS IS W
10.9 .297 .4393 .0102 .1324 -2.1 1.523 26.4 38.7 .701

*HO/STD M1
EGC

BURN # 1 GE16 209:45

1340
1.86 27.4 31.6 174 .443 27.6 11.0 560 2.670 11.1
1.83 -4.5 1.24 -1083 1.11 1.43 3.85 51.1 .5695 .082
6.40 -.18 .4249 .0173 .0637 -1.8 1.695 52.7 28.7 -.27

*O/L14 100E
EGC

BURN # 1 GE16 209:46

1340
1.68 19.4 4.69 59.5 .345 16.6 10.5 270 2.708 3.48
2.55 -4.1 .752 -604 .275 1.32 3.13 58.0 .3640 .024
7.95 -.36 .4416 .0098 .1054 -1.2 1.259 22.8 34.4 .830

*O/L14 200E
EGC

BURN # 1 GE16 209:47

1340
1.94 30.4 11.4 79.9 .289 23.4 11.9 446 3.160 4.54
2.28 -4.2 1.61 -888 .389 1.10 3.54 56.9 .4976 .030
10.4 .343 .4352 .0178 .0891 -2.2 1.594 28.6 32.3 .705

*O/L14 300E
EGC

~~BURN # 1 GE16 209:48~~

~~EGC~~

BURN # 1 GE16 209:49

1340
1.41 25.4 27.3 74.6 .349 20.0 11.1 408 2.700 5.39
-2.1 -4.2 2.04 -900 .466 .829 3.34 47.5 .4881 .027
9.59 -.81 .3566 .0214 .0985 -1.5 1.834 23.9 33.4 .014

*

*HO/L14 400E
EGC

BURN # 1 GE16 209:50

IS
1340
MO CU PB ZN AG NI CO MN FE AS
1.84 28.4 6.64 67.3 .316 29.6 11.1 268 3.007 3.94
U IS TH IS CD SB BI V CA P
6.13 -3.9 1.18 -1210 .432 1.58 2.97 59.9 .6289 .074
LA IN MG BA TI B AL IS IS W
9.81 .285 .5044 .0111 .1001 -1.4 1.443 29.3 33.8 .674

*HO/L14 500E
EGC

BURN # 1 GE16 209:51

1340
2.12 48.1 12.9 91.6 .441 32.7 14.5 546 3.544 6.81
.989 -4.1 1.67 -1278 .759 1.30 3.35 69.1 .6696 .061
11.2 .117 .6582 .0142 .1058 -3.4 1.803 29.7 34.7 .423

*O/L14 600E
EGC

BURN # 1 GE16 209:52

1340
2.01 37.6 11.6 87.4 .343 30.1 14.1 423 3.457 5.34
1.46 -4.1 1.76 -1575 .651 1.36 2.72 63.9 .7690 .061
11.1 .047 .6150 .0130 .1205 -1.7 1.671 28.5 37.1 .723

*O/L14 700E
EGC

BURN # 1 GE16 209:53

1340
1.89 41.7 11.1 96.2 .381 28.7 14.1 488 3.419 6.28
.535 -4.3 1.68 -1454 .579 1.75 3.08 65.6 .7306 .070
11.2 .658 .6176 .0133 .1073 -1.9 1.769 28.5 35.2 .684

*O/L14 800E
EGC

BURN # 1 GE16 209:54

1340
.845 20.8 3.13 64.8 .106 21.1 10.3 263 2.621 -1.2
1.82 -4.7 1.54 -783 .335 -4.1 2.79 42.9 .4389 .025
10.1 -1.7 .3532 .0090 .1033 -1.8 1.390 22.0 34.2 -.77

*

*HO/L14 900E
EGC

BURN # 1 GE16 209:59

IS
1340
MC CU PB ZN AG NI CO MN FE AS
1.65 31.4 7.35 113 .352 23.9 13.1 415 2.997 4.13
U IS TH IS CD SB BI V CA P
3.51 -4.4 1.30 -995 .591 .692 2.95 56.0 .5336 .054
LA IN MG BA TI B AL IS IS W
9.43 -.27 .4146 .0139 .1142 -.72 1.655 31.7 35.8 .530

*HO/L14 1000E
EGC

BURN # 1 GE16 210:00

1340
1.61 40.1 6.07 73.8 .392 32.2 13.1 290 3.155 5.07
3.39 -4.1 2.03 -1098 .200 1.08 3.11 61.4 .5855 .040
10.0 -.84 .5275 .0086 .1196 -2.6 1.455 32.5 36.6 .488

*O/L14 1100E
EGC

BURN # 1 GE16 210:01

1340
2.16 62.2 14.0 73.3 .466 22.1 13.6 589 3.744 11.1
-6.5 -3.8 1.11 * .612 1.83 2.89 86.0 6.226 .070
10.3 .810 .8413 .0119 .0838 -3.6 2.019 28.5 33.0 1.39

*O/L14 1200E
EGC

BURN # 1 GE16 210:02

1340
1.63 38.9 5.38 36.2 .309 21.7 13.8 525 2.942 2.90
2.03 -4.2 1.97 -1753 .280 .061 3.09 53.4 .8237 .047
12.5 -.03 .5405 .0159 .0726 -.98 1.342 31.3 30.0 .498

*O/L14 1300E
EGC

BURN # 1 GE16 210:03

1340
1.55 38.4 3.72 72.5 .310 30.2 13.6 341 2.883 2.00
1.02 -4.4 2.09 -1046 .214 .804 3.20 63.5 .5640 .044
11.3 -.35 .9745 .0132 .0753 -1.9 1.219 46.3 30.0 .141

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*HO/L14 1400E
EGC

BURN # 1 GE16 210:04

IS
1340

MO	CU	PB	ZN	AG	NI	CO	MN	FE	AS
1.34	31.2	6.46	76.6	.368	19.7	10.8	329	2.752	5.24
U	IS	TH	IS	CD	SB	BI	V	CA	P
3.72	-4.2	.952	-1166	.502	.550	3.40	53.8	.6137	.075
LA	IN	MG	BA	TI	B	AL	IS	IS	W
9.63	-.01	.4106	.0145	.0881	-1.3	1.531	26.4	32.1	.642

*HO/L14 1500E
EGC

BURN # 1 GE16 210:05

1340

2.13	26.1	6.72	65.6	.349	21.4	12.7	414	3.050	5.19
2.20	-4.2	1.50	-1023	.477	1.82	2.68	60.9	.5547	.043
9.37	.892	.4134	.0113	.1102	-1.9	1.548	28.6	35.1	.936

*O/L14 1600E
EGC

BURN # 1 GE16 210:06

1340

2.02	25.2	5.43	73.7	.341	25.5	13.2	383	3.239	5.21
1.81	-4.4	1.83	-1006	.325	1.65	3.05	60.1	.5599	.029
11.0	.184	.4506	.0109	.1195	-.67	1.614	31.7	36.7	.664

*O/L14 1700E
EGC

BURN # 1 GE16 210:06

1340

2.06	31.0	6.80	67.6	.423	30.7	14.8	415	3.621	5.21
-.95	-4.2	2.03	-1088	.409	1.53	2.91	65.8	.5895	.023
12.9	-.82	.4945	.0092	.1349	-2.5	1.794	34.3	39.0	1.08

*O/L14 1800E
EGC

BURN # 1 GE16 210:07

1340

1.29	34.3	4.48	86.7	.290	18.4	10.3	346	2.207	4.85
1.74	-4.1	1.76	-3324	.309	.792	2.71	43.5	1.379	.053
16.4	-.21	.3613	.0100	.0739	.835	1.138	23.3	30.4	.445

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*HO/L14 1920E
EGC

BURN # 1 GE16 210:08
IS

1340

NO	CU	PB	ZN	AG	NI	CO	MN	FE	AS
1.66	24.6	4.87	88.6	.326	22.3	13.7	560	2.373	4.15
U	IS	TH	IS	CD	SB	BI	V	CA	P
1.30	-4.4	1.73	-1000	.268	.848	3.46	53.2	.5410	.069
LA	IN	MG	BA	TI	B	AL	IS	IS	V
12.6	.263	.4490	.0092	.0744	-1.3	1.069	26.7	30.1	.303

*HO/L14 2000E
EGC

BURN # 1 GE16 210:09
1340

1.92	24.9	5.80	72.4	.366	24.5	12.5	304	3.475	5.70
.584	-4.1	1.95	-914	.362	.699	3.16	60.5	.5186	.022
11.9	.387	.4946	.0082	.1236	-1.5	1.597	26.7	37.3	.843

*O/RE L14 900E
EGC

BURN # 1 GE16 210:10
1340

1.70	29.8	6.93	106	.283	22.8	12.5	404	2.795	3.88
-.31	-4.3	1.61	-885	.591	.655	3.06	51.3	.4986	.052
9.50	-.52	.3993	.0133	.1001	-.24	1.512	27.4	33.7	.159

*O/L16 0E
EGC

BURN # 1 GE16 210:11
1340

2.00	22.8	6.19	88.4	.395	27.9	13.1	383	3.350	4.68
.234	-4.2	1.78	-751	.375	.913	2.97	63.5	.4546	.025
12.1	.276	.4006	.0109	.1357	-2.2	1.552	31.2	39.1	.690

*O/L16 100E
EGC

BURN # 1 GE16 210:12
1340

1.76	22.8	7.05	84.3	.239	24.3	11.6	360	3.281	2.29
3.48	-4.3	1.70	-896	.382	.810	2.84	57.0	.5086	.023
11.1	-.83	.4028	.0103	.1192	-1.6	1.613	28.1	36.8	.224

*

*HO/L16 200E
EGC

BURN # 1 GE16 210:13

IS

1340

MO	CU	PB	ZN	AG	NI	CO	MN	FE	AS
1.90	22.7	7.82	98.2	.347	23.7	11.7	394	3.217	4.09
U	IS	TH	IS	CD	SB	BI	V	CA	P
.634	-4.3	1.72	-904	.432	1.59	2.99	54.7	.5145	.024
LA	IN	MG	BA	TI	B	AL	IS	IS	W
11.8	.095	.4293	.0099	.1137	-.25	1.609	28.1	36.1	.990

*HO/L16 300E
EGC

BURN # 1 GE16 210:14

1340

2.07	30.4	7.72	97.1	.274	28.7	13.2	492	3.468	5.19
-.60	-4.2	1.76	-1068	.451	1.25	3.24	61.8	.5859	.031
12.0	-.46	.4727	.0132	.1283	-1.6	1.777	29.3	38.2	.616

*O/L16 400E
EGC

BURN # 1 GE16 210:15

1340

2.02	23.7	9.01	114	.338	23.8	13.6	542	3.007	3.74
1.83	-4.3	1.37	-738	.657	1.07	3.16	60.9	.4399	.021
10.2	-.68	.3555	.0124	.1296	-1.4	1.445	27.5	38.1	.593

*O/L16 500E
EGC

BURN # 1 GE16 210:15

1340

1.74	25.2	10.2	100	.342	21.4	10.7	379	2.864	2.84
3.16	-4.2	1.59	-664	.477	1.05	3.27	50.5	.4028	.022
9.31	-.01	.3756	.0121	.1139	-.91	1.541	23.5	35.6	.489

*

ICP GEOCHEMICAL ANALYSIS

A .500 GRAM OF SAMPLE IS DIGESTED WITH 3 ML OF 3:1:3 NITRIC ACID TO HYDROCHLORIC ACID TO WATER AT 90 DEG C FOR 1 HOUR. THE SAMPLE IS DILUTED WITH WATER TO 10.0 MLS.

THE RESULTS ARE REPORTED IN PPM EXCEPT FOR FE, CA, P, MG, BA, AND AL WHICH IS IN PERCENT.

THIS LEACH IS PARTIAL FOR CA, P, MG, AL, TI, LA. AND W.

VERY LITTLE BA IS DISSOLVED.

IS = INTERNAL STANDARD.

*O/L16 600E QUINTO FILE# 80-1289 PAGE 5 (END)
EGC

BURN # 1 GE16 210:19
1340
2.17 41.8 11.6 108 .454 26.2 12.0 483 3.022 6.84
2.58 -3.9 .721 -1549 .779 1.63 3.52 57.9 .7652 .084
9.47 1.07 .5558 .0168 .0909 1.02 1.606 25.6 32.8 .897

*HO/L16 700E
EGC

BURN # 1 GE16 210:19
IS
1340
MO CU PB ZN AG NI CO MN FE AS
2.14 26.1 10.9 89.4 .445 26.6 13.5 476 3.185 4.13
U IS TH IS CD SB BI V CA P
2.19 -4.2 1.51 -836 .448 1.72 3.33 58.6 .4872 .030
LA IN MG BA TI B AL IS IS W
10.8 -.62 .4568 .0122 .1305 -.67 1.695 28.9 38.5 .651

*HO/L16 800E
EGC

BURN # 1 GE16 210:21
1340
2.35 49.2 8.30 97.3 .445 28.7 14.1 400 3.522 4.67
-1.0 -4.1 1.89 -1347 .573 2.46 3.36 73.1 .7058 .063
10.4 .014 .5801 .0115 .1529 -1.4 1.581 33.6 41.8 1.03

*O/L16 900E
EGC

BURN # 1 GE16 210:21
1340
2.15 30.2 7.70 101 .409 32.4 13.7 401 3.261 4.62
-.42 -4.2 1.64 -1113 .534 2.01 2.95 64.6 .6019 .036
10.3 -.13 .5042 .0102 .1302 -1.1 1.558 46.2 38.4 .926

*

*HO/L16 1000E
EGC

BURN # 1 GE16 210:24

IS
1339
MO CU PB ZN AG NI CO MN FE AS
2.04 34.1 7.38 85.0 .323 33.1 14.4 377 3.401 3.63
U IS TH IS CD SB BI V CA P
1.51 -4.2 1.60 -993 .447 1.81 2.82 63.8 .5453 .029
LA IN HG BA TI B AL IS IS W
10.6 -.87 .5486 .0100 .1421 -1.8 1.637 42.9 39.9 .584

*HO/L16 1100E
EGC

BURN # 1 GE16 210:26

1339
2.92 241 16.8 475 1.27 25.4 15.4 501 4.526 8.26
.503 -4.0 1.60 -1713 1.98 2.64 2.95 91.2 .8693 .029
11.0 -.92 .9637 .0050 .1146 -2.4 2.191 50.0 36.2 -.85

*O/L16 1200E
EGC

BURN # 1 GE16 210:26

1339
3.84 120 18.4 142 .494 15.9 13.2 833 4.232 7.72
-1.3 -3.6 -.11 -5728 .707 1.47 3.64 67.3 2.139 .049
7.86 1.45 .9553 .0097 .0186 -.92 2.059 29.2 22.4 1.08

*O/L16 1300E
EGC

BURN # 1 GE16 210:27

1339
1.20 19.0 4.58 51.1 .359 17.9 10.6 564 2.042 4.82
-3.9 -4.3 .596 * .303 2.05 3.56 40.5 9.511 .105
11.3 1.57 1.603 .0135 .0180 -.33 .6875 44.4 23.6 .854

*O/L16 1400E
EGC

BURN # 1 GE16 210:28

1339
1.80 29.5 3.49 72.0 .348 23.2 11.7 368 2.719 3.93
1.92 -3.9 1.13 -1574 .461 .937 2.97 51.9 .7722 .082
9.33 -.45 .4859 .0146 .0806 .736 1.491 28.6 30.9 .552

*

*HO/L16 1500E
EGC

BURN # 1 GE16 210:29

IS
1340
MO CU PB ZN AG NI CO MN FE AS
1.87 27.2 6.63 77.5 .265 23.6 12.7 400 3.022 4.15
U IS TH IS CD SB BI V CA P
3.90 -4.0 1.33 -1256 .354 .744 3.42 54.8 .6612 .063
LA IN MG BA TI B AL IS IS W
9.83 -.08 .4385 .0120 .1014 -1.0 1.562 26.0 34.1 .733

*HO/L16 1600E
EGC

BURN # 1 GE16 210:30

1340
1.90 22.0 3.84 80.3 .368 21.7 12.0 380 3.200 5.39
-.71 -4.2 1.60 -839 .364 2.08 2.91 63.9 .4935 .029
10.6 -.01 .3861 .0108 .1354 -.51 1.557 29.0 39.0 .756

*O/L16 1700E
EGC

BURN # 1 GE16 210:31

1340
2.19 26.1 7.96 72.9 .428 26.8 14.2 419 3.494 3.84
-.97 -4.1 2.63 -964 .424 .893 3.61 61.4 .5519 .024
13.7 -.29 .4404 .0096 .1304 -1.2 1.850 31.6 38.4 .887

*O/L16 1800E
EGC

BURN # 1 GE16 210:31

1340
2.09 27.2 6.72 77.0 .349 25.1 14.0 479 3.376 4.05
1.02 -4.3 1.74 -986 .443 .999 3.40 63.8 .5594 .024
12.5 .179 .4360 .0104 .1368 -.50 1.675 28.2 39.3 .767

*O/L16 1900E
EGC

BURN # 1 GE16 210:32

1340
2.16 36.4 7.02 69.3 .454 30.6 15.4 443 3.701 5.52
-.06 -4.0 1.93 -1315 .416 2.60 2.87 68.0 .7079 .047
13.3 -.02 .6113 .0095 .1288 -1.9 1.842 29.9 38.3 .854

*

*HO/L16 2000E
EGC

BURN # 1 GE16 210:33

IS
1340

MO	CU	PB	ZN	AG	NI	CO	MN	FE	AS
1.78	33.1	4.80	32.9	.364	25.3	14.2	391	2.987	4.89
U	IS	TH	IS	CD	SB	BI	V	CA	P
2.45	-4.3	2.03	-1063	.341	.750	2.90	57.3	.5885	.077
LA	IN	MG	BA	TI	B	AL	IS	IS	W
11.5	.558	.4378	.0122	.1107	-1.4	1.623	24.0	35.4	.606

*HO/L STD M1
EGC

BURN # 1 GE16 210:34

1340

2.11	26.9	29.9	173	.485	28.0	10.8	544	2.609	9.72
.656	-4.3	1.16	-1035	.925	2.79	3.89	50.9	.5676	.077
6.80	-.23	.4245	.0168	.0642	-.39	1.649	49.4	28.6	.244

*O/RE L16 1400E
EGC

BURN # 1 GE16 210:35

1340

2.24	31.4	7.20	76.4	.549	24.6	12.5	381	2.909	6.25
7.83	-3.9	1.19	-1478	.346	4.06	3.28	53.3	.7557	.086
10.1	.989	.5008	.0152	.0899	.786	1.592	31.6	32.3	1.81

*

ICP GEOCHEMICAL ANALYSIS

A .500 GRAM OF SAMPLE IS DIGESTED WITH 3 ML OF 3:1:3 NITRIC ACID TO HYDROCHLORIC ACID TO WATER AT 90 DEG C FOR 1 HOUR. THE SAMPLE IS DILUTED WITH WATER TO 10.0 MLS.

THE RESULTS ARE REPORTED IN PPM EXCEPT FOR FE, CA, P, MG, BA, AND AL WHICH IS IN PERCENT.

THIS LEACH IS PARTIAL FOR CA, P, MG, AL, TI, LA, AND W. VERY LITTLE BA IS DISSOLVED.

IS = INTERNAL STANDARD.

Handwritten signature and notes

#1P

Quinto, Quinto II

BURN # 1 GE16 399:17

ANALYTICAL LABORATORY LTD

#0710

ECC

VANCOUVER, B.C. CANADA

BURN # 1 GE16 399:17

P7

1325

-0.73	29.1	31.42	198	.191	33.7	12.8	392	2.588	7.67
1.25	-2.9	2.60	-1135	.131	-1.7	-.63	57.7	-4739	.879
6.45	-1.8	.4937	.2198	.3668	-3.8	1.732	87.2	23.3	.453

#0710

ECC

BURN # 1 GE16 399:18

1328

-0.36	29.2	33.6	196	.173	31.5	12.3	687	2.648	8.94
.718	-2.3	2.42	-1162	.260	-1.4	-1.1	59.1	.4857	.26
6.63	-1.8	.5143	.8195	.3635	-3.2	1.788	89.9	26.3	-.38

#10/QUINTO PIPE#801193 SAMPLE 312894 OCT 6-1980

ECC

BURN # 1 GE16 399:20

1328

NO	CU	TI	ZN	AC	NI	CO	MN	FE	AS
1.14	29.3	19.8	37.0	.294	15.1	4.27	1823	1.934	7.53
U	19	TR	13	CD	SE	31	V	BA	P
-1.0	-3.2	1.55	*	-.28	-1.8	-.95	29.0	9.863	2814
LA	18	MS	BA	TI	B	AL	15	15	U
2.66	-0.9	.4217	.8185	.8827	-3.6	.8432	115.1	19.6	.597

#10/8128251

ECC

BURN # 1 GE16 399:21

1327

-0.73	29.8	.51	63.6	.385	46.8	30.5	382	3.594	21.3
-1.4	-3.5	.173	*	-.44	-.13	-3.1	167	3.671	.308
2.63	-0.9	1.47	.8192	.9881	-2.41	2.134	167	56.7	1.82

*O/012806

EGC

BURN # 1 GE16 399:22

1328

-0.29	20.4	6.79	31.5	.072	9.94	3.12	413	.9949	4.62
-1.4	-3.0	.977	*	-.18	-.86	-.29	8.37	3.875	.015
6.02	1.10	.2465	.0464	.0030	.200	.3735	9.36	17.0	.379

*O/012807

EGC

BURN # 1 GE16 399:23

1328

-1.2	37.1	5.91	106	-.23	45.4	28.2	673	5.261	18.7
-4.6	-1.4	2.06	*	-1.0	-9.5	-5.0	118	5.405	.122
12.0	-1.7	.8734	.0098	.0314	-6.6	1.211	52.3	24.4	1.28

*O/012808

EGC

BURN # 1 GE16 399:23

1328

7.03	58.3	6.84	136	.043	15.6	7.07	275	2.236	9.64
1.54	-2.3	1.01	-2077	.138	-1.7	-1.7	18.8	.7964	.040
3.13	-.34	.3350	.0281	.0007	1.88	.2813	23.9	15.8	-.08

*O/RE-012806

EGC

BURN # 1 GE16 399:24

1328

.075	20.6	5.84	32.4	.047	9.96	3.06	422	1.005	5.20
-.81	-2.8	1.43	*	-.12	.178	-1.0	7.38	3.955	.016
6.15	.619	.2442	.0461	.0011	.189	.3755	9.01	16.7	.507

*O/M1

EGC

BURN # 1 GE16 399:25

1328

.114	30.7	34.9	202	.232	31.9	12.8	621	2.837	10.8
1.23	-2.8	3.75	-1247	.185	-1.2	-1.9	64.9	.5305	.086
6.80	-2.4	.5384	.0212	.0712	-3.7	1.876	95.9	27.1	.309

ACME
832
VAPOR

13/71
V6A 150

A. 500 mg of sample is dissolved in 10 ml of 10% sulfuric acid to which 10 ml of 10% barium chloride is added. The mixture is allowed to stand for 15 minutes and then filtered. The filtrate is treated with 10 ml of 10% sodium hydroxide and the resulting precipitate is dried at 100°C for 2 hours. The residue is weighed and the weight is compared with that of a standard.

*0/012806
EGC

BURN # 1 GE16 399:22

1328

-0.09	20.4	6.79	31.5	.072	9.94	3.12	413	.9949	4.62
-1.4	-3.0	.977	*	-.18	-.86	-.89	8.37	3.875	.015
6.02	1.12	.2465	.0464	.0038	.200	.3785	9.36	17.0	.379

*0/012807
EGC

BURN # 1 GE16 399:23

1328

-1.2	37.1	5.91	106	-.23	45.4	28.2	673	5.261	18.7
-4.6	-1.4	2.06	*	-1.0	-9.5	-5.0	118	5.405	.122
12.0	-1.7	.8734	.0098	.0314	-6.6	1.211	52.3	24.4	1.28

*0/012808
EGC

QUINTO MINING CORPORATION

211 SUITE 302 - 543 GRANVILLE ST., VANCOUVER, B.C. V6C 1X8 TEL: (604) 681-6526

Ministry of Energy, Mines
& Petroleum Resources,
Parliament Buildings,
Victoria, B.C.
V8V 1X4

Attention Mr. R. Rutherford.
Chief Gold Commissioner.

March 3rd, 1981.

Dear Sir:

re: File 166 - Kamloops

Your letter of February 24th 1981 arrived yesterday. I have tried to get in touch with you by phoning 112-3875178 but there was no answer. I wanted to report that I have the figures you require but I did not know whether to type out a Statement of Exploration and Development form again or just submit the figures on our stationery.

UNDER SECTION "D" GEOLOGICAL, GEOCHEMICAL, GEOPHYSICAL

Assaying for Geochem (Dec/80)	\$ 1,468.00
Surveying, Geochem & E.M. (Sept/80)	7,688.31
2 men 8 days (June & July/80)	1,600.00
Car Rental, gas, hotel & food.	780.00
Assaying of rock samples	493.69
Supervising by Director of Company- 2 trips of 2 days each, car, food & lodgings.	870.00
	<hr/>
	\$ 12,900.00
	<hr/> <hr/>

Please accept my apologies for being late. I filed and forgot it!

Yours very truly,

P.D. P. Schiller

QUINTO MINING CORPORATION.

6527

GEOCHEMICAL, GEOLOGICAL AND GEOPHYSICAL REPORT

- ON THE -

QUINTO CLAIMS

KAMLOOPS MINING DIVISION,

BRITISH COLUMBIA

- FOR -

THE QUINTO MINING CORPORATION,

#8 - 784 THURLOW STREET,

VANCOUVER, B. C.

LOCATION: LATITUDE: ⁵⁰52° 47' N.

LONGITUDE: 121° 01' W.

WORK PERFORMED: AUGUST 22ND. TO OCTOBER 6TH., 1977.

PREPARED BY:

KERR, DAWSON & ASSOCIATES LTD.,

#1-219 VICTORIA STREET,

KAMLOOPS, B. C.

W. GRUENWALD,

OCTOBER, 1977.

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LOCATION AND ACCESS	2
PHYSIOGRAPHY AND VEGETATION	3
PROPERTY	5
HISTORY	6
PRESENT EXPLORATION	8
REGIONAL GEOLOGY	9
PROPERTY GEOLOGY	10
GEOCHEMISTRY	16
MAGNETOMETER SURVEY	20
SUMMARY AND CONCLUSIONS	24
RECOMMENDATIONS	26

MAPS

- Figure #158 - 1 - Location Map (1": 64 mi.)
- Figure #158 - 2 - Index Map (1:50,000)
- Figure #158 - 3 - Geological Plan (1:5,000)
- Figure #158 - 4A - Geochemical Plan (Copper) (1:5,000)
- Figure #158 - 4B - Geochemical Plan (Zinc) (1:5,000)
- Figure #158 - 5 - Magnetic Survey (1:5,000)

APPENDICES

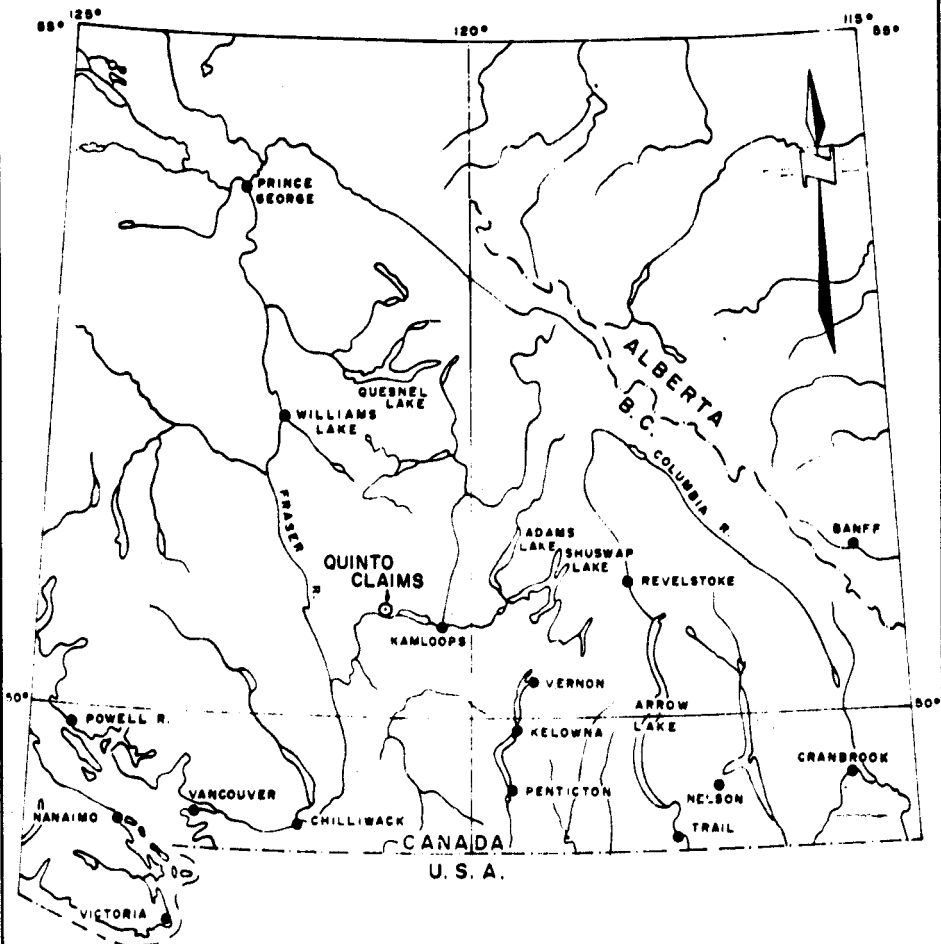
- APPENDIX A - PERSONNEL
- APPENDIX B - STATEMENT OF EXPENDITURES
- APPENDIX C - AFFIDAVIT IN SUPPORT OF STATEMENT OF EXPENDITURES
- APPENDIX D - REFERENCES
- APPENDIX E - WRITER'S CERTIFICATE
- APPENDIX F - MAPS

INTRODUCTION

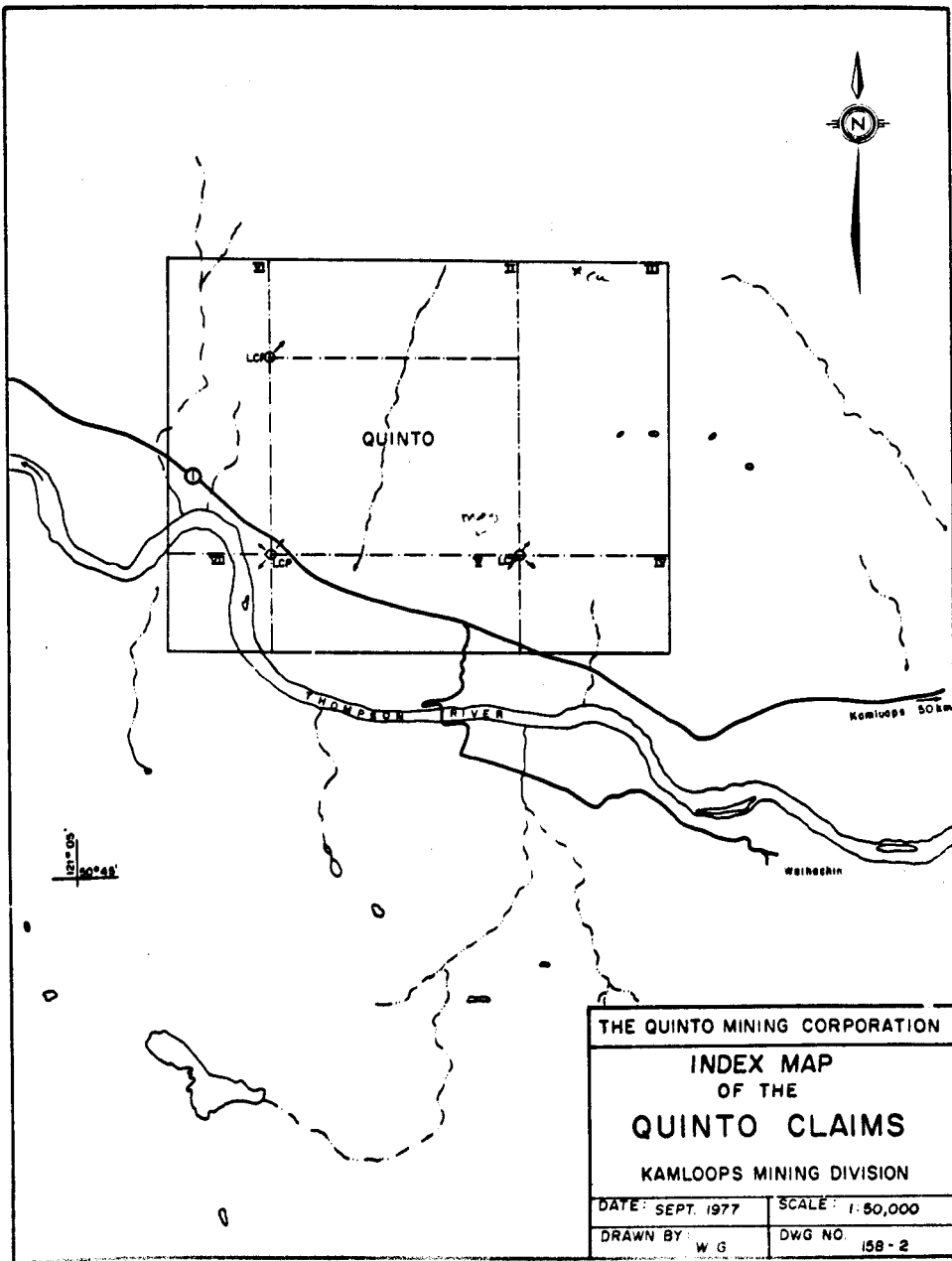
During the period from August 22nd. to October 6th., 1977, the writer carried out a programme of geochemical sampling, geological mapping and a magnetic survey on the Quinto claims owned by the Quinto Mining Corporation.

The Quinto claims comprised of 80 metric units are situated at the northern extremity of the Guichon Creek Batholith and cover a number of copper, zinc, and magnetite showings in a geologic environment very similar to that of the Craigmont mine at Merritt, B. C.

This report and the enclosed maps describe the data obtained during the course of the above surveys.



THE QUITO MINING CORPORATION	
LOCATION MAP	
QUITO CLAIMS	
WALHACHIN, B.C.	
KAMLOOPS MINING DIVISION	
Date: September, 1977	Scale: 1" = 64 Miles
Dwg by: W.G.	Dwg no. 158-1



125° 05'
50° 43'

THE QUINTO MINING CORPORATION

INDEX MAP
OF THE
QUINTO CLAIMS

KAMLOOPS MINING DIVISION

DATE: SEPT. 1977 SCALE: 1:50,000

DRAWN BY: W G DWG NO. 158-2

LOCATION AND ACCESS

The Quinto claims are situated approximately 22 kilometers east of Cache Creek, B. C. The Trans Canada Highway and the ~~North~~ Thompson River transect the southwest corner of the claim block. Gravel roads head north into the claims approximately 1 km. west of the Walhachin turnoff; however, they have deteriorated to a nearly impassable condition north of L-15+00N (see figure #158-3). A rough road is found parallel to the major power line which transects the southwest corner of the claims, north of the Trans Canada Highway.

Access for the majority of the surveys has been via a road that leaves the Trans Canada about 5 km. east of the Walhachin turnoff. From this point, the property is approximately 4 kilometers.

PHYSIOGRAPHY AND VEGETATION

The Quinto claims are situated on a south facing slope between the 1,200' and 3,000' elevation from 1/2 to 2 1/2 miles north of the North Thompson River. Much of the claim area is of a gentle south slope; however, a number of steep and highly dissected slopes are found along the highway and in the northern portion of the survey area.

Creek valleys and gulleys are generally of a north-south trend and are nearly always dry except for the occasional spring.

Vegetation consists primarily of sage and sparse grasses on the gentle slopes to the south. The northern and steeper portion of the claims are sparsely treed by pines.

Overburden of both a glacial and residual nature covers much of the claims. The most extensive area of overburden is found on the southern third of the Quinto claim and most of Quinto V and VII, where

the fluvial and glacial debris is probably well in excess of 10 meters.

Overburden depths on the upper slopes varies from 1/4 to 1/2 meter on the steeper slopes to \geq 2 meters on some of the gentler slopes such as in the central portion of Quinto III.

PROPERTY

The Quinto claims comprised of 80 units were staked under the Modified Grid System and are located in the Kamloops Mining Division (N.T.S. No 92I/14E). The claims owned by the Quinto Mining Corporation are as follows:

<u>Name</u>	<u>No. of Units</u>	<u>Record No.</u>	<u>Expiry Date</u>
Quinto	20	660	December 16, 1977 1977
Quinto II	10	747	March 29, 1978 1978
Quinto III	18	748	March 29, 1978
Quinto IV	6	749	March 29, 1978
Quinto V	10	750	March 29, 1978
Quinto VI	12	823	May 25, 1978
Quinto VII	4	824	May 25, 1978

HISTORY

The history of the Quinto claims area dates back to at least the 1940's with the following representing a brief summary of work done to date, (taken from a report by James S. Christie, 1977).

- i) 1940's to 1967: - prospecting, grid soil sampling especially in the Main showing area.

- ii) 1967: - trenching of the Main showing area yielded low to moderate values in copper, zinc, and silver.

- iii) 1971-1972: - Cache Creek Copper Mines Ltd. (N.P.L.) carried out programme of trenching and diamond drilling (reportedly 2,000').
Some geological mapping by Rio Tinto.

iv) 1972:

- restaked and sold to Northland Mines Ltd. (N.P.L.) who completed two east-west I.P. lines which indicated "anomalous conditions" over the Main and East showings.
- grid established over western third of present Quinto claim and parts of Quinto VI and VII.
- recorded for assessment but allowed to lapse by 1975.

v) 1975 - 1976:

- restaked as the 20 unit Walla claim by W. McLaren of Vancouver.
- the Quinto claim is a relocation of the lapsed Walla claim.

PRESENT EXPLORATION

Following a preliminary reconnaissance of the Quinto claims in May, 1977, the writer was engaged by the Quinto Mining Corporation to carry out geological, geophysical and geochemical surveys on the Quinto, Quinto III, and Quinto V claims.

A 2.55 km. baseline was established along the boundary of the Quinto and Quinto III claim with the 0+00 point located 60 meters south of the Trans Canada Highway.

Then a series of east-west picket lines were established at 300 meter intervals (L-0+00 to L-24+00N) with stations every 50 meters. (See Figure #158 - 3).

Pace and compass lines were established between each picket line making the line spacing 150 meters. (See Figure #158 - 4A, 4B). Line separations were measured at the extremities of the grid to determine any deviations. The subsequent geological, geochemical, and geophysical surveys were carried out on these grid lines.

REGIONAL GEOLOGY

The Quinto claims are situated at the northern extremity of the Guichon Creek Batholith which is host to the porphyry copper deposits of the Highland Valley & the Craigmont mine, a contact metasomatic iron-copper deposit.

The Guichon Creek Batholith, a Jurassic quartz diorite-diorite, with hybrid contact phases intrudes the Upper Triassic Nicola Group. The Nicola Group consists of a thick sequence of volcanic flows, pyroclastics and sedimentary rocks.

Several small late Cretaceous quartz-feldspar porphyry plugs (possibly Copper Creek intrusions) intrude the Nicola volcanics in the northwest portion of the Quinto claims.

Overlying the Guichon Creek Batholith and the Nicola volcanics to the north is the southern extremity of the Kamloops Group, an extensive Tertiary sequence of volcanic flows, fragmentals and sedimentary rocks (conglomerates in the claim area).

PROPERTY GEOLOGY

The geology of the Quinto claims under investigation consists of the following rock units:

- (1). KamloOps Group volcanics and sedimentary rocks
- Tertiary
- (2). Quartz-Feldspar porphyry Intrusive - Cretaceous?
- (3). Quartz Diorite Intrusive - Lower Jurassic
- (4). Nicola Group volcanics and sedimentary rocks
- Upper Triassic

The Kamloops Group covers the northern portion of Quinto VI, III, all of Quinto II and the extreme northern edge of the Quinto claim. The sequence consists of nearly flat lying red, brown purplish and black flows, tuffs, coarse fragmentals and vesicular volcanics. The northern quarter of Quinto III is composed of a thick (~100 meters) sequence of conglomerate composed primarily of well rounded pebbles to boulders of volcanics with minor intrusive and limestone fragments. No mineralization of economic mineralization was observed in this unit. In the

northwestern part of the grid several yellow-brown to pale green quartz-feldspar porphyry plugs similar to the Cretaceous (?) Copper Creek intrusions cut the Nicola volcanics. An area of quartz feldspar porphyry is found in the Main showing area suggesting that there may be a small plug in the mineralized area. Other than pyrite, no other mineralization was observed in these plugs.

The Guichon Creek batholith underlies much of the eastern part of the grid. It averages approximately 1,500 meters wide and extends north to at least L-25+50N; 3+50E where it disappears under the Kamloops Group volcanics.

The batholith consists of a medium grained, gray to greenish, quartz-hornblende diorite to diorite. Alteration of mafic minerals to chlorite is common. Local concentrations of epidote, pink feldspar, \pm calcite, \pm magnetite were also observed in some areas. Near the eastern contact of the Guichon Creek batholith is a medium grained, pinkish granite phase (?) which

averages 250 meters in width and approximately 1,000 meters in length. This fresh looking phase (?) is more acidic and unaltered than usual for the batholith in this area.

The largest group of rocks is the Upper Triassic Nicola Group consisting of andesitic volcanic flows, tuffs, feldspar porphyries, coarse fragmentals and sedimentary rocks. The sedimentary sequence is composed of gray to white, fine grained, locally fossiliferous limestones, and minor quartzites.

One area of limestone is a north-south trending unit in the western portion of the Quinto claim from line 13+50N to just north of L-21+00N. The width averages 75 meters but may vary considerably. The dip of the limestone would appear to be $\geq 30^\circ$ to the west. The upper contact has been observed to be quite irregular and often with a coarse grained quartz-feldspar porphyry (dyke?) and fragmental volcanics. (See Figure #158-3). The volcanic rocks for at least 200 meters west of the limestone unit contain fragments of limestone which may suggest that the volcanic rocks may have incorporated blocks of limestone at the time of extrusion.

Another occurrence of limestone is the "roof pendant" area (See Figure #158-3), where small contact metasomatic deposits of magnetite, garnet \pm chalcopyrite have been found in uplifted blocks of limestone and minor quartzite. The largest limestone unit is found east of the batholith. Here the limestone extends north-northwesterly from L-00+00, 15E to L-27+00N. The width varies from 50 to 80 meters with a second thinner unit being indicated to the east in some area. The dip of the unit appears to be steep and to the east possibly due to uplift by the batholith. In all areas observed the limestone is separated from the batholith by various Nicola volcanics. Though separated at the surface an underground batholith - limestone contact is quite possible. The limestone also shows highly fossiliferous beds in several localities (ie. L-1+50N; 12+50E and L-27+00N; 5+00F).

The only mineralization observed was a very small showing of native copper, malachite and azurite in dark gray limestone that assayed 1.58% Cu and 0.2% zinc. Approximately 60 meters north of here the limestone plunges under a thick sequence of Kamloops Group volcanics.

The volcanic division of the Nicola Group here is andesitic though acidic and basic units are observed. Fine to coarse fragmentals and flows constitute the majority of the volcanic rocks. Some welded tuffs were observed in the western extremity of the grid.

A medium to coarse grained quartz \pm feldspar porphyry is found scattered in an area from L-13+50N to L-25+50N; 12 to 18W. These rocks are found on both the east and west side of the western limestone unit. As previously stated some of the rocks in the showings to the north are similar to these porphyries. A small copper showing on L-18+00N; 15 W occurs in a similar pale green quartz-feldspar porphyry. These porphyries may be dykes or a series of small hypabyssal plugs since they appear too felsic to be part of the Nicola group volcanics.

The main zone showing occurs in pale to dark green andesitic tuffs(?) flows, and amygdaloidal volcanics. The mineralization consists of pyrite, chalcopyrite, sphalerite and minor galena often in a quartz \pm carbonate gangue. This area has been trenched and drilled (see History). Details of assays are given in a report by James S. Christie, 1977.

The east zone showing is a small pyritic showing in carbonatized, and silicified volcanics with chalcopyrite and sphalerite mineralization. Though not connected with the main zone showing on the surface, the two zones may be part of a common mineralized zone at depth. A similar copper-zinc showing exists on L-15+00N; 12 + 50W in Nicola volcanics in contact with a rusty brown quartz-feldspar porphyry.

At line 15N, S+50W a showing of massive, fine grained magnetite with minor malachite was found in Nicola volcanics in contact with quartz diorite. Other magnetite showings were observed south of L-1050N, 9W in massive epidote-pink feldspar replacements in dark green Nicola volcanics. Numerous pieces of magnetite float were found north and northeast of this area suggesting other sources of magnetite mineralization exist between these showings near the volcanic-intrusive contact.

Though no limestone was observed in this area, a buried northwesterly continuation of the limestones such as at the "roof pendant" area is conceivable.

GEOCHEMISTRY

During the course of the survey the writer collected a total of 1,097 geochemical samples at 50 meter intervals on all grid lines.

Since the claim area is situated in a semi arid region, the "A" horizon of the soil was generally weakly developed or non existent. The majority of the soils collected would generally be categorized as B to C horizon. Sample depths ranged from 5 cm. on outcrop areas to 30 cm. on less rocky areas.

The finest grain size available was collected and placed in Kraft paper envelopes numbered by the co-ordinate system. All samples were shipped to Bondar-Clegg and Co. Ltd. in Vancouver for analysis of copper and zinc. From each sample the -80 mesh material was used and of this a portion was subjected to aqua regia extraction and analysed by the atomic absorption method. All results were stated in parts per million (p.p.m.)

The mean and standard deviation were calculated for both metals and were classified into the following categories. (See Figures #158 - 4A, 4B).

Negative	0	- Mean
Possibly Anomalous	Mean	- (Mean \pm 1 Std. Dev.)
Probably Anomalous	(Mean \pm 1 std.dev.)	- (Mean \pm 2 Std. Dev.)
Definitely Anomalous	>	- Mean \pm 2 Std. Dev.)

All values were plotted on base maps at a scale of 1:5,000 or 1 cm. = 50 meters. The above categories represent the contour intervals for copper and zinc. (See Figures #158 - 4A, 4B). The mean for both copper and zinc is 46.4 and 98.4 p.p.m. respectively with a number of definitely anomalous zones being indicated (See Figures #158 - 4A, 4B).

From inspection of the maps, it can be seen that a definite north-south trend exists in the anomalies and that the anomalous zones form a large area which arcs northwesterly from the southern part of Quinto III to the west central and northern portion of the Quinto claim. The large scale trend roughly parallels the Guichon-Nicola contact while the individual anomalies possibly outline the local trend of rock units and their

mineralized zones. This north-south trend may also be in part modified by a downslope movement in the soils.

The Guichon Creek batholith is essentially negative except for some anomalous copper-zinc values in the southeastern portion of the grid were some assimilated and mineralized Nicola volcanics may exist.

One definite anomaly exist parallel to and just west of the baseline from L-4+50N to L-7+50N. This copper-zinc anomaly corresponds to an area of numerous roof pendants of Nicola volcanics and limestone. Some of these limestones contain small contact concentrations of magnetite, grossularite garnet, pyrite and minor chalcopyrite. (See Figure #158 - 3, L-6+00N, 0+00.)

Several small high intensity zinc anomalies exist on the east side of L-25+50, L-27+00N at 5+00 to 6+00E. (See Figure #158-4B). These small anomalies correspond to the north northwesterly trending limestone ridge. Thus the small copper showing and the zinc anomalies here imply some definite increase in metal values in this part of the limestone unit.

In the north central portion of the Quinto claim L-22+50N to 25+50N, are several coincident north-south copper-zinc anomalies which correspond quite well to the Main and East showings. (See Figure #158 - 4A, 4B).

To the south approximately 750 meters from the above anomalies is a large zinc anomaly with a smaller coincident copper anomaly within it. Both anomalies lie immediately east of a north-south bed of Nicola limestone and are situated in an area of pale green, medium to coarse grained quartz-feldspar porphyry similar to that found north of here in the main zone showing. Though the rocks here are not pyritized to any great extent some chalcopyrite mineralization was noted in an outcrop at L-18+00N; 15+00W.

MAGNETOMETER SURVEY

During the course of the survey 56.05 km. of magnetic readings were taken on all grid lines as well as on some pace and compass extensions into irrigated land (i.e. L-10+50N, L-9+00N, and L-4+50N). Readings were normally taken at 50 meter intervals except in magnetically active or limestone areas where spacings were reduced to 10 - 25 meters.

The instrument used was a Phoenix Geophysics Fluxmaster MU-1 magnetometer which measures the vertical component after having been adjusted to cancel out the earth's magnetic field at a known base station. The base station chosen was 0+00 with the cancelled value being 54,700 gammas.

Diurnal (daily) and day to day variations were noted by referring to several known stations at various times during the day with appropriate corrections then being made. Readings were always taken facing north to avoid any orientation errors. Values were stated in "gammas".

From Figure #158 - 5 it can be seen that the magnetic trend in the Quinto claims area is from north to north-northwesterly. The following observations can be made:

- (1). Eastern limestone unit:
 - magnetically low, with some elongate "highs" on the eastern contact with the Nicola volcanics (ie. L-1+50N, L-9+00N, L-12-13+50N).
 - some coincident magnetics with strong zinc anomalies on L-22+50N, L-24+00N at approximately 5+00 to 0+00 E.
- (2). Western limestone unit:
 - magnetically inactive - low values.
- (3). Roof pendant area (L-6+00N to L-7+50N; Baseline)
 - magnetically erratic; no exceptional highs or lows except at magnetite showing.
 - does have coincident copper-zinc anomalies.
- (4). Main zone showing: (L-25+50N; 16+00 to 17+00W).
 - little magnetic activity.
 - strong zinc anomaly - weak copper anomaly.

- (5). East zone showing:
- small strong positive magnetic anomaly.
 - with coincident strong copper anomaly and moderate zinc anomaly.
- (6). Nicola magnetite showings: L-9+00N to L-15+00N
(approx. 5 to 10W).
- magnetically the area is very active (high positives and negatives).
 - corresponds to area just west of Guichon Creek batholith contact.
 - also has coincident weak to moderate copper and zinc anomalies.
 - magnetically active area measures approximately 500 meters x 1,000 meters.
- (7). Nicola volcanics at west edge of L-19+50N to L-22+50N:
- North-south high positive magnetic anomalies with coincident copper anomalies; coincides with large Nicola volcanic cliffs.
- (8). Nicola rocks at east edge of L-15+00N to L-19+50N:
- high positive magnetic anomalies with weak coincident copper anomalies; negative zinc values.
 - corresponds to large area of Nicola fragmentals.

(9). L-22+50N to L-27+00N @ 5 + 00 to 10 + 00W:

- this area of high "magnetics" corresponds to an area of Tertiary Kamloops volcanics that cover both the Nicola volcanics and the Guichon Creek batholith.
- negative copper and zinc values.

(10). Guichon Creek Batholith:

- i) - large NNW-SSE highly magnetic area from L-4+50N to 16+50N, just east of the baseline.
 - contains two small highly magnetic areas one of which corresponds to a limestone roof pendant mineralized by magnetite.
 - other high positive anomaly may be buried magnetite mineralized - limestone roof pendant.
 - weak copper and zinc anomalies at south end of this magnetic high.
- ii) L-1+50N to L-13+50N at 9+00 to 11+00E.
 - these magnetic highs correspond to the eastern border of the Guichon Creek batholith.
 - show a weak coincident copper-zinc anomaly.
 - this may be an area of assimilated Nicola volcanic rocks?
- iii) The granite phase of the batholith is magnetically as well as geochemically inactive.

SUMMARY AND CONCLUSIONS

- (1). The Quinto claims consisting of 80 metric units are situated on a south facing slope north of the ~~North~~ Thompson River approximately 4 kilometers north - northwest of Walhachin, B. C.

- (2). The property is underlain by the northern extremity of the Guichon Creek batholith which intrudes the Triassic Nicola volcanics and sedimentary rocks. Later quartz-feldspar porphyry plugs intrude the Nicola volcanics at the north-west end of the grid. All of the above rock types are overlain to the north by a thick Tertiary volcanic and sedimentary sequence.

- (3). The majority of the mineralization observed is contained within the Nicola rocks. The writer recognizes three types of mineralization, one of which is the pyrite, chalcocopyrite, sphalerite + galena zones in Nicola andesitic flows and porphyries of which the Main and East showings are a part of. The second type is the magnetite + chalcocopyrite replacements in the Nicola volcanics and limestones near their contact with the Guichon quartz diorite. (These are generally contained in the most magnetically active areas.) The third and least common type is the native copper, malachite and azurite noted in the Nicola limestone in the north-east corner of the grid. Zinc appears to be also

with this type.

(4). Geochemistry indicates a rough north-south trend to the anomalies and probably the rock types. Known showings were delineated to some extent and some possible extensions to these zones may be indicated. Limestones were geochemically inactive except for the native copper area and some of the limestone - volcanic contacts in the eastern part of the grid.

(5). The magnetic survey was useful in delineating certain rock types and locating a number of magnetite and probable magnetite showings as well as magnetically active areas near the Nicola-Guichon contact. (i.e. L-9+00N to L-15+00N: 5 to 10W.)

(6). Several areas were delineated as possible areas for possible Craigmont type mineralization, one of which is the area west of the Guichon - Nicola contact in L-9+00N to L-15+00N. Though the surface indications are scattered and relatively small, a good possibility exists for more extensive and economic mineralization at depth, such as is the case at Craigmont.

RECOMMENDATIONS

(1). Investigate the magnetite showings along the west contact of the Guichon batholith (L-7+50N to L-15+00N) by a series of induced polarization lines. A more detailed magnetometer survey could be carried out in this specific area.

(2). Detailed rock geochemistry of the limestone in the northeast corner of the grid to determine the extent of the copper and zinc values.

Carry out induced polarization surveys on:

L-24+00N	2E to 10E)	
)	
L-25+50N	2E to 10E)	Total 2.3 km.
)	
L-27+00N	3E to 10E)	

if geochemical investigation warrants it.

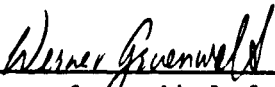
(3). Carry out induced polarization surveys over:

L-15+00N; 8+00W to 22+00W)	
)	Total 2.8 km.
L-18+00N; 8+00W to 22+00W)	

to investigate coincident copper and zinc anomalies.

- (4). To fully test the possibility of Craigmont type mineralization it is recommended that several deep drill holes (~1,000 feet) be drilled in areas #1 and #2 above with the objective of intersecting the contact of the limestone or favourable zone and the Guichon batholith.

Respectfully Submitted by:
KERR, DAWSON AND ASSOCIATES LTD.,



Werner Gruenwald, B. Sc.,
GEOLOGIST

October 7th., 1977,
KAMLOOPS, B. C.

APPENDIX A

PERSONNEL

PERSONNEL

Field:

W. Gruenwald	August 24 - August 27, 1977	4 days
	August 29 - September 3	6 days
	September 6 and 7	2 days
	September 10 - 13 inclusive	4 days
	September 17 - 19th. inclusive	3 days
	September 23rd.	<u>1 day</u>
	TOTAL IN THE FIELD	20 days

Office:

W. Gruenwald	August 22nd. and 23rd.	1 1/2 days
	September 8th. and 9th.	1 3/4 days
	September 14th. and 15th.	1 3/4 days
	September 21, 22, 24	3 days
	September 26, 27	2 days
	September 28	1 day
	September 29 - 30	2 days
	October 3, 4, 5, 6	<u>4 days</u>
	TOTAL IN THE OFFICE	16 1/2 days

APPENDIX B

STATEMENT OF EXPENDITURES

COST OF PROGRAMME ON THE QUINTO CLAIMS

(1). Grid Establishment:

i) Transit Baseline 2.55 km. @ \$280/km.	\$ 714.00	
ii) Picket Lines 28 km. @ \$105/km.	<u>2,940.00</u>	\$ 3,654.00

(2). Geochemical Survey:

563 samples on picket lines @ \$2.50/sample	1,407.50	
534 samples on pace and compass lines @ \$3.75/ sample	<u>2,002.50</u>	3,410.00

(3). Geochemical Analyses:

1,097 samples @ \$2.25/sample	2,468.25	
1 rock sample geochem.	<u>3.15</u>	2,471.40

(4). Magnetometer Survey:

56.05 km. @ \$50/km.		2,802.50
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(5). Report and compilation

1,700.00

(6). 3 extra copies report @ \$35.00/report

105.00

TOTAL \$14,142.90

APPENDIX C

AFFIDAVIT IN SUPPORT OF STATEMENT OF EXPENDITURES

C A N A D A
PROVINCE OF BRITISH COLUMBIA

) IN THE MATTER of the Statement of
) Expenditures for the Geochemical,
) Geological and Geophysical exploration
) of the Quinto claims in the Kamloops
) Mining Division.
)
)
)

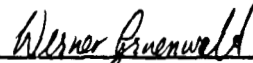
I, WERNER GRUENWALD, Geologist of #1 - 219 Victoria Street in the City
of Kamloops, in the Province of British Columbia, DO SOLEMNLY DECLARE:

- (1). THAT the geochemical, geological and geophysical investigation
of the Quinto claims was carried out by the writer under the
supervision of J. R. Kerr, P. Eng. and J. M. Dawson, P. Eng.

- (2). THAT the Statement of Expenditures set out in Appendix B of my
report entitled "Geochemical, Geological and Geophysical Report"
dated October 10th., 1977, truly represents the amount expended
on geochemical, geological and geophysical surveys of the said
claims.

AND I make this solemn declaration conscientiously believing it to be
true and knowing that it is of the same force and effect as if made
under oath, and by virtue of the Canada Evidence Act.

Declared before me at the City
of Kamloops in the Province of
British Columbia this 10th. day
of October, A. D., 1977.



Werner Gruenwald,
GEOLOGIST



A Commissioner for taking
Affidavits for British Columbia

APPENDIX D

REFERENCES

REFERENCES

- (1). DAFTEL, S. and McTAGGART, K. D. (1952): - G.S.C. Memoir #262,
Ashcroft Map area, B. C.
- (2). CHRISTIE, J. E. (1977): - Report on the Geology
and Geophysics of the
Quinto Mineral Claim.

APPENDIX B

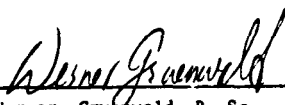
WRITER'S CERTIFICATE

STATEMENT OF QUALIFICATIONS

I, WERNER GRUENWALD, OF KAMLOOPS, BRITISH COLUMBIA, DO HEREBY
CERTIFY THAT:

- (1). I am a geologist residing at #13 - 1435 Summit Drive, Kamloops, B. C. and employed by Kerr, Dawson and Associates Ltd. of Suite #1 - 219 Victoria Street, Kamloops, British Columbia.
- (2). I am a graduate of the University of British Columbia, B. Sc. (Geology) (1972), and have practised my profession for 5 1/2 years.
- (3). I am the author of this report which is based on an exploration programme that included geochemical soil sampling, geological mapping, and a magnetic survey.

KERR, DAWSON & ASSOCIATES LTD.,



Werner Gruenwald, B. Sc.,
GEOLOGIST

October 10th., 1977,
KAMLOOPS, B. C.

JAMES M. DAWSON, P.Eng.
GEOLOGIST

SUITE 1 - 219 VICTORIA STREET
KAMLOOPS, B.C.

PHONE (604) 374-6427

CERTIFICATE

I, JAMES M. DAWSON, OF KAMLOOPS, BRITISH COLUMBIA, DO HEREBY
CERTIFY THAT:

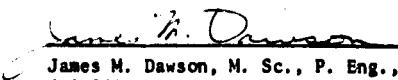
- (1). I am a geologist employed by Kerr, Dawson and Associates Ltd. of Suite #1 - 219 Victoria Street, Kamloops, B. C.
- (2). I am a graduate of the Memorial University of Newfoundland. B. Sc., (1960), M. Sc. (1963), a fellow of the Geological Association of Canada and a Member of the Association of Professional Engineers of B. C. I have practised my profession for 13 1/2 years.
- (3). Werner Gruenwald, employed by Kerr, Dawson and Associates Ltd. and author of the report entitled "Geochemical, Geological and Geophysical Report on the Quinto Claims" was under my supervision during the work on the Quinto claims.



October 10th., 1977,

KAMLOOPS, B. C.

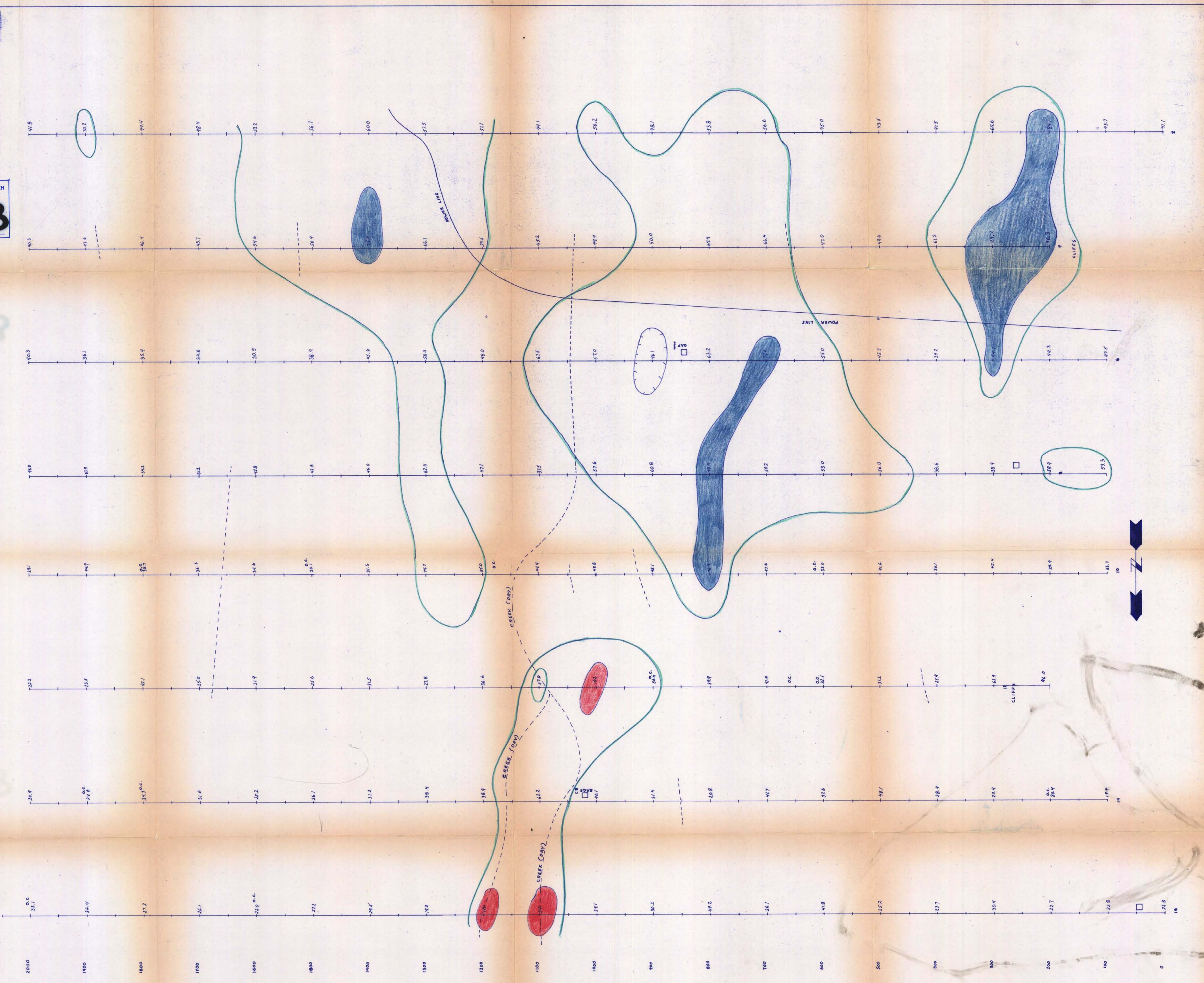
KERR, DAWSON & ASSOCIATES LTD.,


James M. Dawson, M. Sc., P. Eng.,
GEOLOGIST

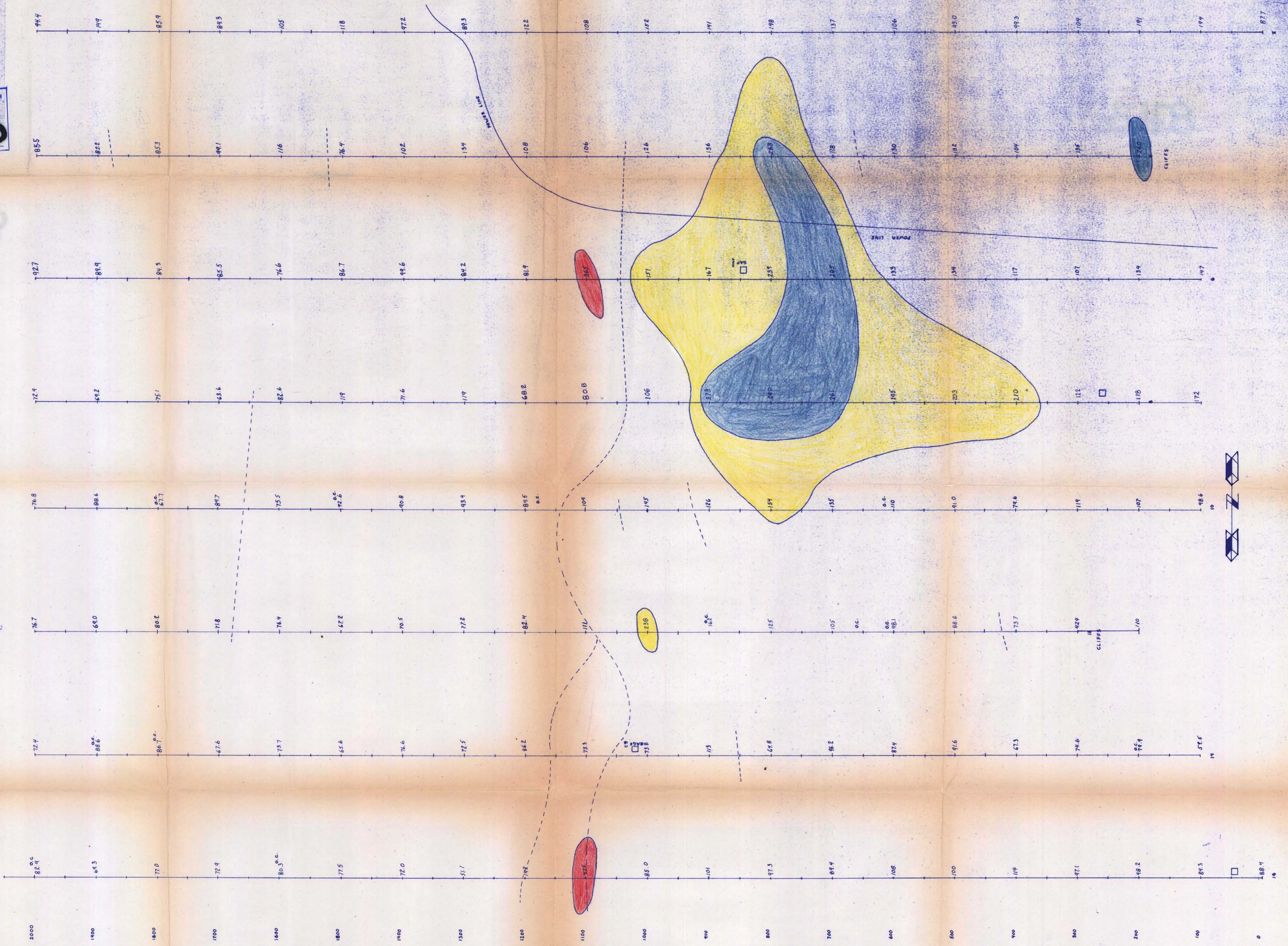
APPENDIX F

MAPS

QUINTO MINING CORPORATION
 VANCOUVER B.C.
 QUINTO CLAIM
 Kamloops - M.D.
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 SCALE: 1 CM = 25 M
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 DRAWN BY: STRATON GEOLOGICAL
 TO ACCOMPANY REPORT BY J.P. ELWELL, P. ENG. OCT 1980
GEOCHEMISTRY
 Cu Pb Zn
 MINERAL RESOURCES BRANCH
 ASSESSMENT REPORT
8763
 NO.



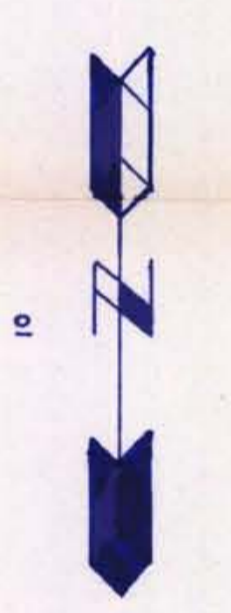
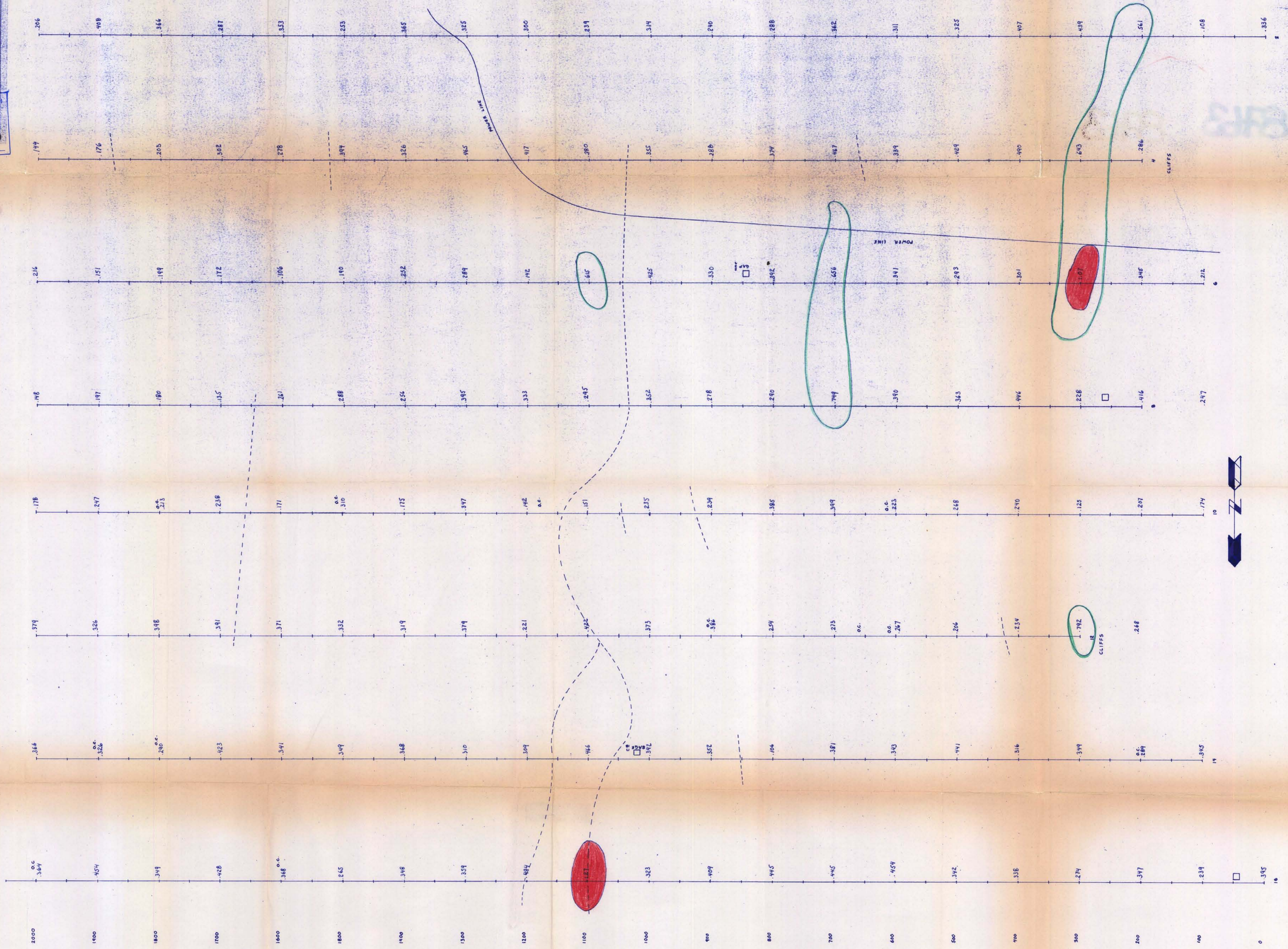
QUINTO MINING CORPORATION
 VANCOUVER B.C.
 QUINTO CLAIM
 Kamloops, B.C.
 DATE: DEC 1, 1980
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 TO ACCOMPANY REPORT BY J. P. ELWELL, P. ENG. 081, 1980
GEOCHEMISTRY
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 351 +
MINERAL RESOURCES BRANCH
 ASSESSMENT REPORT
8713

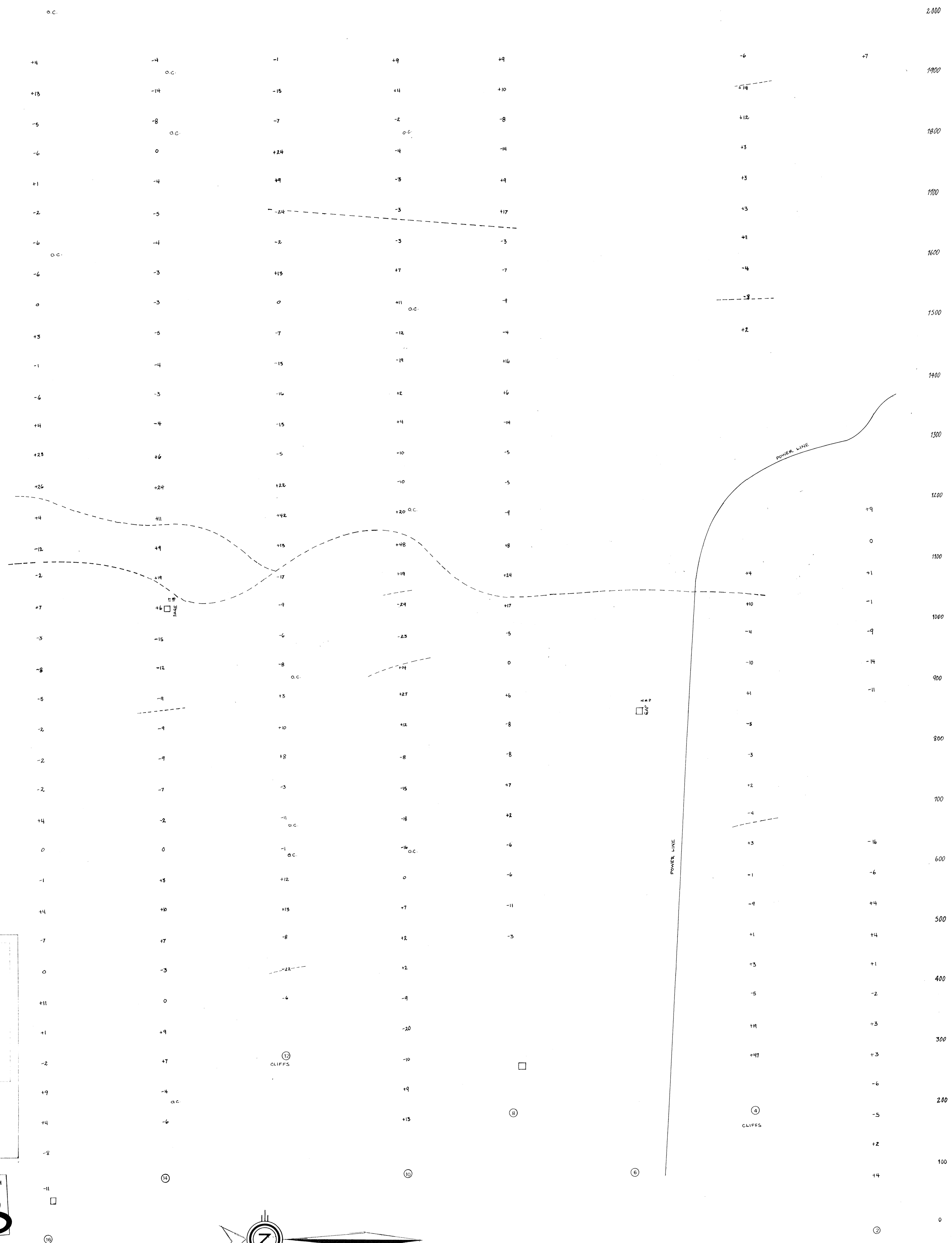


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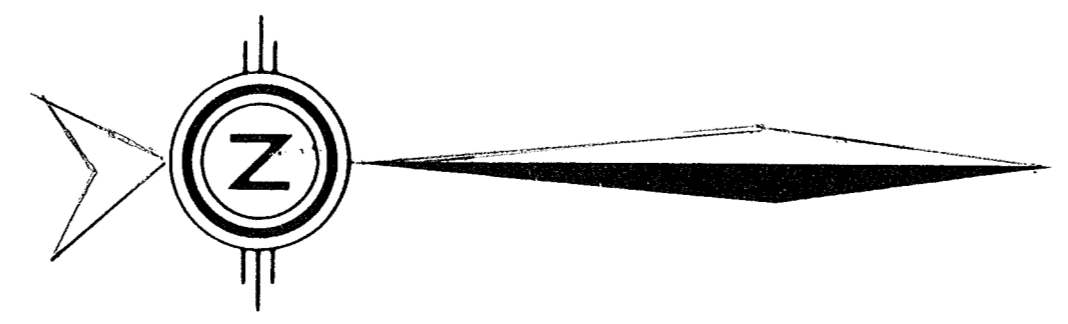
QUINTO MINING CORPORATION
 VANCOUVER B.C.
 QUINTO CLAIM
 Kamloops, B.C.
 DATE: Oct. 1980
 SCALE: 1 CM = 25 M
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 DRAWN BY: STRATIGEOLOGICAL
 TO ACCOMPANY REPORT BY J.P. ELWELL P. ENG. DEC. 1980
GEOCHEMISTRY
 Ag, Cu, Pb
 MINERAL RESOURCES BRANCH
 ASSESSMENT REPORT
8713

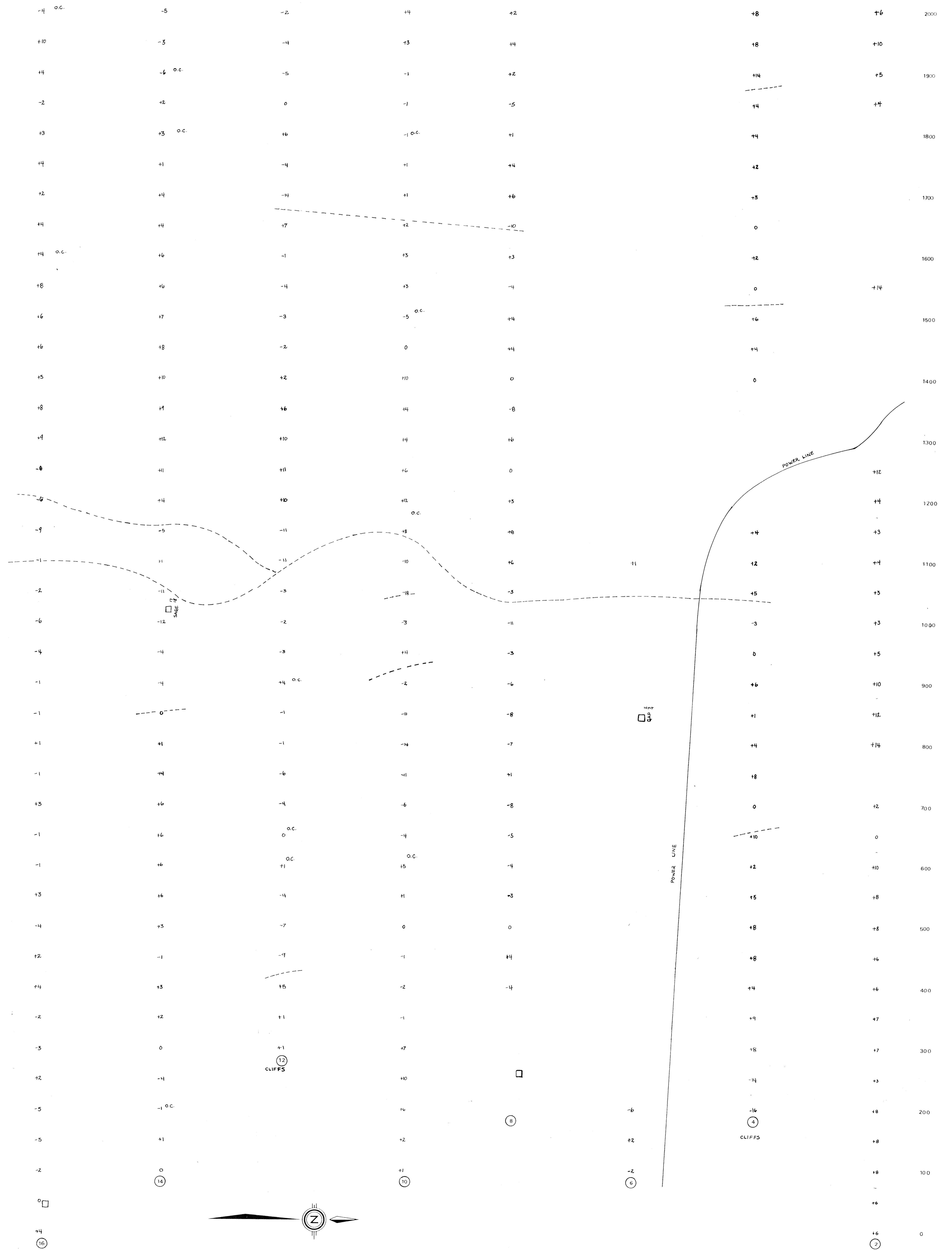




QUINTO MINING CORPORATION
 VANCOUVER B.C.
 QUINCY CLAIM
 Kesteven, B.C.
 DATE: 1980
 SCALE: 1 CM = 25 M
 DRAWN BY: STRATON GEOLOGICAL
 TO ALL COMPANY REPORT BY J. P. ELWELL, P. ENG. (C), 1980
Electromagnetic Survey
 FILTER

MINERAL RESOURCES BRANCH
 ASSESSMENT REPORT
8763
 NO.





QUINTO MINING CORPORATION
VANCOUVER B.C.

QUINTO CLAIM
Kamloops M.D.

DATE: Oct. 1980
SCALE: 1 CM = 25 M
0 25 50 100

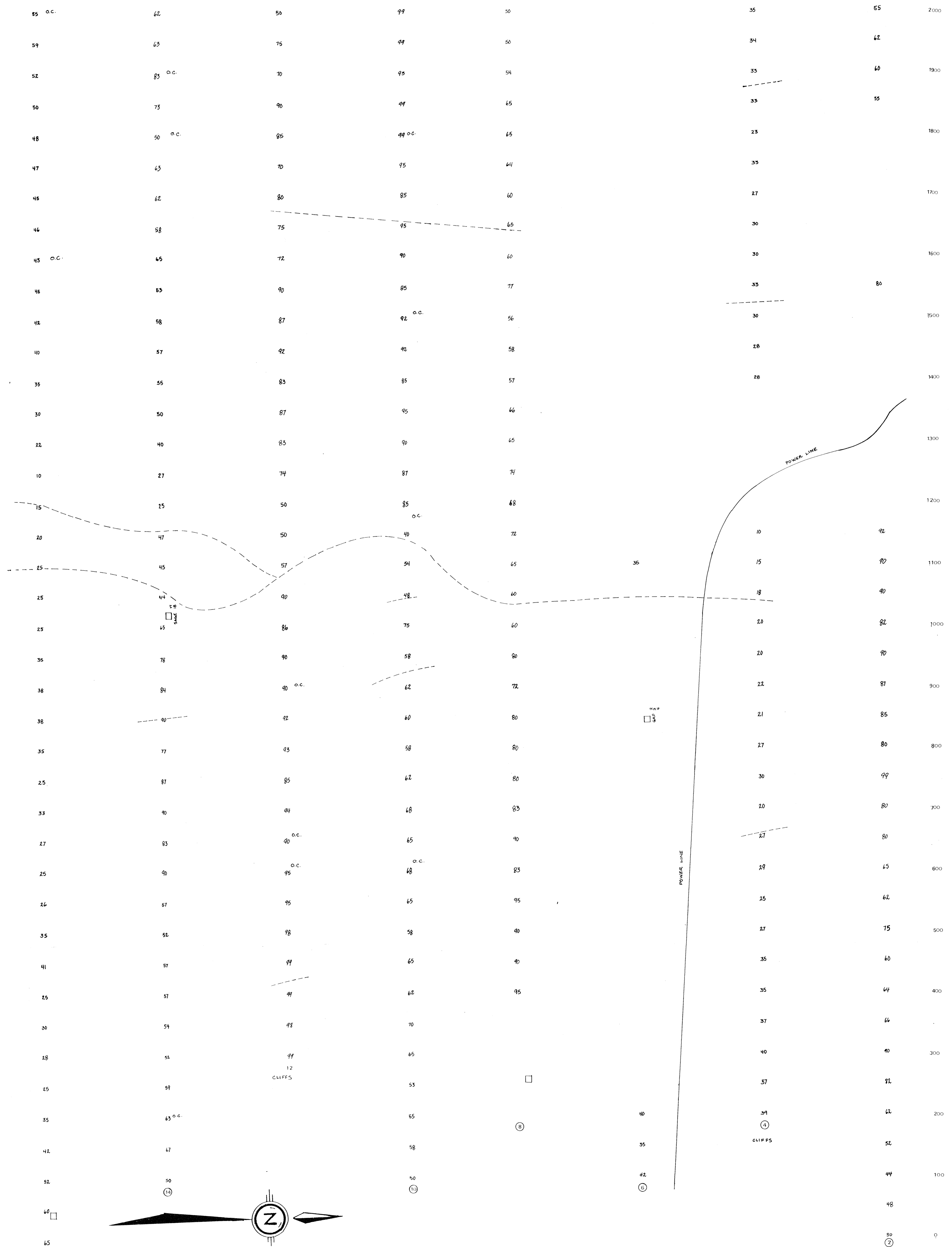
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FIELD COMPANY REPORT BY J. P. ELWELL, P. ENG. Oct. 1980

Electromagnetic Survey
DIP ANGLE

LINE CLAIM POST FREE

MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
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NO.



QUINTO MINING CORPORATION
VANCOUVER B.C.

QUINTO CLAIM
K.M. 10.00 - 12.00

DATE: 11.1.1980
SCALE: 1 CM = 25 M

DRAWN BY: STRATO GEOLOGICAL

TO ACCOMPANY REPORT BY J.P. ELWELL P. ENG. (1980)

Electromagnetic Survey

FIELD STRENGTH

LINE
CLAIM
TIEK

