6/88

ASSESSMENT REPORT

1987 GEOCHEMICAL AND GEOPHYSICAL SURVEY

ON THE

HIDDEN TREASURE, HOOKER AND SPHINX MINERAL CLAIMS IN THE CRAWFORD CREEK AREA

SLOCAN AND FORT STEELE MINING DIVISION
BRITISH COLUMBIA, NTS 82F/10E

LATITUDE: 49 40'
LONGITUDE: 116 40'

OPERATOR: RIVAL MINERALS LTD.
OWNERS: E. DENNY AND J. DENNY

NOVEMBER, 1987

R. S. VERZOSA, P. Eng.
Consulting Geologist

87-379

GEOLOGICAL EVALUATION

OF THE

COMMONWEALTH PROPERTY
(Hidden Treasure, Hooker and Sphinx M.C.)

Slocan and Fort Steele M.D.

NTS 82F/10E
49°40' 116°40'

FOR

Operator: RIVAL MINERALS LTD.

Owner(s): E. Denny
J. Denny

November, 1986
Vancouver, B.C.

R.S. Verzosa, P.Eng.
Consulting Geologist

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SUMMARY AND CONCLUSIONS

The Commonwealth Property in which Rival Minerals Ltd. has acquired an option is located east of Crawford Bay, in the Slocan Mining Division. Access to the property is by 17 Km of logging and 4-wheel drive road from Crawford Bay. The property comprises a total of 1,500 hectares.

The property which was prospected before the turn of the century and since recently explored lies within a northerly belt of Precambrian sediments of the Windermere and Purcell Series. Within the Series are carbonate units that host a number of important Lead-Zinc deposits.

In the Commonwealth Property, lead and zinc mineralization with minor amounts of silver occur in quartz stockwork in buff dolomite. Grab samples from the most significant showing returned average values of 28 oz/T Ag, 19.36% Pb, 1.38% Zn, and 2.24% Cu.

A recent exploration program of soil geochemistry, VLF-EM and Magnetometer surveys have defined 9 geological anomalies of which at least five warrant a follow-up diamond drilling program.

INTRODUCTION

The Commonwealth Property near Nelson in Southwestern British Columbia is under an option agreement whereby Rival Minerals Ltd. would earn a 100 percent interest by making scheduled payments and work commitments.

At the request of Mr. C. Tiojanco, president and director of Rival Minerals Ltd., the undersigned initiated and supervised a geological evaluation program on the Commonwealth Property. The field work which commenced during the later part of September, 1986 comprised line-cutting, soil sampling, VLF-EM survey, Magnetometer survey and reconnaissance geological mapping. A survey grid of approximately 37 Km was established and a total of 1,322 soil samples were collected.

LOCATION AND ACCESS

The Commonwealth Property is located 47 Km northeast of Nelson, B.C. in the Slocan Mining Division. The property is centered on latitude 49 deg. 40' north and longitude 116 deg. 40' west, sitting astride Mount Hooker in a northerly direction (Figure 1).

The property is accessible from Crawford Bay by 17 Km of logging road along Crawford and Hooker Creeks, the last six kilometres of which require a 4-wheel drive vehicle. Crawford Bay is a ferry terminal on the east coast of Kootenay Lake. The nearest commercial centre is Nelson which is some 34 Km by road and ferry from Crawford Bay.

PHYSIOGRAPHY

The topography is characteristically rugged, dominated by steep slopes averaging 55 degrees to sheer bluffs formed by resistant and steeply-dipping rock formations. Elevations range from 1,525 m in the creek beds to greater than 2,440 m on Mount Hooker and Sphinx Mountain. The property is drained by the upper reaches of the westward-flowing Hooker and Houghton Creeks, both major tributaries of Crawford Creek. The property is partly logged resulting in some open grassy slopes although generally merchantable timber (mostly spruce) abound even in the elevated areas surrounding Mount Hooker.

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
R. S. VERZOSA

RIVAL MINERALS LTD.	
COMMONWEALTH PROPERTY	
PROPERTY LOCATION MAP	
Compiled:	Date:
R. S. VERZOSA P. Eng.	Consulting Geologist

FIGURE 1

The climate is characteristic of the Kootenays, with short dry summers and long cold winters. Snow precipitation occurs as early as September with the snow pack lasting as late as June.

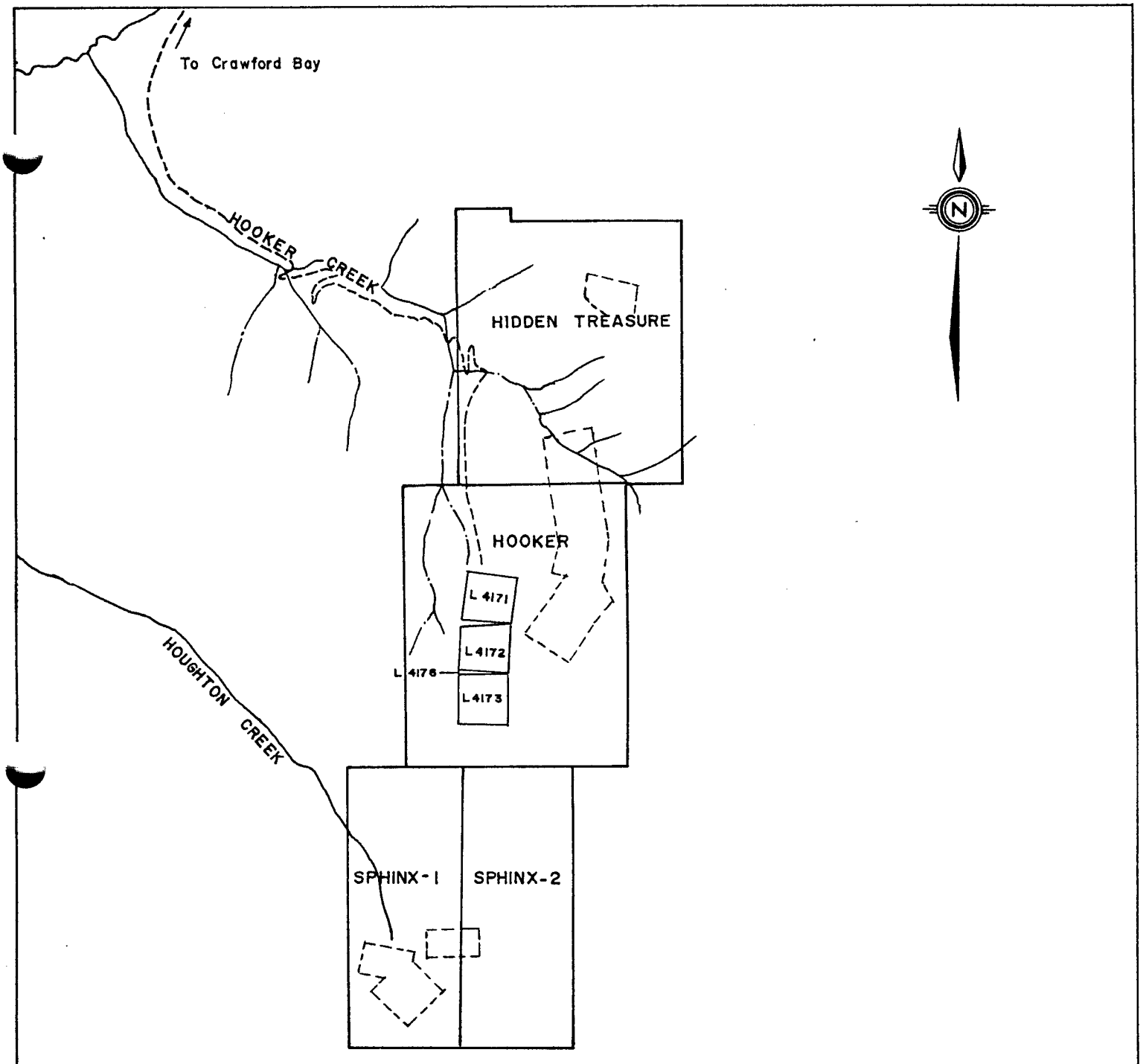
PROPERTY-CLAIM HOLDINGS

The Commonwealth Property includes 4 reverted crown grants and 4 claims (Figure 2). The 4 reverted crown grants comprised the original Commonwealth Property but which later was expanded to a 20-unit claim. The Sphinx 1 and 2 claims were recently staked in September, 1986 increasing the total area of the property to 1,500 heactares (3,705 acres). The legal details of the claims are as follows:

Claim	No. of Units	Record No.	Month of Record
Sultan (L4171)	1	137	January
Commonwealth (L4172)	1	138	January
Republic (L4173)	1	139	January
Republic Fr. (L4176)	1	140	January
Hooker	20	1993	June
Hidden Treasure	20	2221	October
Sphinx #1	10	5098	September
Sphinx #2	10	5099	September

HISTORY

Accordingly, the Commonwealth Crown Grants were staked and worked shortly following the establishment of the Pilot Bay Smelter near Crawford Bay in 1892. The extent of prospecting in the area at the time is indicated by the acquisition of Crown Grants (now reverted back to crown land) in the areas covered by the Hidden Treasure and the Sphinx #1 and Sphinx #2 Claims (Figure 2). The area remained poorly accessible until the completion of the logging access roads in the 1960's although the general area was mapped and survey by H.M.A. Rice of the G.S.C. between 1936 and 1938. In 1976, Eric and Jack Denny of Nelson, B.C. acquired the Commonwealth group of 4 reverted Crown Grants. From 1979 to 1983 Greenwich Resources Inc. (formerly Celcan Minerals) optioned the property and carried out work programs under the supervision of Robertson Research Canada Limited. Their work comprising detailed geological mapping, soil and silt sampling, VLF-EM and I.P. surveys were concentrated on the original Commonwealth showings.



- Reverted Crown Grants

1000 0 1000 2000

METRES

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
R.S. VERZOSA

RIVAL MINERALS LTD.

COMMONWEALTH PROPERTY

CLAIM MAP

Compiled:	Date:-
R.S. VERZOSA P. Eng.	Consulting Geologist

FIGURE. 2

REGIONAL SETTING

The Commonwealth Property lies in a northerly belt of Precambrian sediments of the Purcell and Windermere Series. The Series are widely distributed in the area forming a large part of the well-known Kooteney Arc, a regional structural feature starting from south of the U.S. border near Metalline Falls and extending northwards past Revelstoke, B.C. Within the sedimentary formations of the Kootenay Arc, Precambrian and Cambrian carbonate units occur hosting a number of important Lead-Zinc deposits including the formerly H.B. and Jersey mines near Salmo and the nearby Bluebell mine in Riondel. Other similar deposits occur to the north, the most important of which include the Duncan mine near Duncan Lake and the Wigwam deposit south of Revelstoke. Large nearby granitic intrusions have been thought of to have contributed to mineralization, migration and concentration processes.

PROPERTY GEOLOGY

Stratigraphy

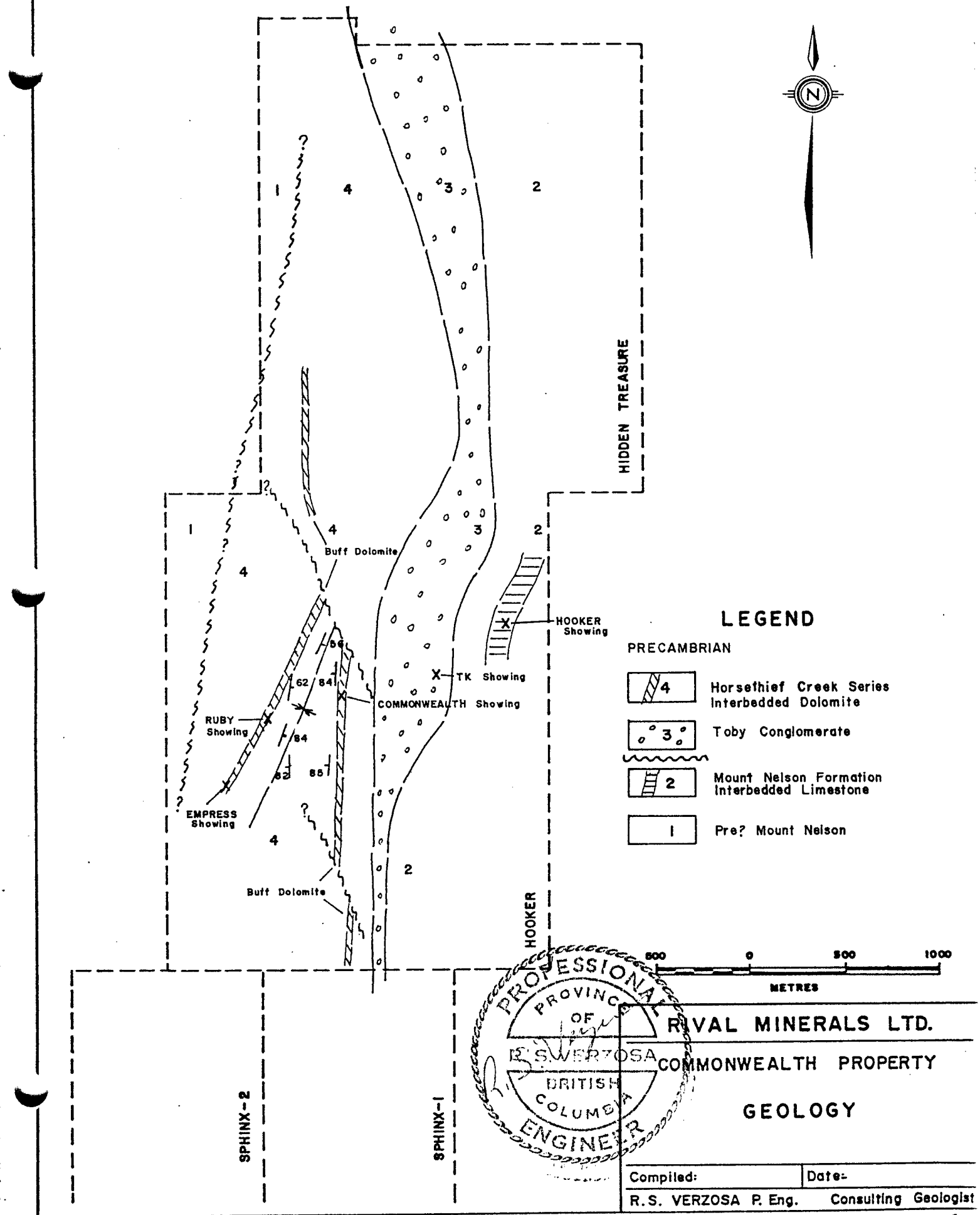
The Commonwealth Property is chiefly underlain by sedimentary units of the Windermere and Purcell Series. It may appear that the oldest rocks in the property are the gray phyllites occuring to the west. They are thought of to be pre-Mount Nelson and are probably in fault-contact with rocks of the Horsethief Creek Series (Figure 3).

Mount Nelson Formation

The Mount Nelson Formation comprises a thick succession of gray, green and black, thin bedded to laminated argillite, dolomite, impure limestone and quartzite. The Formation extensively outcrops on the eastern half of the property, its resistant beds forming the dominant topographic highs in the area.

Toby Conglomerate

Unconformably overlying the Mount Nelson Formation is the Toby Conglomerate. On the property, the Toby Conglomerate is clast-supported, mainly comprised of subrounded and rounded pebbles and cobbles of quartz and lesser angular to subangular green argillite. The unit occurs as a persistent band traversing northerly along the middle part of the property.



RIVAL MINERALS LTD.

COMMONWEALTH PROPERTY

GEOLOGY

Compiled:	Date:
R.S. VERZOSA P. Eng.	Consulting Geologist

FIGURE. 3

Horsethief Creek Series

Conformably overlying the Toby Conglomerate is the Horsethief Creek Series. On the property it comprises a thick succession of argillite, quartzite and interbeds of dolomite, limestone and conglomerate. The argillite is dark gray to black, thin-bedded to laminated, generally schistose and in varying degrees of crenulation, being more intense towards the Toby Conglomerate.

The interbedded limestone and dolomite are well-indurated and somewhat thin-bedded. They are commonly characterized by the development of quartz stockworks, accompanied by variable amounts of metallic mineralization. Their buff coloration is distinctive being an alteration form associated with the mineralization.

Structure

The main structrural trend is north-north east while the general dip is west. A significant structural feature at the Hooker claim is a a tightly folded syncline whose eastern limb includes the buff dolomite that hosts the Commonwealth mineral showings and whose western limb include the buff dolomite that hosts the Ruby and Empress mineral showings. It is likely that the two dolomite beds are the same although of different degrees of mineralization.

Mineralization

There are 5 mineral showings on the Commonwealth Property (Figure 3). The most significant so far is the Commonwealth showing consisting of extensive quartz stockwork in buff dolomite. The quartz veinlets are commonly accompanied by either dissiminations or stringers of galena, tetrahedrite, sphalerite, pyrargyrite and pyrite. In some cases stringers to veinlets of sulphides occur with no accompanying quartz. There seems to be no preferred orientation for the mineralization although previous workers claim the concordance of the mineralized quartz stockwork with the structural trend of the buff dolomite. Grab samples from trenches on the Commonwealth showings taken by Robertson Research returned average values of 28 oz/T Ag, 19.36% Pb, 2.24% Cu and 1.38% Zn. The other showings in the Horsethief Creek Series include the Ruby and the Empress. In the Ruby showings, quartz veins striking sub-parallel to the dolomite trend carry moderate amounts of galena, tetrahedrite, pyrargyrite, sphalerite, malachite, and pyrite occurring either as disseminations or blebs in quartz. Grab samples returned insignificant values of copper, lead, zinc and silver.

The Empress showing consists of quartz veins and stringers in dolomite, weakly mineralized with chalcop[yrite, galena, malachite, azurite and pyrite. Like the Ruby showing, grab samples returned low values of copper, lead, zinc and silver.

Two other showings, the TK occurring in the Toby Conglomerate and the Hooker Pass occurring in a carbonate unit in the Mount Nelson Formation were studied by previous workers. Grab samples from the TK showing returned values up to 9.2% Pb, 5.0% Zn and 37 oz/T Ag. In the Hooker Pass showing, mineralization consists of galena, tetrahedrite, azurite and malachite in quartz stockwork in the dolomitic limestone. Grab samples returned values up to 7.2% Pb, 3% Zn and 96 oz/t Ag.

GEOCHEMISTRY AND GEOPHYSICS

The soil sampling program resulted in a total of 1,322 samples taken every 25 metres along a total of 37 Km of grid lines spaced at 100-metre interval. The samples were taken from the "B" layer at depths between 15 to 30 cm and placed in wet strength Kraft envelopes. The samples were shipped to Acme Analytical Laboratory in Vancouver where a standard ICP analysis was carried out for Cu, Ag, Pb, Zn and As.The statistical summary of the analytical results are shown as follows:

Element	Mean	Std. Deviation	Anomaly Threshold
Cu	23	18	41
Pb	60	105	165
Zn	155	250	405
Ag	0.42	0.47	0.89
As	16	19	35

In the survey, the mean plus the standard deviation was taken to be the Anomaly Threshold. The results of the geochemical survey are presented in Figures 4 to 8.

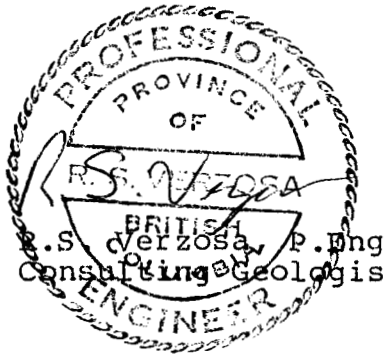
The VLF-EM and Magnetometer survey was carried out on the same grid interval and spacing as the soil sampling. The VLF-EM survey utilized a Sabre instrument Model 27 and the Hawaii transmitter.The result of the survey is presented in filtered form in Figure 9. The magnetometer survey utilized a Unimag Proton instrument that measures the total field. The magnetometer survey results are shown in Figure 10.

The results of the geochemical and geophysical surveys were correlated and summarized in the anomaly map in Figure 11. Anomaly A is fairly well defined by anomalous values of Cu, Zn and Ag. Although the values are only slightly higher than threshold, the anomaly is significant in that it is coincident with the trend of the main Commonwelath showing. Anomalies B, C, and D are principally VLF-EM anomalies with a coincident copper anomaly in D. Anomalies B and C are distinct and strong and appear to be caused by fairly deep-seated conductors. Anomaly E has coincident Pb, Ag and Zn values and is particularly significant in that it is along strike with the Ruby and Empress showings. Anomaly F is a weak VLF anomaly somewhat associated with high arsenic values. Anomaly G is fairly well defined by coicident high values of Pb, Ag, Cu and Zn. Anomaly H is based on coincident although weak Ag and Cu values. Anomaly I has coincident anamalous Pb, Ag and Zn values.

Anomalies A and E appear to be the most significant since they are associated with visible copper, lead and zinc mineralization. However, anomaly G could be an expression of mineralization from a nearby band of buff dolomite. Anomalies C and D are along strike of each other and could represent a single conductor. Together with anomaly B, these VLF-EM expressions are very well defined and may represent mineralized conductors near the contact between the Toby Conglomerate and the Horsethief Creek Series.

RECOMMENDATIONS

On the basis of previous and recent work on the Comomnwealth Property a diamond drilling program is recommended. In their order of priority anomalies A, E, G, B and C-D warrant further evaluation by diamond drilling.



R.S. Verzosa, P.Eng.
Consulting Geologist

December 5, 1986
Vancouver, B.C.

SELECTED REFERENCES

Adamson, R.S., 1981, Report on the Commonwealth Property

Evans, D.S., 1982, Trench Sampling and Mapping Program Commonwealth Property

Hand, J.S., 1980, Property Evaluation Report, Commonwealth Group,
1981, Assessment Report, Commonwealth Property

Hardy Associates (1978) Ltd., 1983, Letter Report on I.P. Survey on Commonwealth Property

Ministry of Mines Annual Reports, 1896, P. 94, 1900, pp. 982-988

The Canadian Mining Journal, 1901, p. 389.

CERTIFICATE

I, Ruben S. Verzosa, hereby certify that:

1. I am a Consulting Geologist with an office at 23064 50th Avenue, Langley, B.C.

2. I am a graduate of the University of the Philippines in Geology, 1957.

3. I have been practicing my profession as a geologist for 25 years.

4. I am a member of the Association of Professional Engineers of British Columbia, Registration No. 7437.

5. This report is based on my examination of the literature on the property and on a field examination and personal supervision of the work carried out during the month of September and October, 1986.

6. I have no interest, nor do I expect to receive any interest, direct or indirect, in the Commonwealth Property or in any securities of Rival Minerals Ltd.

7. I consent to the use of this report in or, pertinent to, the filing of a Prospectus by Rival Minerals Ltd.

DATED at Vancouver, British Columbia, this 5th day of December, 1986.

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA R.S. VERZOSA

Ruben S. Verzosa, P.Eng.
Consulting Geologist

GEN1.RSV:2.1-11

STATEMENT OF EXPENDITURES

Contract Work to Milan Hlava, FGAC, (37 km of line cutting, soil sampling and VLF/MAG Survey	$ 14,260.00
Analytical Costs, 1322 soils for Ag, Pb, Zn, Cu and As	6,427.50
Transportation and accommodations	628.00
Report Preparation	1,500.00
Total	$ 22,815.50

R. S. Verzosa, P. Eng.
Consulting Geologist

ACME ANALYTICAL LABORATORIES LTD.
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PHONE 253-3158 DATA LINE 251-1011

DATE RECEIVED: OCT 28 1986

DATE REPORT MAILED: Oct. 31/86

GEOCHEMICAL ICP ANALYSIS

.500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER. THIS LEACH IS PARTIAL FOR MN.FE.CA.P.CR.MG.BA.TI.B.AL.NA.K.W.SI.ZR.CE.SN.Y.NB AND TA. AU DETECTION LIMIT BY ICP IS 3 PPM.

- SAMPLE TYPE: SOILS -80MESH

ASSAYER: DEAN TOYE. CERTIFIED B.C. ASSAYER.

TRIUMPH INDUSTRIES PROJECT - NELSON FILE# 86-3431 PAGE 1

SAMPLE#	Cu PPM	Pb PPM	Zn PPM	Ag PPM	As PPM
1	27	107	172	.7	19
2	9	32	29	.2	9
3	36	27	65	.3	68
4	74	59	205	.3	21
5	24	32	54	.6	4
6	14	17	25	.3	5
7	10	17	14	.3	4
8	22	30	134	.4	10
9	22	24	46	.2	5
10	24	19	52	.1	4
11	9	11	14	.2	2
12	18	25	66	.2	6
13	39	30	75	.1	18
14	5	45	9	.2	2
15	92	107	149	.6	17
16	93	156	303	.6	33
17	74	96	197	.5	9
18	47	29	234	.5	10
19	13	30	36	.2	3
20	21	57	169	.2	30
21	6	37	95	.1	8
22	13	38	242	.1	14
23	16	44	150	.1	8
24	27	47	126	.2	15
25	41	115	145	.3	14
26	27	111	97	.3	23
27	26	40	135	.2	11
28	18	14	72	.1	13
29	9	26	57	.1	10
30	24	67	174	.2	21
31	25	122	178	.3	21
32	18	77	147	.5	10
33	21	40	68	.4	12
34	11	36	57	.2	9
35	23	34	102	.1	16
36	21	48	49	.3	7
STD C	59	39	129	6.8	38

SAMPLE#	Cu PPM	Pb PPM	Zn PPM	Ag PPM	As PPM
37	19	64	56	.4	7
38	31	202	229	.2	31
39	21	81	148	.1	11
40	13	26	49	.1	6
41	19	43	88	.1	14
42	8	25	82	.4	5
43	13	25	94	.2	6
44	17	21	66	.1	15
45	8	87	31	.1	9
46	13	26	29	.5	2
47	27	26	28	.6	2
48	52	11	44	.1	20
49	87	24	79	.1	56
50	25	17	71	.4	20
51	14	15	47	.2	10
52	15	25	24	.3	13
53	71	51	73	.2	30
54	53	39	82	.3	37
55	27	25	55	.3	12
56	79	113	51	1.7	2
57	26	91	209	.6	28
58	15	35	34	.3	17
59	22	14	35	.6	6
60	26	22	92	.3	6
61	12	19	35	.2	3
62	32	24	88	.3	7
63	34	31	49	.4	29
64	14	15	16	.3	5
65	23	19	55	.5	3
66	22	39	60	.2	22
67	14	34	16	.3	8
68	21	41	130	.4	14
69	12	30	38	.3	2
70	12	27	28	.3	11
71	13	22	29	.3	19
72	14	8	10	.2	2
STD C	57	39	130	7.0	38

SAMPLE#	Cu PPM	Pb PPM	Zn PPM	Ag PPM	As PPM
73	46	26	76	.4	56
74	174	41	132	.2	47
75	46	30	44	.1	270
76	17	12	25	.2	46
77	75	63	402	.5	42
78	40	35	156	.3	22
79	33	44	277	.1	8
80	14	19	45	.4	6
81	9	37	23	.4	5
82	17	29	56	.3	21
83	14	16	37	.1	4
84	30	41	89	.2	11
85	28	19	59	.2	2
86	17	19	42	.3	2
87	35	20	68	.2	7
88	17	31	116	.2	8
89	21	34	229	.1	17
90	36	28	182	.2	17
91	24	24	76	.1	15
92	13	44	46	.1	16
93	17	35	134	.5	14
94	20	23	65	.2	17
95	11	7	8	.4	15
96	36	8	28	.3	48
97	76	13	33	.3	65
98	20	14	25	.2	62
99	18	14	12	.4	11
100	19	16	18	.7	10
1026	15	118	374	.9	32
1027	19	93	264	.8	13
1028	22	53	281	.6	14
1029	16	36	151	.7	9
1030	36	80	246	.5	25
1031	19	55	136	.6	16
1032	33	63	242	.8	45
1033	39	93	550	.4	20
STD C	57	39	131	6.9	37

SAMPLE#	Cu PPM	Pb PPM	Zn PPM	Ag PPM	As PPM
1034	12	47	96	.8	13
1035	18	44	194	1.5	12
1036	15	48	138	.7	14
1037	23	244	181	.6	17
1038	34	128	277	.7	12
1039	17	39	581	1.1	5
1040	5	27	131	.5	6
1041	11	37	110	.3	9
1042	20	79	179	.6	11
1043	15	63	167	.3	20
STD C	57	37	130	6.8	38

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PHONE 253-3158 DATA LINE 251-1011

DATE RECEIVED: OCT 28 1986

DATE REPORT MAILED: Nov.4/86....

GEOCHEMICAL ICP ANALYSIS

.500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER. THIS LEACH IS PARTIAL FOR MN.FE.CA.P.CR.MG.BA.TI.B.AL.NA.K.W.SI.ZR.CE.SN.Y.NB AND TA. AU DETECTION LIMIT BY ICP IS 3 PPM.
- SAMPLE TYPE: SOILS -80MESH

ASSAYER: .DEAN TOYE. CERTIFIED B.C. ASSAYER.

TRIUMPH INDUSTRIES PROJECT-NELSON FILE# 86-3407

SAMPLE#	Cu PPM	Pb PPM	Zn PPM	Ag PPM	As PPM
101	45	32	68	.1	79
102	8	64	38	.1	20
103	32	37	73	.9	14
104	14	20	28	.1	12
105	15	30	69	.1	5
106	11	18	81	.1	12
107	23	98	90	.4	34
108	26	180	227	.2	32
109	10	217	137	.3	35
110	15	97	88	.1	13
111	12	39	81	.1	14
112	9	35	35	.4	11
113	21	47	89	.1	37
114	12	42	71	.4	54
115	20	44	81	.3	84
116	15	16	20	.8	14
117	9	19	48	.3	7
118	6	34	61	.1	4
119	14	171	63	.2	6
120	2	56	81	.1	8
121	17	309	56	.6	5
122	27	128	241	.1	18
123	19	239	57	.5	5
124	4	15	38	.1	4
125	10	24	31	.2	7
126	43	21	31	.5	15
127	12	51	23	.2	12
128	25	41	50	.8	9
129	16	13	22	.1	35
130	27	13	24	.1	60
131	44	17	68	.3	69
132	212	1102	767	4.7	60
133	23	44	82	.2	9
134	13	114	197	.1	25
135	26	35	80	.3	39
136	8	24	30	.1	11
STD C	59	40	131	6.9	42

SAMPLE#	Cu PPM	Pb PPM	Zn PPM	Ag PPM	As PPM
137	10	26	31	.2	8
138	16	32	92	.1	13
139	20	27	63	.1	32
140	23	35	65	.1	16
141	13	10	32	.2	12
142	9	14	32	.1	8
143	13	14	33	.1	6
144	18	29	57	.1	15
145	10	6	11	.2	5
146	52	22	61	.1	7
147	4	11	25	.1	4
148	16	22	93	.1	12
149	14	37	162	.1	33
150	13	15	23	.1	5
151	17	13	64	.1	20
152	14	24	53	.1	13
153	13	12	60	.5	20
154	13	20	35	.1	22
155	17	49	565	.1	21
156	26	40	28	.8	53
157	21	22	56	.4	14
158	9	15	64	.1	11
159	12	23	64	.1	9
160	5	27	19	.2	16
161	39	64	93	.2	27
162	4	3	18	.1	8
163	16	18	28	.1	12
164	16	53	72	.2	14
165	18	53	140	.2	26
166	11	44	132	.1	18
167	6	14	34	.1	11
168	12	11	31	.1	5
169	17	9	23	.3	5
170	24	31	60	.1	18
171	9	31	48	.1	12
172	29	73	120	1.1	34
STD C	59	41	131	6.9	43

SAMPLE#	Cu PPM	Pb PPM	Zn PPM	Ag PPM	As PPM
173	117	103	108	.4	39
174	12	31	43	.2	9
175	13	34	52	.2	10
176	8	32	36	.2	35
177	11	21	55	.1	10
178	19	26	57	.4	9
179	19	21	35	.2	12
180	16	38	40	.4	5
181	24	31	156	.1	22
182	18	73	133	.1	17
183	22	11	44	.2	5
184	26	15	47	.3	12
185	2	50	21	.1	7
186	11	23	36	.1	9
187	18	20	46	.1	6
188	14	24	41	.2	7
189	16	25	65	.1	10
190	10	19	64	.1	8
191	13	23	41	.1	6
192	13	36	78	.3	5
193	7	21	65	.1	3
194	22	56	71	.1	3
195	11	19	35	.4	4
196	5	20	39	.3	5
197	7	13	14	.2	3
198	12	77	39	.2	7
199	13	41	50	.1	6
200	15	27	80	.2	11
201	12	17	41	.1	6
202	12	21	32	.1	9
203	16	27	35	.2	6
204	29	25	67	.1	9
205	19	20	42	.1	7
206	7	26	31	.2	10
207	32	51	88	.1	27
208	15	27	88	.1	12
STD C	58	38	130	6.9	37

SAMPLE#	Cu PPM	Pb PPM	Zn PPM	Ag PPM	As PPM
209	11	24	30	.4	5
210	14	18	23	.1	10
211	17	37	167	.2	14
212	18	20	49	.2	11
213	10	66	75	.1	22
214	15	38	86	.5	14
215	23	88	187	.3	34
216	12	30	104	.1	10
216 <A>	11	18	55	.1	12
217	10	14	45	.1	10
218	24	28	123	.2	13
219	19	33	54	.2	18
220	12	14	14	.2	2
221	15	11	33	.2	8
222	19	22	52	.1	8
223	16	25	69	.1	3
224	17	61	41	.1	8
225	29	42	198	.1	13
226	12	28	177	.1	10
227	15	27	53	.3	9
228	9	20	46	.2	5
229	15	36	62	.1	16
230	20	23	147	.2	19
231	20	24	45	.1	17
232	14	20	68	.1	11
233	112	221	377	1.4	10
234	26	33	72	.3	10
235	12	23	64	.1	12
236	12	20	45	.1	9
237	12	12	47	.1	8
238	11	26	48	.1	11
239	12	38	63	.1	10
240	20	25	100	.1	13
241	17	25	80	.1	11
242	15	19	32	.1	7
243	33	24	98	.1	12
244	16	17	38	.2	7
STD C	57	38	128	6.8	42

SAMPLE#	Cu PPM	Pb PPM	Zn PPM	Ag PPM	As PPM
245	32	32	79	.2	11
246	20	20	54	.2	7
247	16	14	41	.1	3
248	14	94	48	.5	9
249	15	26	53	.7	8
250	15	28	63	.2	5
251	19	37	137	.1	7
252	14	39	159	.6	12
253	37	102	103	1.2	24
254	27	105	209	.2	17
255	31	164	331	.5	32
256	27	85	164	.1	11
257	20	32	71	.1	11
258	20	33	67	.1	10
259	19	30	54	.1	8
260	27	39	72	.1	12
261	16	32	49	.1	11
262	21	46	90	.1	7
263	22	54	93	.3	9
264	22	54	104	.2	10
265	25	81	84	.1	12
266	40	78	76	.3	11
267	39	36	69	.2	10
268	97	31	76	.2	6
269	87	27	68	.1	6
270	92	31	67	.2	6
271	15	36	86	.1	9
272	78	20	64	.1	4
273	49	20	58	.1	4
274	24	16	81	.1	5
275	16	26	75	.2	7
276	48	34	83	.2	6
277	58	40	104	.1	9
278	90	25	84	.2	5
279	106	34	76	.1	3
280	76	33	86	.2	4
STD C	58	43	134	7.1	38

SAMPLE#	Cu PPM	Pb PPM	Zn PPM	Ag PPM	As PPM
281	66	33	89	.1	6
282	37	39.	123	.3	7
283	55	26	97	.1	5
284	14	17	63	.1	3
285	16	38	126	.3	11
286	22	24	71	.6	3
287	17	29	57	.3	2
288	19	35	129	.3	5
289	26	34	73	.1	6
290	25	37	174	.2	7
291	22	47	70	.3	10
292	27	69	73	.2	11
293	78	129	146	1.1	17
294	30	43	111	.3	14
295	25	40	116	.2	10
296	23	35	136	.1	9
297	24	44	69	.4	9
298	29	270	169	.7	16
299	27	54	165	.3	12
300	28	67	177	.2	10
301	26	109	194	.3	10
302	25	112	167	.2	13
303	27	48	124	.1	8
304	19	84	276	.6	8
305	32	624	387	4.0	15
306	25	130	249	.4	10
307	27	107	125	.2	15
308	29	77	203	.3	15
309	20	60	122	.1	9
310	16	34	87	.2	14
311	15	20	83	.1	13
312	28	48	197	.1	13
313	22	35	104	.2	6
314	24	50	125	.1	10
315	22	25	107	.1	4
316	10	7	81	.1	5
STD C	58	39	128	6.8	39

SAMPLE#	Cu PPM	Pb PPM	Zn PPM	Ag PPM	As PPM
317	13	12	82	.1	3
318	22	90	500	.6	18
319	26	583	1233	1.5	14
320	22	1225	1271	1.9	11
321	79	92	110	.2	22
322	20	24	62	.3	20
323	29	35	112	.3	14
324	23	44	103	.1	11
325	24	42	101	.3	11
326	23	56	128	.3	12
327	31	70	194	.3	12
328	25	41	108	.2	13
329	22	25	77	.1	10
330	23	35	99	.1	12
331	24	17	69	.1	10
332	19	21	83	.1	8
333	21	29	112	.1	12
334	21	61	73	.1	11
335	19	25	74	.1	10
336	22	55	142	.1	12
337	19	32	99	.2	10
338	13	59	133	.3	6
339	30	84	146	.3	13
340	32	17	55	.1	12
341	14	15	49	.2	10
342	19	28	63	.1	13
343	13	42	54	.2	10
344	19	26	111	.1	11
345	20	72	154	.1	15
346	35	93	214	.5	27
347	36	43	150	.2	13
348	25	42	121	.4	28
349	31	34	146	.3	18
350	18	29	126	.3	17
351	13	16	118	.4	9
352	21	28	104	.4	10
STD C	59	38	130	6.8	38

SAMPLE#	Cu PPM	Pb PPM	Zn PPM	Ag PPM	As PPM
353	16	26	108	.2	11
354	7	18	52	.3	8
355	12	24	111	.2	12
356	23	63	121	.5	15
357	28	93	87	.3	20
358	13	17	38	.1	22
359	13	18	40	.2	14
360	133	111	248	.1	20
361	34	207	347	.2	25
362	30	63	158	.4	21
363	13	13	26	.4	9
364	24	26	111	.2	16
365	31	33	66	.2	18
366	21	31	139	.3	12
367	43	48	127	.6	19
368	29	30	130	.1	17
369	17	23	102	.5	10
370	18	27	122	.4	13
371	15	26	123	.4	13
372	18	23	101	.3	13
373	16	17	78	.4	11
374	17	23	121	.3	9
375	19	40	127	.4	14
376	47	36	114	.5	18
377	14	27	101	.6	6
378	10	27	67	.2	12
379	16	27	162	.4	15
380	12	33	110	.3	10
381	28	141	316	.4	25
382	20	95	290	.8	19
383	14	38	188	.7	12
384	24	34	110	.4	10
385	39	22	61	.4	15
386	24	18	34	.3	9
387	21	19	56	.2	12
388	16	14	29	.2	14
STD C	59	37	132	7.0	42

SAMPLE#	Cu PPM	Pb PPM	Zn PPM	Ag PPM	As PPM
389	42	57	193	.2	26
390	59	66	63	.2	36
391	16	15	79	.2	11
392	12	17	26	.1	11
393	20	49	30	.2	44
394	38	36	58	.2	48
395	20	13	43	.2	9
396	24	11	90	.3	5
397	13	37	124	.5	6
398	16	44	125	.2	9
399	10	34	62	.3	3
400	10	29	69	.5	2
401	12	15	72	.1	8
402	14	27	204	.3	7
403	8	37	184	.2	17
404	22	75	258	.4	22
405	14	50	60	.3	5
406	21	68	247	.9	15
407	25	75	138	.1	15
408	18	50	109	.7	11
409	15	45	83	.4	11
410	14	25	44	.1	11
411	24	38	96	.2	16
412	18	27	97	.1	10
413	15	18	78	.2	11
414	16	43	131	.5	14
415	25	31	123	.3	18
416	9	7	39	.2	8
417	19	13	60	.2	8
418	35	23	44	.6	22
419	62	206	47	.6	17
420	65	89	141	.2	34
421	41	66	313	.4	10
422	48	335	1453	1.1	19
423	28	72	181	.5	52
424	30	77	222	.5	37
STD C	55	43	131	6.9	39

SAMPLE#	Cu PPM	Pb PPM	Zn PPM	Ag PPM	As PPM
425	27	74	168	.5	76
426	33	149	288	.9	59
427	21	220	625	.8	16
428	13	55	214	.1	10
429	11	52	226	.1	6
430	27	80	272	.5	15
431	24	77	209	.4	97
432	19	51	194	.3	33
433	26	79	363	.3	13
434	26	79	312	1.0	46
435	25	145	595	.9	29
436	19	40	172	.2	11
437	32	102	338	.9	17
438	26	89	279	.3	84
439	24	87	241	.5	27
440	32	74	365	.1	17
441	20	57	309	.4	14
442	29	72	152	.3	22
443	24	121	343	.3	16
444	26	58	168	.6	8
445	24	33	174	.3	13
446	21	53	108	.2	9
447	77	78	278	.6	10
448	38	55	185	.4	18
449	64	71	181	.2	29
450	109	133	168	.8	36
451	27	35	72	1.5	15
452	14	33	40	.4	8
453	15	23	42	.5	10
454	13	22	33	.3	5
455	25	25	59	.1	16
456	16	32	32	.3	9
457	11	32	21	.2	4
458	23	39	48	.3	9
459	23	35	40	.1	15
460	14	71	107	.2	7
STD C	58	38	131	6.9	40

SAMPLE#	Cu PPM	Pb PPM	Zn PPM	Ag PPM	As PPM
461	14	46	132	.2	8
462	19	104	146	.2	5
463	15	129	67	.3	5
464	19	17	28	.4	10
465	13	18	28	.1	12
466	15	34	53	.3	11
467	11	17	25	.2	12
468	11	15	23	.6	8
469	16	14	38	.5	19
470	43	68	79	1.0	30
471	17	101	73	.5	15
472	80	53	204	.2	25
473	71	154	573	.3	18
474	62	141	862	.4	9
475	62	58	382	.4	7
476	60	98	633	.3	11
477	23	488	3099	1.2	12
478	27	124	813	.8	14
479	24	71	577	.3	13
480	22	85	327	.4	24
481	26	38	213	.2	19
482	25	28	194	.6	11
483	32	19	62	.3	25
484	11	22	62	.5	11
485	13	18	39	.2	20
486	36	44	44	.6	9
487	33	40	54	.6	23
488	9	29	19	.6	12
489	14	14	24	1.0	10
490	16	15	25	.6	17
491	24	14	35	.7	14
492	20	10	23	2.2	14
493	73	24	35	.4	26
494	23	11	41	.6	14
495	26	16	40	.2	13
496	12	26	35	.2	5
STD C	58	37	128	6.9	42

SAMPLE#	Cu PPM	Pb PPM	Zn PPM	Ag PPM	As PPM
497	8	27	68	.5	6
498	14	22	44	.2	6
499	14	27	104	.4	6
500	20	20	29	.6	25
501	17	21	27	.1	37
502	15	35	36	.5	21
503	20	23	33	.7	20
504	17	50	37	.1	6
505	16	23	73	.3	6
506	25	37	128	.4	8
507	23	232	115	.3	33
508	4	34	83	.1	25
509	10	298	336	.4	18
510	10	95	79	.2	8
511	23	210	150	.3	20
512	7	60	51	.3	13
513	7	18	38	.3	13
514	5	76	46	.2	18
515	20	48	66	.4	36
516	11	32	35	.2	20
517	10	19	11	.5	3
518	9	64	22	.3	10
519	11	26	19	.3	14
520	47	90	193	.3	32
521	16	38	51	.7	25
522	25	36	72	.3	30
523	10	16	22	.4	10
524	20	97	133	.3	41
525	23	56	78	.2	13
526	11	93	206	.5	19
527	19	87	158	.1	21
528	40	96	156	.3	8
529	17	151	84	.7	8
530	21	110	64	.4	4
531	89	97	33	1.6	5
532	5	52	42	.4	9
STD C	59	39	131	6.9	37

SAMPLE#	Cu PPM	Pb PPM	Zn PPM	Ag PPM	As PPM
533	7	31	50	.1	20
534	8	17	17	.4	6
535	18	32	35	.6	12
536	12	17	18	.2	25
537	54	384	603	.9	60
538	18	99	177	.4	24
539	24	98	205	.5	24
540	22	114	270	.2	25
541	13	115	59	1.3	9
542	30	1941	600	3.4	80
543	21	782	924	2.0	44
544	25	267	470	1.4	59
545	23	80	759	.2	23
546	18	167	642	.5	22
547	24	88	573	.2	17
548	15	11	67	.5	2
549	18	70	205	.7	14
550	16	46	111	1.6	5
551	20	12	56	.5	7
552	18	18	100	.2	9
553	14	43	84	.4	17
554	38	205	757	.5	54
555	37	49	213	.1	32
556	63	43	153	.5	44
557	22	32	192	.4	22
558	40	25	124	.1	25
559	56	22	91	.5	46
560	10	7	26	.6	9
561	24	10	64	.2	14
562	17	18	34	.5	11
563	64	71	100	.3	45
564	31	14	70	.2	18
565	35	28	35	.3	9
566	16	35	39	.1	12
567	36	91	73	.3	10
568	18	14	47	.2	11
STD C	60	38	132	7.0	41

SAMPLE#	Cu PPM	Pb PPM	Zn PPM	Ag PPM	As PPM
569	27	29	71	.1	11
570	25	16	42	.3	14
571	14	21	38	.2	12
572	32	18	80	.1	22
573	27	22	75	.2	12
574	22	20	58	.3	10
575	30	26	38	.4	8
576	68	24	71	.8	27
577	25	44	226	.1	21
578	21	29	113	.2	19
579	22	38	164	1.0	14
580	13	50	112	.5	13
581	15	63	91	1.1	10
582	19	22	67	.6	4
583	30	224	655	.7	15
584	20	47	204	.4	5
585	18	60	297	.4	16
586	18	78	354	.5	12
587	25	149	588	.9	32
588	16	100	253	.4	17
589	24	189	362	.3	18
590	44	83	847	.9	41
591	12	32	174	.3	9
592	9	18	40	.1	9
593	16	43	97	.1	3
594	27	37	134	.3	9
595	23	31	95	.2	7
596	27	31	126	.2	10
597	28	33	91	.2	10
598	6	404	260	.4	6
599	69	1443	3126	5.0	325
600	31	294	1107	.7	22
601	25	159	641	.4	10
602	33	107	312	.4	21
603	18	65	368	.4	19
604	27	174	543	3.4	19
STD C	57	38	133	7.1	38

SAMPLE#	Cu PPM	Pb PPM	Zn PPM	Ag PPM	As PPM
605	12	31	127	.7	8
606	18	35	149	.4	21
607	18	43	163	.3	18
608	16	30	85	.4	16
609	14	34	64	.6	19
610	16	42	84	.4	13
611	18	28	102	.2	14
612	18	36	98	.4	19
613	13	18	46	.7	17
614	12	24	28	.5	9
615	19	69	163	.7	25
616	136	53	143	.6	26
617	24	23	72	.4	15
618	26	51	69	.4	14
619	167	33	104	.1	59
620	29	12	80	.1	17
621	16	13	60	.1	14
622	18	26	26	.2	6
623	28	14	67	.3	32
624	13	19	41	.3	17
625	17	12	55	.2	12
626	23	13	74	.3	23
627	18	14	67	.3	23
628	20	10	49	.2	37
629	18	6	41	.2	17
630	11	15	37	.1	7
631	44	127	140	.3	22
632	52	56	64	.7	11
633	20	24	42	.6	10
634	48	90	62	1.5	16
635	10	16	48	.4	18
636	2	15	27	.2	7
637	17	24	60	.4	21
638	16	35	54	.2	16
639	24	25	13	.1	17
640	13	24	45	.2	34
STD C	59	43	131	6.9	43

SAMPLE#	Cu PPM	Pb PPM	Zn PPM	Ag PPM	As PPM
641	27	31	77	.2	31
642	15	31	49	.6	12
643	21	39	140	.3	18
644	22	91	274	.3	14
645	19	69	312	.1	25
646	15	46	175	.4	15
647	20	52	287	.3	13
648	17	51	235	.4	13
649	36	149	685	.8	20
650	11	92	213	.1	8
651	20	55	170	.6	12
652	25	111	317	.4	22
653	26	115	610	.8	20
654	36	129	417	.9	29
655	76	132	529	.8	38
656	46	141	350	.3	28
657	39	106	358	.2	32
658	29	68	413	.5	11
659	28	89	385	.5	25
660	26	100	284	.1	17
661	14	60	149	.5	8
662	18	316	619	.6	13
663	21	332	636	1.4	21
664	14	80	292	.5	15
665	15	26	102	.9	20
666	14	24	97	.5	6
667	17	30	88	.1	13
668	26	37	59	.5	15
669	30	23	83	.2	84
670	15	19	46	.4	85
671	22	22	63	.4	56
672	29	48	70	.7	19
673	19	29	49	.8	16
674	29	95	95	.5	12
675	22	34	33	.5	4
676	32	5	79	.4	11
STD C	57	39	129	6.9	41

SAMPLE#	Cu PPM	Pb PPM	Zn PPM	Ag PPM	As PPM
677	16	37	40	.4	11
678	25	25	44	.3	12
679	35	21	56	.3	23
680	160	28	86	.6	112
681	17	15	51	.4	12
682	45	23	60	.2	13
683	19	22	58	.2	13
684	24	27	43	.3	15
685	28	31	58	.1	16
686	21	16	68	.1	12
687	32	21	67	.1	15
688	18	18	51	.5	9
689	127	38	40	.6	6
690	25	39	83	.4	12
691	31	18	94	.1	13
692	11	20	38	.1	27
693	14	17	74	.1	25
694	10	23	66	.2	44
695	26	27	52	.2	23
696	18	26	59	.1	26
697	14	47	48	.1	6
698	7	12	66	.1	4
699	20	13	58	.1	5
700	18	14	89	.1	5
701	14	15	99	.2	11
702	19	137	233	.7	15
703	16	56	186	.8	20
704	25	80	477	.2	12
705	37	67	318	.1	21
706	49	96	506	.3	24
707	39	122	308	.1	31
708	48	106	345	.3	26
709	54	194	659	.1	38
710	44	190	496	.2	44
711	18	59	101	.2	27
712	57	88	260	.2	25
STD C	56	38	131	6.7	37

SAMPLE#	Cu PPM	Pb PPM	Zn PPM	Ag PPM	As PPM
713	50	159	724	1.6	29
714	35	50	144	.4	23
715	40	98	309	.1	34
716	38	82	330	.8	17
717	48	132	776	1.1	18
718	32	185	500	.5	34
719	20	38	141	.3	7
720	14	18	87	.3	5
721	15	17	98	.2	2
722	13	19	103	.3	2
723	20	18	62	.2	4
724	62	100	75	.8	15
725	41	50	61	.3	45
726	32	25	39	.3	26
727	19	24	31	.3	5
728	11	23	51	.5	10
729	29	24	80	.2	14
730	50	24	60	.4	7
731	27	15	48	.5	12
732	38	22	55	.8	15
733	30	26	69	.1	20
734	46	26	64	.2	18
735	26	26	66	.2	17
736	51	40	61	.4	14
737	69	26	80	.4	26
738	27	31	73	.3	10
739	18	16	44	.2	6
740	17	18	62	.3	6
741	40	19	63	.1	9
742	31	35	80	.2	10
743	36	13	74	.1	6
744	62	24	64	.3	8
745	48	19	69	.3	12
746	30	11	64	.3	15
747	17	10	45	.2	11
748	21	9	41	.4	11
STD C	58	39	129	6.8	40

SAMPLE#	Cu PPM	Pb PPM	Zn PPM	Ag PPM	As PPM
749	20	16	48	.4	5
750	45	18	87	.1	10
751	44	21	39	.9	8
752	10	21	38	.2	7
753	14	27	100	.6	22
754	16	18	100	.1	18
755	16	30	117	.6	19
756	48	82	130	1.2	8
757	8	25	78	.2	8
758	17	136	829	.3	13
759	43	181	1433	.5	31
760	15	57	255	.2	17
761	11	34	73	.5	8
762	31	95	500	1.3	20
763	14	26	73	5.6	10
764	14	23	74	.4	9
765	13	21	110	.4	10
766	16	37	114	.7	16
767	12	19	44	.7	10
768	16	23	68	.6	13
769	21	80	282	.4	10
770	24	45	245	.6	15
771	48	112	427	.5	20
772	20	51	197	.2	12
773	28	103	436	.5	12
774	19	197	942	.6	12
775	20	45	306	.1	13
776	18	54	216	.3	12
777	22	63	313	.4	15
778	22	58	203	.8	13
779	17	30	80	.5	4
780	21	92	375	.5	19
781	25	70	207	.6	10
782	40	52	122	1.0	7
783	11	24	30	.3	2
784	14	28	46	.5	6
STD C	58	36	129	6.9	40

SAMPLE#	Cu PPM	Pb PPM	Zn PPM	Ag PPM	As PPM
785	30	36	97	.8	12
786	26	19	70	.1	7
787	31	19	108	.4	12
788	83	21	70	.7	6
789	30	13	64	.1	5
790	36	16	72	.2	7
791	22	21	52	.3	9
792	28	27	69	.2	5
793	32	14	90	.2	7
794	21	24	65	.2	7
795	22	24	57	.3	7
796	25	18	91	.1	10
797	30	10	61	.1	17
798	18	49	122	.4	13
799	26	113	244	.6	9
800	44	206	390	.5	17
801	17	56	251	.1	5
802	33	155	812	.5	10
803	25	180	901	.4	11
804	40	87	516	.1	19
805	16	71	295	.4	10
806	20	83	337	.9	14
807	51	219	901	.7	19
808	30	150	802	.4	18
809	32	30	147	.2	25
810	68	189	1349	1.5	24
811	126	452	1855	1.5	31
812	127	858	2435	1.1	23
813	42	182	1028	.5	19
814	17	97	444	.2	12
815	45	97	530	.3	13
816	21	132	631	.6	11
817	17	54	388	.1	8
818	30	63	463	.4	16
819	32	104	261	.6	44
820	19	81	222	.4	17
STD C	59	39	130	7.0	38

SAMPLE#	Cu PPM	Pb PPM	Zn PPM	Ag PPM	As PPM
821	14	44	132	.2	13
822	40	119	410	.3	21
823	49	47	158	.1	14
824	30	61	171	.5	11
825	18	85	178	.4	14
826	16	54	89	.2	26
827	29	19	39	.3	23
828	26	26	57	.3	26
829	13	18	43	.2	10
830	14	10	30	.1	12
831	14	22	37	.4	8
832	49	13	33	.4	20
833	20	22	71	.2	12
834	11	16	40	.3	8
835	14	28	76	.7	14
836	13	28	62	.2	9
837	16	30	51	.4	9
838	19	41	101	.2	13
839	23	51	108	.2	14
840	19	39	69	.2	12
841	21	33	87	.2	8
842	18	46	61	.2	19
843	22	29	64	.3	14
844	12	27	43	.2	15
845	35	23	63	.3	11
846	26	24	51	.1	20
847	17	21	37	.1	10
848	44	74	175	.3	8
849	29	24	63	.1	35
850	21	38	97	.2	20
851	31	71	101	.3	15
852	13	25	28	.2	4
853	13	19	35	.2	8
854	14	26	37	.3	13
855	20	27	68	.1	14
856	11	18	34	.3	3
STD C	58	37	130	6.8	38

SAMPLE#	Cu PPM	Pb PPM	Zn PPM	Ag PPM	As PPM
857	13	13	28	.6	10
858	17	6	30	.7	8
859	16	20	40	.9	14
860	8	20	34	.2	7
861	18	17	54	.2	15
862	16	15	78	.1	20
863	17	25	62	.2	23
864	12	32	97	.1	14
865	28	98	284	.6	14
866	33	233	482	1.0	22
867	26	232	489	.6	18
868	51	298	1665	1.5	26
869	62	219	1941	1.1	21
870	23	160	415	.6	10
871	20	43	189	.4	10
872	20	46	160	.5	10
873	24	63	286	.5	13
874	26	49	302	.1	10
875	20	43	309	.2	14
876	17	38	269	.6	13
877	16	51	295	.1	17
878	17	50	229	.3	12
879	21	37	147	.2	14
880	18	46	104	.3	10
881	24	61	208	1.2	12
882	27	108	181	.3	15
883	10	30	73	.4	10
884	14	37	196	.4	7
885	10	56	302	.6	17
886	22	62	332	.4	24
887	12	69	306	.6	46
888	12	38	261	.1	6
889	25	25	140	.1	2
890	6	3	87	.1	2
891	22	46	153	.1	14
892	35	52	198	.2	17
STD C	59	37	133	6.9	39

SAMPLE#	Cu PPM	Pb PPM	Zn PPM	Ag PPM	As PPM
893	23	60	199	.6	12
894	31	59	302	.1	19
895	17	54	97	.2	6
896	28	145	243	.5	10
897	25	45	296	.2	9
898	27	38	206	.6	13
899	19	61	265	.3	12
900	20	45	228	.2	6
901	29	57	265	.2	14
902	31	41	241	.1	8
903	14	44	143	.2	9
904	13	23	61	1.5	7
905	16	18	37	.4	9
906	15	14	31	.9	10
907	15	11	23	.1	8
908	16	9	11	1.3	5
909	14	13	17	.2	7
910	24	22	113	.1	19
911	14	16	23	.3	5
912	13	22	33	.3	11
913	12	91	205	1.7	11
914	14	132	204	.2	15
915	34	42	78	.3	5
916	11	13	42	.3	3
917	7	9	35	.6	5
918	9	15	49	.7	2
919	18	22	167	.1	4
920	16	27	142	.2	6
921	13	22	59	.2	9
922	13	24	59	.3	13
923	13	25	132	.2	7
924	19	34	242	.2	3
925	16	23	78	.2	4
926	19	43	225	.1	8
927	10	17	68	.3	5
928	13	18	48	.4	8
STD C	59	38	128	7.1	37

SAMPLE#	Cu PPM	Pb PPM	Zn PPM	Ag PPM	As PPM
929	6	13	34	.1	2
930	10	9	31	.1	3
931	18	38	133	.1	5
932	13	23	107	.2	5
933	10	15	130	.2	2
934	19	21	394	.1	2
935	16	28	155	.2	3
936	14	29	68	.1	4
937	16	24	79	.1	2
938	17	62	91	.1	3
939	11	10	69	.1	2
940	15	80	51	.9	2
941	8	36	38	.2	3
942	18	61	29	.4	35
943	18	10	12	.5	3
944	22	13	20	1.3	7
945	39	25	117	.5	315
946	22	19	19	7.4	8
947	13	12	20	.5	7
948	7	13	7	.6	2
949	11	12	22	.9	10
950	32	36	83	.3	20
951	17	67	153	.4	10
952	23	65	136	.2	12
953	20	46	168	.5	10
954	15	46	246	.1	10
955	29	107	464	.4	20
956	27	102	134	.5	24
957	27	55	116	.1	29
958	32	96	127	.4	26
959	23	31	98	.4	21
960	27	23	56	.7	24
961	47	164	184	.9	27
962	15	16	32	.6	4
963	21	27	43	.4	6
964	46	99	70	.7	25
STD C	55	42	129	6.9	37

SAMPLE#	Cu PPM	Pb PPM	Zn PPM	Ag PPM	As PPM
965	12	23	49	.1	10
966	15	24	55	.6	8
967	21	13	68	.5	5
968	8	21	42	.5	4
969	20	24	117	1.1	7
970	24	21	49	.5	4
971	13	17	86	.2	10
972	11	23	91	.8	2
973	7	21	58	.4	4
974	10	26	31	.7	4
975	8	17	46	.4	3
976	13	21	67	.7	5
977	10	19	63	.2	6
978	8	23	26	.1	6
979	14	19	53	.4	4
980	6	23	38	.3	4
981	14	30	44	.3	6
982	7	13	21	.1	3
983	10	10	34	.4	4
984	19	24	37	.4	8
985	18	26	52	.2	7
986	13	28	61	.4	9
987	10	33	41	.2	6
988	26	35	68	.3	11
989	13	29	54	.2	12
990	10	30	55	.6	7
991	8	34	68	.6	3
992	8	27	26	.4	5
993	7	28	25	.2	5
994	14	61	40	.5	10
995	8	20	22	.2	7
996	11	28	28	.3	8
997	7	11	14	.2	6
998	7	54	43	.5	9
999	10	62	39	.6	7
1000	20	39	36	.3	7
STD C	58	42	129	7.0	38

SAMPLE#	Cu PPM	Pb PPM	Zn PPM	Ag PPM	As PPM
1001	7	14	25	.1	4
1002	18	36	88	.1	6
1003	19	53	129	.2	7
1004	21	27	54	.1	12
1005	10	11	25	.1	10
1006	24	53	71	.1	13
1007	34	102	124	1.0	16
1008	48	40	62	.1	74
1009	15	26	53	.2	15
1010	42	48	58	.2	30
1011	25	34	35	.5	18
1012	29	115	90	.2	34
1013	28	93	93	.3	30
1014	24	62	273	.1	14
1015	14	31	157	.5	10
1016	31	76	304	.3	20
1017	38	88	339	.5	19
1018	28	84	227	.2	17
1019	26	52	229	.1	17
1020	24	64	182	.5	21
1021	35	67	270	.6	15
1022	34	117	480	.6	52
1023	17	121	165	.2	14
1024	20	45	83	.3	13
1025	30	35	399	.4	10
1045	19	35	90	.8	13
1046	15	39	168	1.6	15
1047	18	23	118	1.3	12
1048	10	29	109	1.8	7
1049	20	61	106	.6	17
1050	14	43	102	.6	13
1051	13	73	207	.8	12
STD C	59	38	131	6.9	41

SAMPLE#	Cu PPM	Pb PPM	Zn PPM	Ag PPM	As PPM
1052	16	40	224	.7	10
1053	9	32	120	.2	11
1053 <A>	17	56	579	.5	80
1054	14	48	169	.8	14
1055	16	38	130	.6	11
1056	24	35	99	.7	26
1057	27	53	151	.8	19
1058	23	34	115	.7	17
1059	17	45	78	.3	16
1060	32	46	84	.4	26
1061	24	48	82	.2	33
1062	12	16	60	.7	12
1063	39	33	123	1.1	14
1064	12	12	45	.8	9
1065	8	18	53	.5	11
1066	6	17	169	.4	12
1067	7	32	111	.3	7
1068	15	36	179	.5	3
1069	14	36	95	.2	11
1070	16	46	138	.7	7
1071	23	40	66	.5	8
1072	23	17	38	.4	19
1073	31	64	123	.5	21
1074	9	28	48	.4	8
1075	17	46	84	.5	14
1076	12	31	117	.7	12
1077	12	39	108	.5	9
1078	17	85	409	2.8	13
1079	8	106	123	.5	7
1080	14	18	50	.2	4
1081	7	18	74	.2	4
1082	18	28	68	.2	12
1083	31	110	346	.6	31
1084	11	21	152	.9	11
1085	9	18	176	.9	14
1086	27	36	69	.1	7
1087	11	11	98	.7	7
STD C	59	40	133	6.9	38

SAMPLE#	Cu PPM	Pb PPM	Zn PPM	Ag PPM	As PPM
1088	18	22	63	.6	18
1089	16	19	85	1.2	10
1090	19	34	96	1.3	12
1091	25	22	85	.7	20
1092	21	30	91	.7	13
1093	28	30	87	.4	15
1094	11	21	42	.5	7
1095	9	17	46	1.0	7
1096	34	29	48	.7	24
1097	15	22	47	.5	13
1098	24	33	55	.6	18
1099	18	29	69	1.1	12
1100	15	26	65	1.1	7
1101	14	23	42	.4	11
1102	15	21	86	1.3	12
1103	12	70	50	.3	13
1104	4	13	93	.3	4
1105	16	107	592	.8	75
1106	15	99	119	1.9	14
1107	28	87	137	1.2	9
1108	11	42	100	.9	9
1109	13	35	101	1.5	11
1110	18	58	137	1.1	15
1111	19	42	110	.9	12
1112	16	128	185	.9	21
1113	19	719	479	2.5	17
1114	18	45	125	1.6	19
1115	19	30	85	.9	13
1116	18	28	82	1.0	13
1117	20	32	73	1.0	13
1118	34	45	84	.5	20
1119	27	45	99	1.0	18
1120	29	64	164	.7	55
1121	21	50	174	.5	52
1122	18	41	78	.3	27
1123	17	54	82	.6	11
STD C	58	38	131	6.9	38

SAMPLE#	Cu PPM	Pb PPM	Zn PPM	Ag PPM	As PPM
1124	12	49	32	.4	9
1125	18	80	43	.5	17
1126	26	41	71	.1	17
1127 <S>	14	30	127	.1	7
1128	30	16	37	.2	14
1129	61	23	70	.1	31
1130	26	26	47	.4	11
1131	21	15	86	.3	19
1132	22	14	61	.2	13
1133	7	25	31	.3	13
1134	21	24	66	.4	14
1135	49	33	115	.1	13
1136	8	27	40	.5	7
1137	12	22	42	.3	8
1138	5	17	17	.1	4
1139	15	29	69	.3	8
1140	14	32	67	.1	8
1141	22	37	84	.1	10
1142	18	39	139	.1	6
1143	19	39	274	.4	9
1144	26	156	418	.2	17
1145	14	248	261	.5	34
1146	37	389	495	.2	50
1147	29	421	552	.1	63
1148	10	82	76	.5	40
1149	23	131	1120	.1	60
1150	57	117	668	.4	66
1151	17	58	99	.2	25
1152	24	69	97	1.4	18
1153 <S>	28	95	279	.1	20
1500	23	56	276	.1	10
1501	4	44	86	.1	7
1502	6	26	73	.1	13
1503	8	26	45	.2	2
STD C	59	40	131	6.9	41

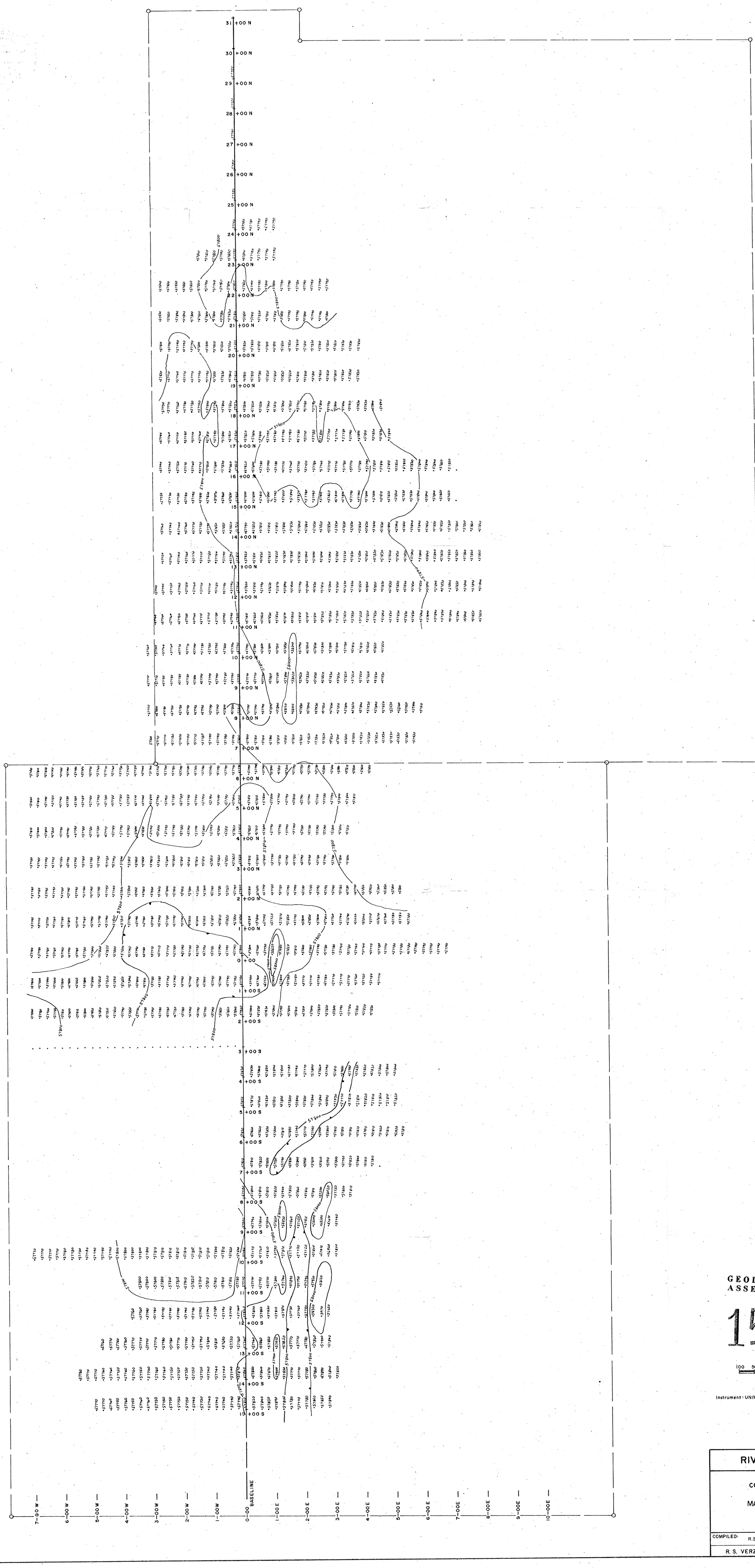
SAMPLE#	Cu PPM	Pb PPM	Zn PPM	Ag PPM	As PPM
1504	20	17	92	.2	2
1505	10	25	65	.2	2
1506	10	12	57	.1	3
1507	9	19	47	.3	4
1508	10	26	48	.2	5
1509	19	25	37	.1	19
1510	17	20	33	.3	8
1511	10	13	31	.1	5
1512	5	13	42	.2	5
1513	6	11	33	.2	3
1514	12	17	37	.4	2
1515	7	14	35	.3	4
1516	9	18	36	.4	6
1517	8	11	28	.3	3
1518	9	19	25	.2	2
1519	11	28	28	.3	5
1520	9	13	20	.1	4
1521	12	27	65	.3	5
1522	35	63	60	.4	2
1523	30	23	104	.7	3
1524	7	29	77	.2	6
1525	30	35	183	.3	3
1526	50	45	155	.8	4
1527	44	31	94	1.6	6
1528	18	27	78	.6	14
1529	18	32	155	.6	7
1530	29	35	48	.9	4
1531	24	35	74	.8	9
1532	17	19	51	.5	13
1533	31	20	92	.7	13
1534	17	16	61	1.1	7
1535	15	14	42	.7	8
1536	48	34	96	.3	69
1537	18	133	87	1.0	29
1538	39	138	96	.8	13
1539	4	23	16	.6	8
STD C	58	36	134	7.1	42

SAMPLE#	Cu PPM	Pb PPM	Zn PPM	Ag PPM	As PPM
1540	8	7	13	.2	3
1541	16	10	52	.3	10
1542	12	26	79	.8	3
1543	23	63	188	.7	11
1544	13	53	203	.3	37
1545	17	27	150	1.3	10
1546	16	28	92	2.3	12
1547	15	25	166	1.2	10
1548	15	48	166	2.0	13
1549	14	56	110	.8	11
1550	11	35	181	1.2	8
1551	12	58	141	1.4	13
1552	18	26	128	.5	16
1553	15	59	120	.6	13
1554	16	35	108	.4	17
1555	19	21	128	.6	18
1556	23	39	163	.9	15
1557	25	39	95	.5	15
1558	16	37	107	.6	15
1559	16	64	153	.3	14
1560	45	95	177	.6	27
1561	10	108	175	.5	11
1562	27	130	126	.4	23
1563	22	181	154	.3	23
1564	10	84	135	.4	7
1565	10	32	121	.8	3
1566	5	53	80	.6	5
1567	19	43	137	.3	15
1568	8	30	110	.3	6
1569	16	53	99	.3	14
1570	20	80	75	.6	10
1571	29	72	106	.7	15
1572	13	55	100	.4	8
1573	12	64	65	.7	12
1574	13	80	63	.4	10
1575	17	86	88	.5	13
STD C	56	41	132	6.9	38

SAMPLE#	Cu PPM	Pb PPM	Zn PPM	Ag PPM	As PPM
1576	29	178	120	.3	16
1577	28	193	150	.5	21
1578	24	158	157	.3	16
1579	13	93	55	.3	14
1580	20	131	106	.4	13
1581	16	76	84	.3	11
1582	19	50	77	.2	12
1583	19	38	63	.1	8
1584	29	83	67	.4	22
1585	37	52	91	.8	8
1586	40	50	82	.1	23
1587	40	21	83	.3	19
1588	20	29	68	.3	5
1589	14	28	68	.3	3
1590	14	31	101	.7	5
1591	18	25	49	.1	17
1592	25	58	123	.4	19
1593	39	134	404	.7	28
1594	29	91	335	.1	25
1595	32	70	251	.2	41
1596	11	45	245	.6	14
1597	14	23	165	.5	16
1598	13	43	313	.8	23
1599	13	23	222	.7	8
1600	8	45	176	.1	8
1601	20	91	164	.1	16
1602	13	23	84	.1	6
1603	10	9	60	.3	2
1604	15	87	113	.4	11
1605	46	361	358	1.4	23
1606	21	284	402	1.3	17
1607	10	32	99	.4	8
1608	19	36	45	.3	11
1609	17	49	111	.8	11
1610	18	54	90	.6	5
1611	37	38	70	.2	22
STD C	57	43	132	7.1	37

SAMPLE#	Cu PPM	Pb PPM	Zn PPM	Ag PPM	As PPM
1612	31	219	240	2.6	18
1613	35	138	161	1.0	19
1614	18	83	123	.7	12
1615	16	74	190	1.0	16
1616	25	140	313	.5	30
1617	34	27	110	.3	12
1618	25	61	145	.6	11
1619	75	33	57	.4	159
1620	10	18	65	.6	12
1621	19	20	34	.2	14
1622	7	21	24	.1	4
1623	7	22	79	.9	2
1624	16	39	71	.5	12
1625	20	27	159	.4	38
1626	9	22	155	.7	15
1627	11	48	177	.4	4
1628	13	20	68	.4	10
1629	11	22	111	.8	11
1630	8	51	47	.2	33
1631	17	55	60	.2	50
1632	55	197	165	1.2	45
1633	43	152	226	.6	28
1634	20	52	94	.5	17
1635	19	64	340	.7	15
1636	37	106	891	.9	12
1637	25	166	432	.9	19
1638	17	143	1082	.7	17
1639	13	93	344	.2	34
1640	15	16	51	.1	8
1641	9	41	48	.4	13
1642	13	44	59	.3	9
1643	27	61	97	.2	16
1644	28	51	120	.2	17
1645	33	69	131	.1	18
1646	25	34	89	.6	16
1647	7	21	30	.1	11
STD C	57	39	129	6.9	37

SAMPLE#	Cu PPM	Pb PPM	Zn PPM	Ag PPM	As PPM
1648	18	15	37	.6	9
1649	31	82	151	.5	19
1650	37	40	79	.3	21
1651	14	17	90	1.1	10
1652	18	29	60	.7	9
1653	16	19	136	1.3	13
1654	22	29	163	1.6	14
1655	27	55	89	.3	21
1656	37	63	51	.3	17
1657	28	47	51	.3	13
1658	31	44	88	.2	16
1659	20	21	48	.2	16
1660	50	23	63	.3	21
1661	22	11	30	.7	6
1662	14	26	64	.3	20
1663	35	33	119	.2	35
1664	19	75	194	.4	63
1665	36	337	891	.5	75
1666	25	61	144	.1	9
1667	21	219	2276	1.2	226
1668	23	754	2674	1.4	15
1669	67	204	984	1.1	23
1670	37	271	1826	.7	16
1671	45	481	1078	.5	56
1672	24	140	123	.3	27
STD C	57	37	132	7.0	39



GEOLOGICAL BRANCH
ASSESSMENT REPORT

15,933

100 50 0 100 200 300 m
1:5000

Instrument: UNIMAG proton magnetometer

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MAGNETOMETER SURVEY

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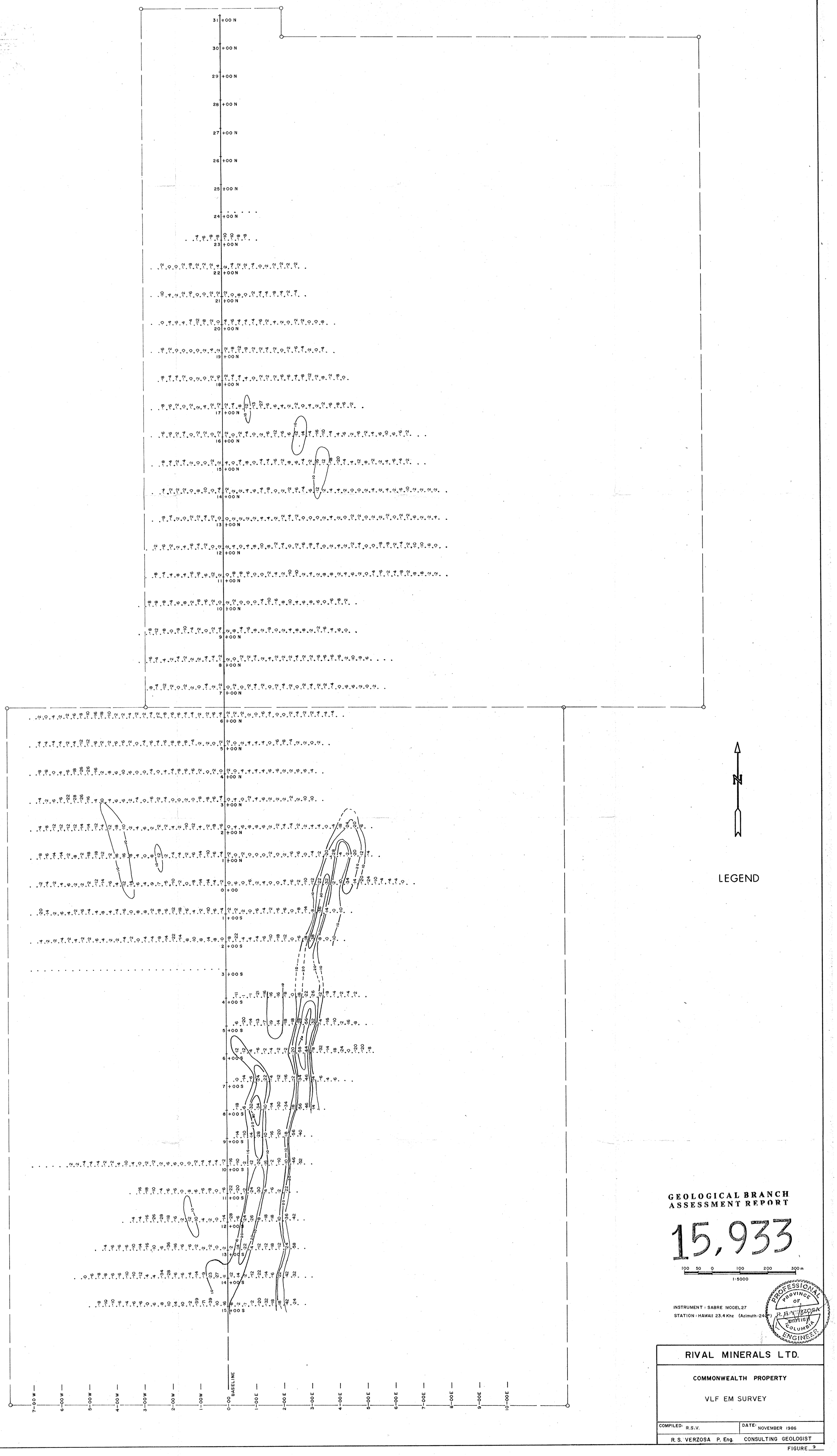
R. S. VERZOSA P. Eng.	CONSULTING GEOLOGIST

FIGURE 10



LEGEND

GEOLOGICAL BRANCH
ASSESSMENT REPORT

15,933

100 50 0 100 200 300 m
1:5000

INSTRUMENT : SABRE MODEL 27
STATION : HAWAII 23.4 Khz (Azimuth: 240)

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VLF EM SURVEY

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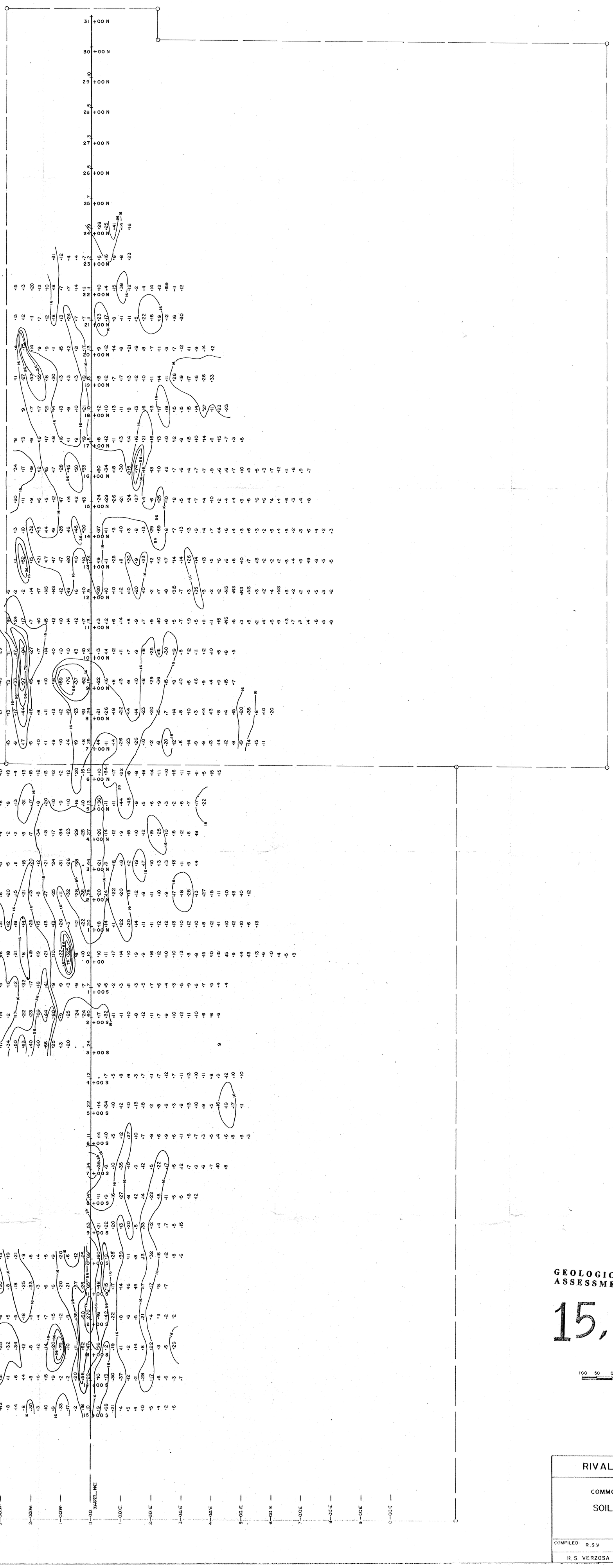
R. S. VERZOSA P. Eng.	CONSULTING GEOLOGIST

FIGURE 9



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100 50 0 100 200 300 m
1:5000

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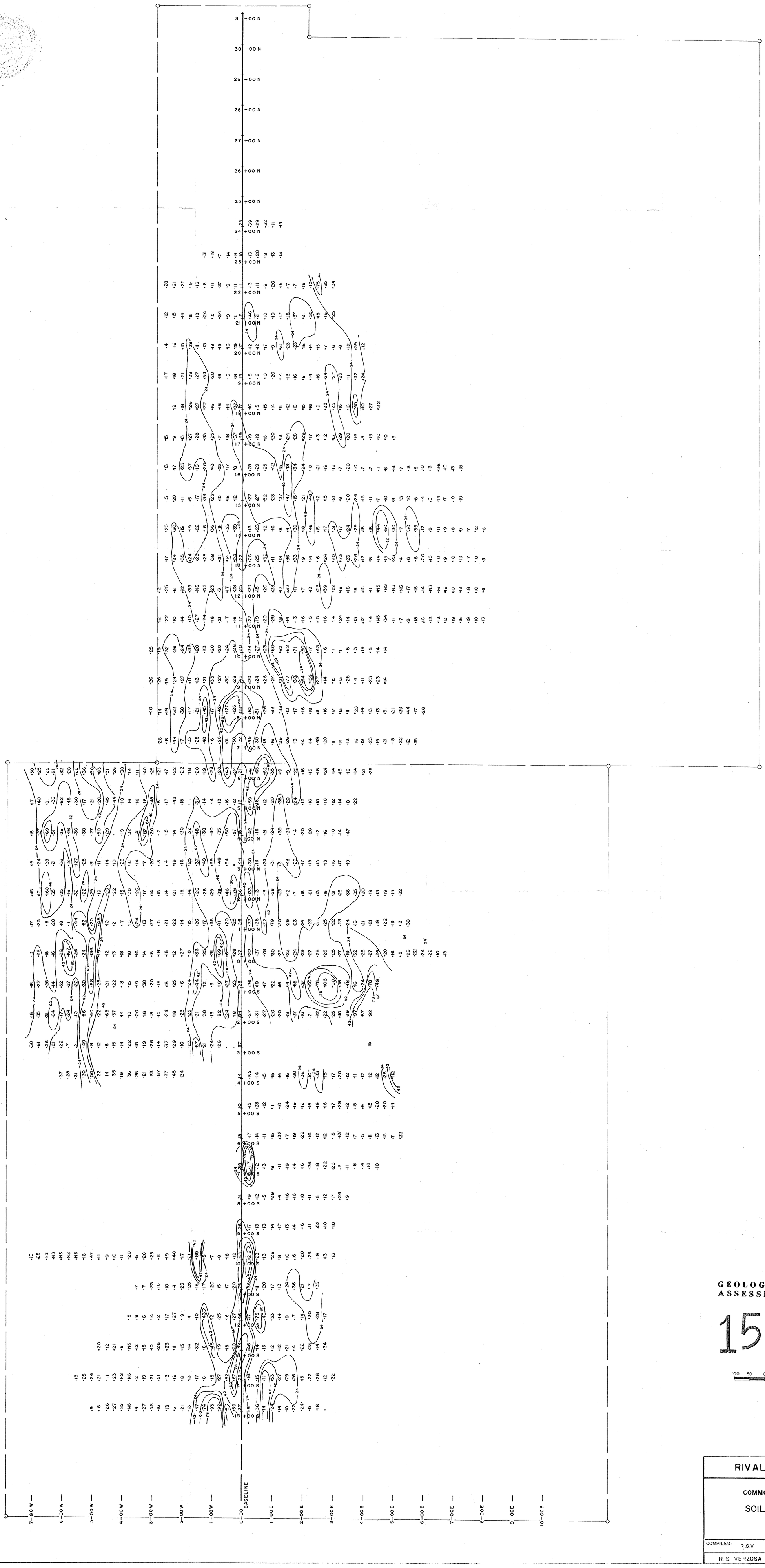
FIGURE 8



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ASSESSMENT REPORT

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1:5000

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COPPER

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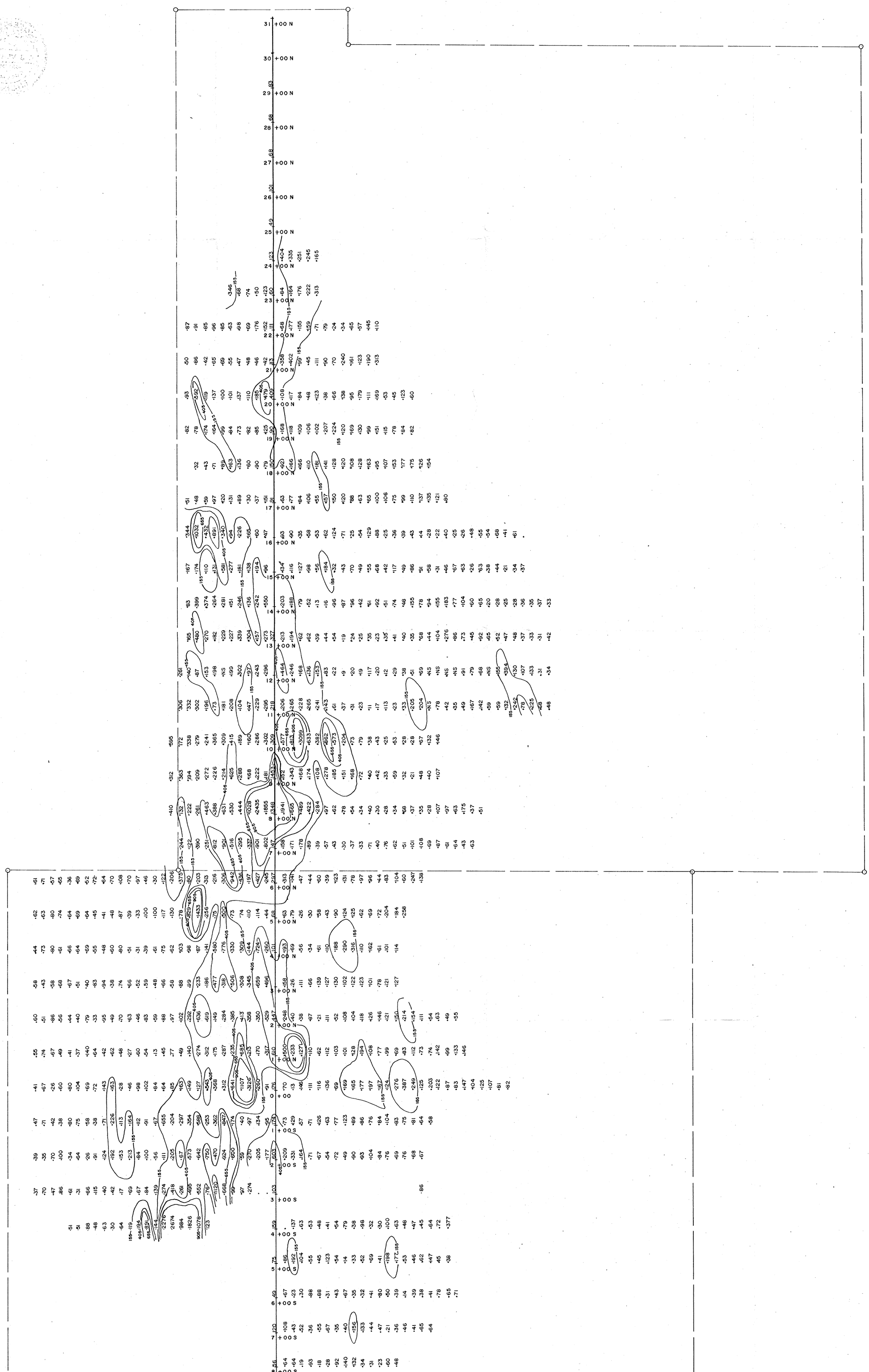
FIGURE 7



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1:5000

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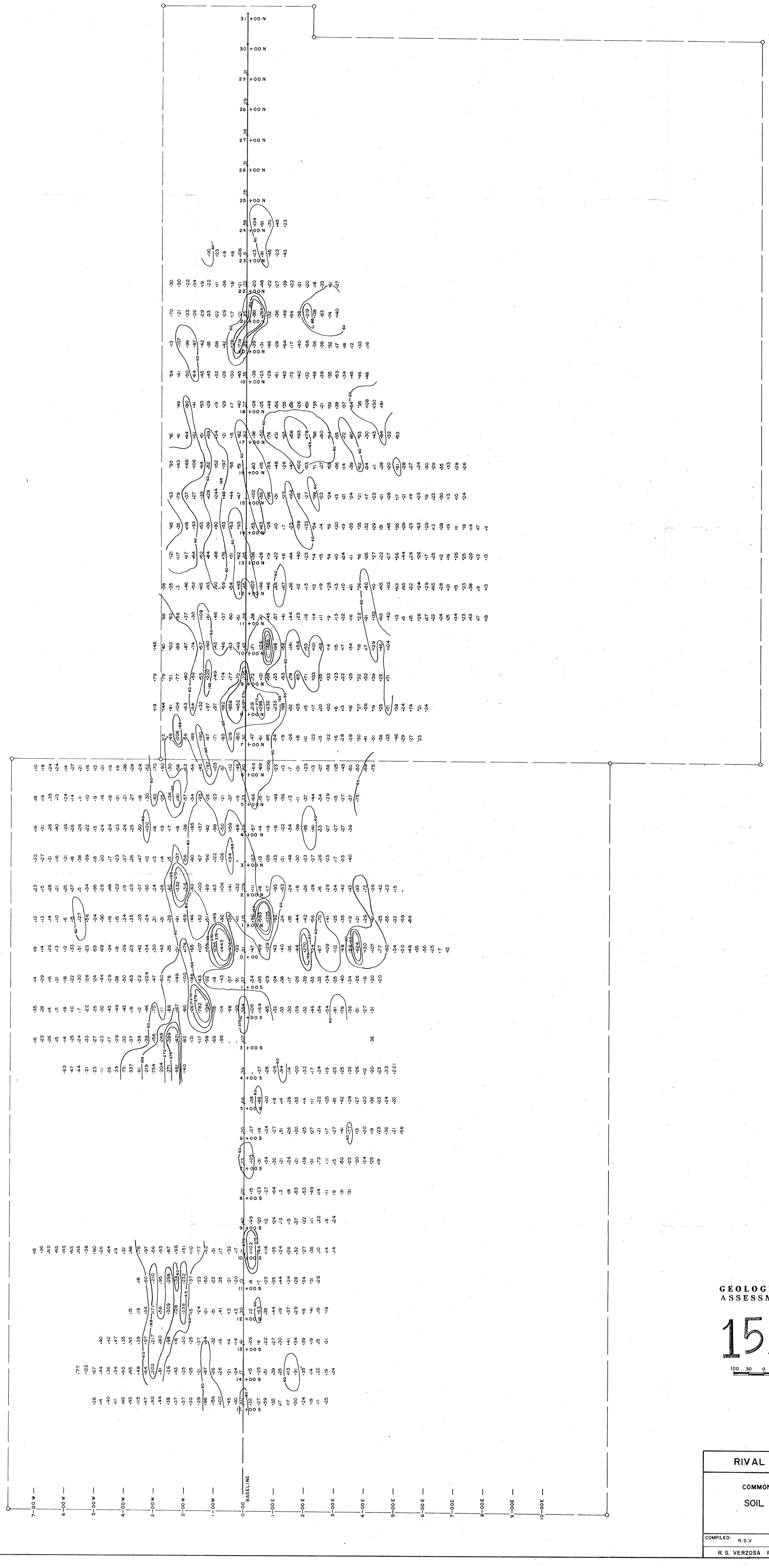
FIGURE 6



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ASSESSMENT REPORT

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1:5000

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LEAD

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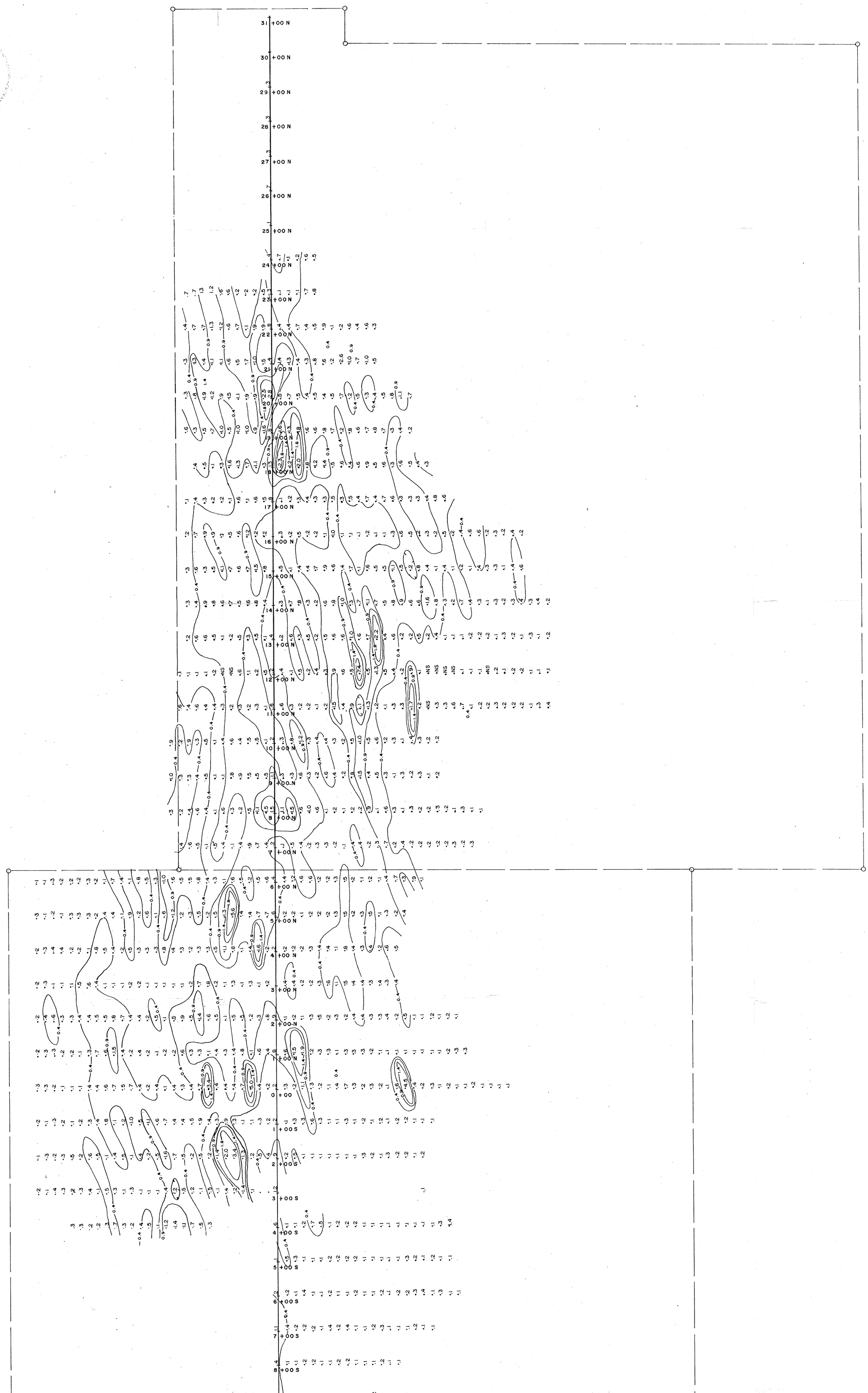
FIGURE 5



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ASSESSMENT REPORT

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100 50 0 100 200 300 m
1:5000

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SILVER

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FIGURE 4