

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT

NO. 3545 MAP.....

GEOCHEMICAL REPORT

by

J. M. Newell, P. Eng.

on surveys completed during August 1971

on the

TABLE and KEN MINERAL CLAIMS

situate in the headwaters of Winfield Creek,

in the

OMINECA MINING DIVISION

54°N 127°W N.E.
(NTS 93-L-11)

and owned by

COPPER QUEEN EXPLORATIONS LTD.

February 1972

Vancouver, B. C.

3545

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Total Cu

Geology & Geochemistry

1" = 400'

Geochemical Report
Table & Ken Mineral Claims
Omineca Mining Division, B. C.

Introduction

The Table & Ken Mineral Claims form part of a larger claim group, owned by Copper Queen Explorations Ltd. During the summer of 1971, the property was examined by the writer, on behalf of Texas Gulf Sulphur Company. Permission was subsequently obtained from the owners to carry out a geochemical soil sampling survey over parts of the Table & Ken claims. This work was undertaken during the period 25-31 August 1971 and provided the data on which this report is based.

Location & Access

The property is comprised of approximately 100 mineral claims, located in the headwaters of Winfield Creek, a tributary of the Telkwa River. It is centred at latitude $54^{\circ}42'$ north, longitude $127^{\circ}29'$ west, approximately thirteen miles west-southwest of Smithers.

Best access is by helicopter from Smithers, but a rough jeep road provides dry-weather access from the village of Telkwa, a road distance of some 30 miles.

Property elevations vary from 4,500 to 5,600 feet and much of the claim group is above timber line.

History & Previous Work

The original Copper Queen showing, an occurrence of high grade chalcocite mineralization, has been known since 1917. In more recent years the property has been explored by the present owners and work

has included:

1. Geological mapping.
2. Geochemical soil sampling.
3. I.P. and E.M. surveys.
4. Extensive bulldozer stripping.
5. Diamond Drilling (five holes).

These surveys were controlled by a picket line grid which is poorly oriented with respect to the strike of the rocks in the area of interest on the Table & Ken claims.

The geochemical survey completed by Texas Gulf Sulphur Company was controlled by flagged lines, oriented perpendicular to the pre-existing grid.

Geochemistry

Field & Laboratory Methods

Ten soil sample traverses were completed over the Table & Ken claims, an area containing several showings of copper mineralization associated with rhyolitic rocks. Samples were collected, at 100 foot intervals, along flagged lines 400 feet apart. Samples were taken from shallow holes dug with a mattock or shovel. "B" horizon material was collected where possible.

The samples were collected in Kraft paper envelopes and shipped to the Bondar Clegg and Co. Ltd. laboratory in North Vancouver for total copper, zinc and molybdenum analyses.

The analytical technique may be summarized as follows:

The samples are first dried and sieved to obtain the -80 mesh fraction. Contained metal is extracted from a weighed sample of this fraction, using Le Fort aqua regia. The resulting solutions are bulked to 20% acid concentration and analysed by atomic absorption spectrophotometry, in constant comparison with both synthetic and matrix standards. Results are expressed in parts per million total metal content.

Discussion of Results

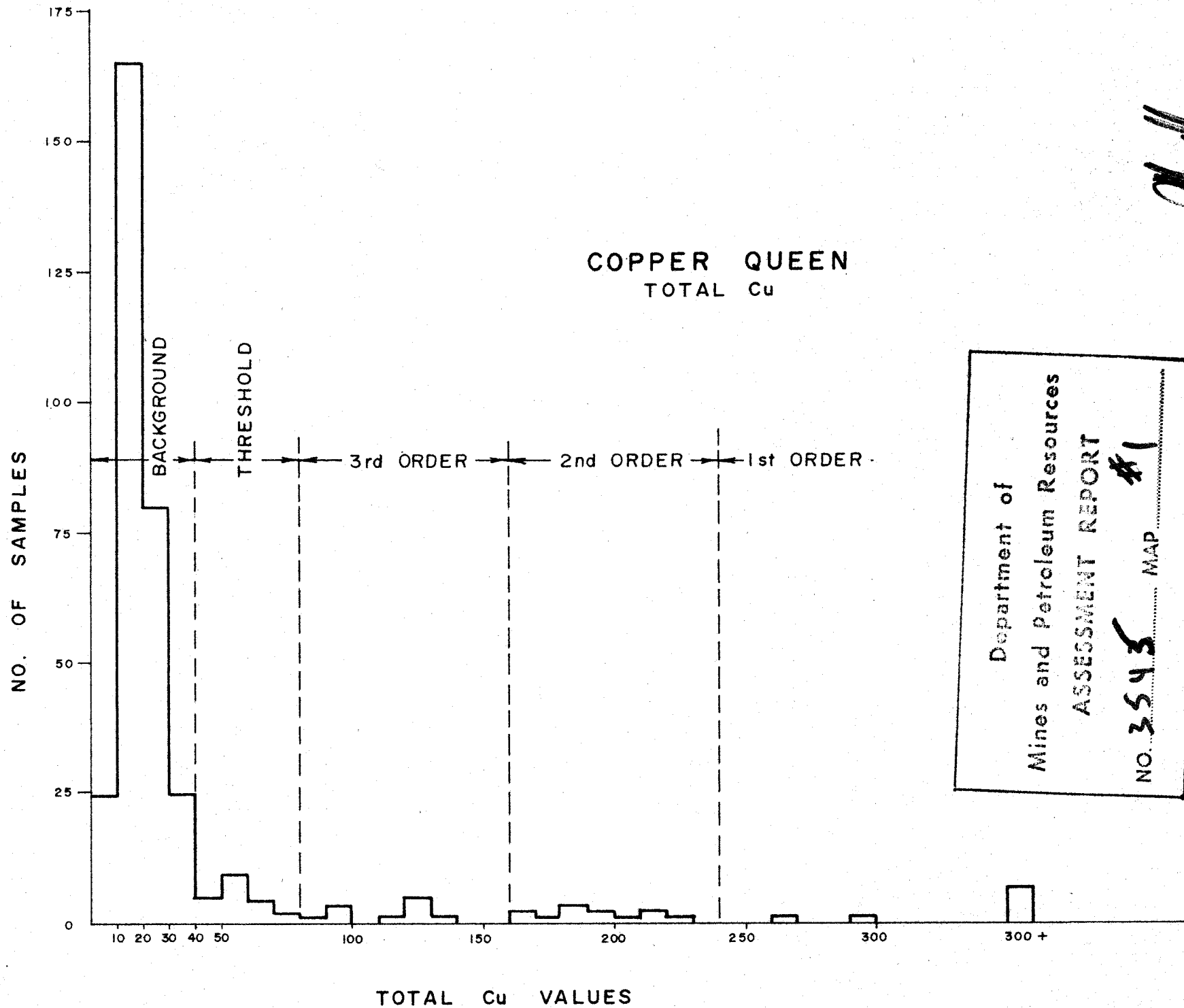
Inspection of the analytical results (See Appendix B) shows very little variation in molybdenum values. Molybdenum was not detected in many samples and no values in excess of 2 ppm were obtained.

Zinc values show rather more variation, but very few samples returned values in excess of twice background. The zinc values are not regarded as being of significant interest from an exploration standpoint, and are not plotted on the accompanying map. Sample numbers are plotted and analytical report sheets included in Appendix B.

The copper values are of greater interest. A histogram showing the distribution of total copper values, obtained from 343 samples, indicates a background range of 7-40 ppm, with a peak distribution at 11-20 ppm. The threshold of interest is taken as 40 ppm, and values in excess of 80 ppm are considered anomalous. Copper values are plotted on the accompanying map and contoured at 40, 80, 160, and 240 ppm, representing threshold, third, second and first order anomalies.

The copper results delineate strong, but very local anomalies

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associated with visible mineralization on lines 32S, 36S, and 44S. Of more significance is the sinuous anomaly trending northwards through the central part of the grid area and reaching a peak value of 1880 ppm on line 40S. This feature may represent mineralization of marginal grade, as is the case with the known showings, but some continuity is indicated and the anomaly merits further investigation.



J. M. Newell, P. Eng.

Appendix A

Statement of Qualifications

Mr. B. C. Ratcliffe is a student at the University of British Columbia. He has had six summers field experience in geochemical exploration, five of them employed by Texas Gulf Sulphur Co. He is well trained and competent in the methods used in this survey.

Mr. C. J. Rockingham is a student at the University of Toronto. He has three summers' exploration experience with Texas Gulf Sulphur Co. and is a well-trained, competent and conscientious field assistant.



J. M. Newell, P. Eng.

DOMINION OF CANADA:
PROVINCE OF BRITISH COLUMBIA.

To Wit:

In the Matter of Assessment work carried out
on the Table 1-8 and Ken 4,
6 and 8 Mineral Claims, situate in the headwaters
of Winfield Creek, in the Omineca Mining Division.

I, John M. Newell

of 701 - 1281 West Georgia Street, Vancouver 5, B. C.

in the Province of British Columbia, do solemnly declare that during the period August 25-31
1971, I caused assessment work to be done on the Table 1-8 and Ken 4, 6
and 8 Mineral Claims, to the value of \$1424.60. The expenses were incurred
as follows:

Geochemical Survey

B. C. Ratcliffe	6 days @ \$25	\$ 150.00
C. J. Rockingham	6 days @ \$20	120.00
343 analyses for Cu-Mo-Zn	@ \$2.70	916.10
supplies:	12 man-days @ \$8	96.00

Supervision, Report etc.

J. M. Newell, P. Eng.	1½ days @ \$75	112.50
Drafting	6 hours @ \$5	30.00

\$1424.60

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 Vancouver, in the
Province of British Columbia, this 1st
day of August, 1971, A.D.

[Signature]
A Commissioner for taking Affidavits for British Columbia or
A Notary Public in and for the Province of British Columbia.

Sub-mining Recorder

APPENDIX B

Analytical Report Sheets



BONDAR-CLEGG & COMPANY LTD.

geologists • geochemists • analysts

1500 PEMBERTON AVENUE, NORTH VANCOUVER, B.C.
PHONE 988-5315

*Copper
Quartz
(S. H. H. H.)*

GEOCHEMICAL LAB REPORT

No. 21 - 702

Extraction Hot Aqua Regia From Texas Gulf Sulphur Co. Ltd.
 Method Atomic Absorption Date Sept. 17, 1971 19
 Fraction Used - 80 mesh Analyst K.B.

SAMPLE NO.	Cu ppm	Zn ppm	Mo ppm	SAMPLE NUMBER	Cu ppm	Zn ppm	Mo ppm	REMARKS
H- 1001	36	117	ND	H- 1032	20	64	1	
1002	12	69	ND	1033	9	27	ND	
1003	14	66	1	1034	28	90	1	
1004	12	55	1	1035	17	51	1	
1005	16	75	1	1036	14	60	1	
1006	14	85	1	1037	14	63	1	
1007	13	45	1	1038	9	21	ND	
1008	10	47	ND	1039	7	42	ND	
1009	25	125	1	1040	13	52	ND	
1010	40	95	1	1041	6	30	ND	
1011	12	65	ND	1042	14	55	1	
1012	19	70	1	1043	15	83	1	
1013	33	90	1	1044	15	58	1	
1014	12	47	1	1045	17	68	1	
1015	11	50	1	1046	13	58	1	
1016	20	70	2	1047	17	65	1	
1017	16	57	1	1048	19	72	1	
1018	14	48	1	1049	21	60	ND	
1019	9	60	ND	1050	14	59	ND	
1020	27	85	ND	1051	27	80	2	
1021	9	25	ND	1052	24	82	1	
1022	10	39	ND	1053	21	78	ND	
1023	15	62	1	1054	9	44	ND	
1024	36	108	ND	1055	33	124	ND	
1025	21	84	ND	1056	13	52	ND	
1026	14	54	1	1057	19	59	1	
1027	18	59	1	1058	24	68	ND	
1028	17	57	1	1059	15	54	ND	
1029	10	34	1	1060	20	49	1	
1030	22	45	1	1061	28	69	1	
1031	58	105	1	1062	25	68	ND	

GEOCHEMICAL LAB REPORT

SAMPLE NO.	Cu ppm	Zn ppm	Mo ppm		SAMPLE NUMBER	Cu ppm	Zn ppm	Mo ppm	REMARKS
H - 1063	175	104	ND	H-	1101	11	26	ND	
1064	16	57	ND		1102	6	19	ND	
1065	21	54	1		1103	15	58	ND	
1066	19	48	1		1104	17	65	ND	
1067	17	65	1		1105	18	66	ND	
1068	121	40	1		1106	13	51	1	
1069	21	70	ND		1107	425	69	1	
1070	18	57	1		1108	22	77	1	
1071	16	58	ND		1109	25	76	1	
1072	16	60	1		1110	29	86	1	
1073	17	65	ND		1111	17	69	1	
1074	13	48	ND		1112	10	48	1	
1075	9	57	ND		1113	12	74	ND	
1076	15	96	1		1114	18	72	1	
1077	19	100	ND		1115	19	80	1	
1079	22	105	ND		1116	18	68	1	
1080	28	69	ND		1117	20	66	ND	
1081	36	95	1		1118	16	60	1	
1082	15	52	1		1119	22	69	1	
1083	72	82	ND		1120	48	89	1	
1084	18	53	1		1121	40	74	ND	
1085	220	124	1		1122	18	52	1	
1086	112	125	1		1123	27	70	1	
1087	210	130	1		1124	20	80	1	
1088	40	110	1		1125	18	69	1	
1089	17	65	1		1126	18	60	1	
1090	7	38	1		1128	460	79	1	
1091	16	65	ND		1129	82	70	1	
1092	19	56	1		1130	31	70	1	
1093	115	62	ND		1131	22	77	1	
1094	65	62	1		1122	18	52	1	
1095	20	60	ND		1123	27	70	1	
1096	12	39	ND		1124	20	80	1	
1097	16	32	ND		1125	18	69	1	
1098	27	80	1		1126	18	60	1	
1099	19	60	ND		1128	460	79	1	

GEOCHEMICAL LAB REPORT

SAMPLE NO.	Cu ppm	Zn ppm	Mo ppm	SAMPLE NUMBER	Cu ppm	Zn ppm	Mo ppm	REMARKS
H - 1129	82	70	1	H- 1166	36	37	ND	
1130	31	70	1	1167	51	71	2	
1131	22	77	1	1168	19	48	1	
1132	155	60	1	1169	16	54	1	
1133	27	45	2	1170	24	60	1	
1134	56	84	1	1171	23	70	1	
1135	190	97	1	1172	14	44	1	
1136	15	70	ND	1173	24	42	ND	
1137	18	52	ND	1174	42	57	1	
1138	37	66	1	1175	17	49	ND	
1139	43	58	1	1177	17	52	ND	
1140	19	59	1	1178	18	52	ND	
1141	29	74	2	1179	17	58	ND	
1142	16	69	1	1180	25	59	ND	
1143	15	47	1	1181	23	69	1	
1144	25	52	2	1182	17	48	1	
1145	14	35	1	1183	24	70	ND	
1146	25	60	1	1184	35	69	ND	
1147	25	41	1	1185	27	88	1	
1148	27	69	1	1186	51	61	ND	
1149	40	80	ND	1187	30	87	1	
1150	23	56	1	1188	30	88	1	
1151	17	88	ND	1189	103	74	1	
1152	34	58	ND	1190	115	82	ND	
1154	35	125	1	1191	11	50	1	
1155	31	110	ND	1192	15	52	1	
1156	30	97	ND	1193	24	80	1	
1157	15	40	ND	1194	21	74	1	
1158	20	56	1	1195	12	50	1	
1159	14	49	1	1196	14	67	1	
1160	19	70	1	1197	18	61	1	
1161	15	68	1	1198	14	64	1	
1162	19	38	1	1199	25	68	ND	
1163	15	61	1	1200	27	79	ND	
1164	29	64	ND	1201	20	67	ND	
1165	1125	59	ND	1202	17	66	1	

GEOCHEMICAL LAB REPORT

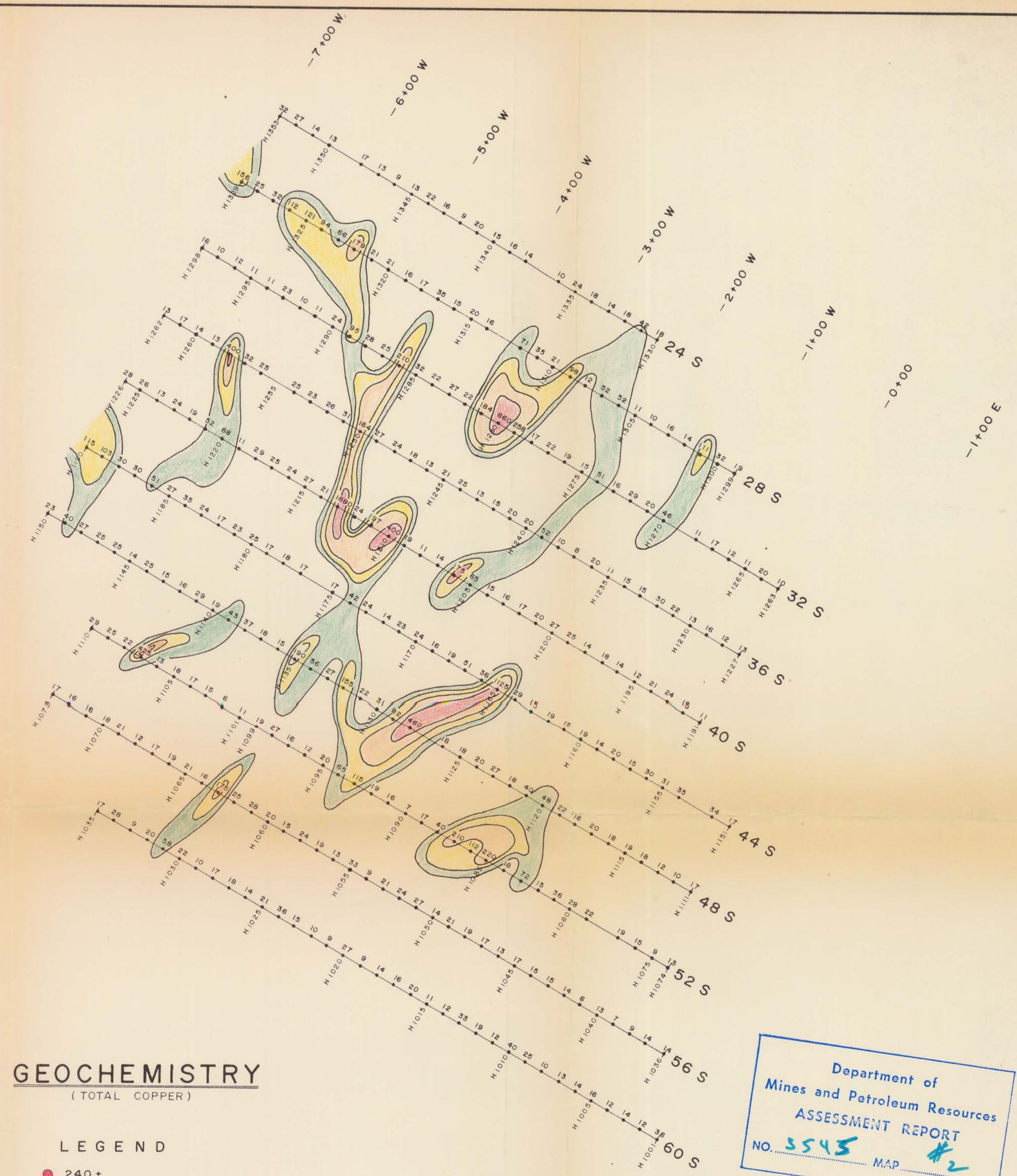
SAMPLE NO.	Cu ppm	Zn ppm	Mo ppm	SAMPLE NUMBER	Cu ppm	Zn ppm	Mo ppm	REMARKS
H - 1203	16	45	1	H- 1239	52	67	1	
1204	15	63	ND	1240	20	51	1	
1205	65	120	1	1241	20	55	2	
1206	175	115	1	1242	15	46	1	
1207	14	51	1	1243	13	60	2	
1208	11	42	1	1244	25	80	1	
1209	19	50	1	1245	21	70	1	
1210	400	79	ND	1246	13	50	1	
1211	197	71	ND	1247	18	62	1	
1212	24	56	1	1248	24	76	1	
1213	1830	90	ND	1249	27	76	1	
1214	21	55	ND	1250	164	90	1	
1215	27	80	1	1251	31	72	ND	
1216	24	51	1	1252	26	77	1	
1217	25	73	ND	1253	23	64	ND	
1218	29	76	1	1254	25	81	1	
1219	11	35	1	1256	25	62	1	
1220	68	80	ND	1257	32	89	1	
1221	52	72	ND	1258	400	181	ND	
1222	19	63	ND	1259	13	51	1	
1223	24	58	ND	1260	14	58	1	
1224	13	50	ND	1261	17	66	1	
1225	26	68	2	1262	13	60	ND	
1226	28	68	ND	1263	10	53	ND	
1227	13	46	1	2 1264	20	58	1	
1228	12	62	ND	o 1265	11	36	ND	
1229	16	66	ND	1266	12	69	ND	
1230	13	40	ND	1267	17	68	ND	
1231	22	60	1	1268	11	63	ND	
1232	30	79	1	1270	46	235	1	
1233	15	79	ND	1271	20	111	1	
1234	15	79	ND	1272	29	74	ND	
1235	11	60	1	1273	16	71	1	
1236	20	68	ND	1274	51	65	1	
1237	8	28	ND	1275	15	80	ND	
1238	10	37	1	1276	19	84	1	

GEOCHEMICAL LAB REPORT

SAMPLE NO.	Cu ppm	Zn ppm	Mo ppm	SAMPLE NUMBER	Cu ppm	Zn ppm	Mo ppm	REMARKS
H - 1277	22	73	2	H- 1314	16	49	ND	
1278	17	46	1	1315	20	61	1	
1279	258	79	1	1316	15	75	ND	
1280	860	62	1	1317	35	74	ND	
1281	134	73	ND	1318	17	69	ND	
1282	22	65	ND	1319	16	63	1	
1283	27	75	1	1320	21	63	1	
1284	22	60	1	1321	21	89	1	
1285	38	80	1	1322	179	104	ND	
1286	210	78	ND	1323	66	99	ND	
1287	25	36	ND	1324	94	69	ND	
1288	28	61	1	1325	121	69	ND	
1289	95	95	1	1326	112	101	ND	
1290	24	79	1	1327	32	106	1	
1291	11	35	1	1328	25	99	ND	
1292	10	50	ND	1329	156	156	ND	
1293	23	78	1	1330	18	58	1	
1294	11	37	ND	1331	42	145	2	
1295	11	44	ND	1332	18	50	1	
1296	12	51	1	1333	14	46	1	
1297	10	42	1	1334	18	62	1	
1298	16	65	1	1335	24	118	ND	
1299	19	51	2	1336	10	91	ND	
1300	32	135	1	1338	14	73	1	
1301	111	106	1	1339	16	57	ND	
1302	14	80	1	1340	15	64	ND	
1303	16	67	1	1341	20	74	ND	
1304	10	54	ND	1342	9	56	ND	
1305	11	41	ND	1343	16	55	1	
1306	52	44	1	1344	22	64	2	
1307	52	60	ND	1345	13	89	ND	
1308	12	42	ND	1346	9	56	1	
1309	98	73	ND	1347	13	51	1	
1310	21	77	1	1348	17	86	ND	
1311	35	140	2	1350	13	71	1	
1312	74	90	2	1351	14	111	1	



GEOLOGY



GEOCHEMISTRY
(TOTAL COPPER)

- LEGEND**
- 240+
 - 160 - 240 ppm
 - 80 - 160 ppm
 - 40 - 80 ppm

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ASSESSMENT REPORT
NO. 3545 MAP #2

TO ACCOMPANY: Geochemical Report, TABLE & KEN
MINERAL CLAIMS, Omineca Mining
Division. J.M. Newell, 1971.

SCALE: ONE INCH = 400'

TEXAS GULF SULPHUR CO.		
GEOLOGY AND GEOCHEMISTRY COPPER QUEEN GROUP		
WORK BY	DRAWN BY	DATE
B.R. & C.R.	L. BELL	NOV. 1, 1971

3545 M-2

Newell