



31M05SE0093 63A.528 GILLIES

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GEOLOGICAL REPORT ON RAGGED CHUTES SILVER MINES LIMITED

GILLIES LIMITED TOWNSHIP, ONTARIO

PROPERTY LOCATION AND DESCRIPTION

The property comprises 14 contiguous unpatented mining claims, numbers T 58415, 416, 417; T 58480, 481; T 58672, 673; T 59097; T 59126, T 59150 to 153 inclusive and T 59158, located in blocks 16, 24, 25 and 26, Gillies Limit Township, Ontario.

Also included in this property is an isolated claim, T 58479, lying one-quarter of a mile north of claim T 58415, in block 16. This claim T 58479 was subject to a geochemical survey only, data for which is covered at the end of this report.

All the above claims are held solely by Ragged Chutes Silver Mines Limited, Head Office address Suite 1000, 11 Adelaide Street West, Toronto.

This report is being submitted by Geophysical Engineering and Surveys Limited, 11 Adelaide Street West, Toronto.

ACCESS

An all weather gravel road, maintained by the Ontario Hydro, traverses the eastern portion of the property. Two heavy hydro electric-power transmission lines parallel the highway.

Also the Montreal River runs northerly through the central portion of the group, providing access to the western claims.

TOPOGRAPHY

East of the Montreal River the ground is flat to moderately undulating with heavy overburden and little outcrop.

West of the river the surface expression is one of intermittent diabase ridges trending northwesterly.

HISTORY

The claims have been subject to staking over the years as a general outgrowth of the Cobalt staking, but little evidence of surface work was found. Limited trenching occurs in the vicinity of rock outcroppings on claim T 58480.

SUMMARY OF GEOLOGICAL WORK

On behalf of Geophysical Engineering and Surveys Limited, 11 Adelaide Street West, Toronto, the writer personally conducted geological mapping on the contiguous group of 14 claims, for Ragged Chutes Silver Mines Limited.

Picket lines were cut east-west at 400 foot intervals from a north-south base line control. Chainage stations were established at 100 foot intervals. Total line footage was approximately 14 miles, including tie lines.

Traversing from these lines was done over the entire claim grouping during the period July 17 to August 22, 1967.

Line cutting and chaining were done by L. Savard, Contractor, of Box 273, North Bay, Ontario.

The writer personally conducted the geological and geochemical surveys and prepared the reports and plans for both surveys.

My address is 195 Scott Street, New Liskeard, Ontario.

GENERAL GEOLOGY

The eastern portion of the property is underlain by flat to gently dipping quartzite and greywacke together with some pebble conglomerate, which are thought to comprise the sedimentary filling of an underlying Keewatin trough which trends northerly. These sediments belong to the Coleman formation of the Huronian series as defined by the provincial geologist.

Pebble conglomerate of the Huronian series is exposed on T 58481. This series was overlain by a sheet like sill of Nipissing diabase. The bottom of the diabase sill was mapped on claims T 58415, 416 and would appear to have been in contact with conglomerate before erosion.

The diabase sill extends westward over most of the claim group. The approximate contact between the top of the diabase sill and the underlying Huronian conglomerate was mapped on claims T 59153 and T 58158 of the west end of the property.

A band of arkosic material occurs on the eastern portion of claim T 59153, covering approximately one third of the claim.

FAULTING

The Montreal River is generally believed to be the surface expression of a strong regional fault.

A marked lineament, striking slightly west of north, was observed on the boundary between claims T 59153 and T 59158. This lineament would tend to follow the course of the creek flowing out of Hound Chutes Lake and is expressed as a steep bluff 30 to 40 feet high.

ECONOMIC GEOLOGY

No veins or mineralization of economic significance were observed on the property.

TABLE OF FORMATIONS

CENOZOIC

Recent: Clay, humus.

Pleistocene: Sand, gravel.

PRECAMBRIAN

Nipissing: Sill-like diabase intrusives.

Huronian
Cobalt Series: Coleman Formation.
Conglomerate.
Greywacke.
Quartzite.
Arkosic quartzite.

DESCRIPTION OF FORMATIONS

DIABASE

The diabase observed varied widely in texture from coarse to fine. Essentially it was composed of feldspar and olivine with a good percentage of associated dark minerals.

CONGLOMERATE

Matrix is greenish black, fine grained with individual granules of feldspar and quartz to 1/32 of an inch. Some outcroppings show minor cherty pebbles up to 1/8 of an inch. Granitic pebbles up to 2 inches maybe seen.

GREYWACKE

Medium grey colour, fine grained. Some evidence of lamination was observed.

QUARTZITE

Located on the eastern claims, this formation presented a fine grained texture, dark grey colour. The matrix is comprised of quartz, presenting a glassy appearance.

ARKOSIC QUARTZITE

Texture is fine to medium. Colour varies from buff to pink. Matrix is quartz-feldspar with approximately 2 percent dark minerals in the buff varieties.

The pink varieties contain minor blebs of sulphide, presumably chalcopyrite.

Respectfully submitted
GEOPHYSICAL ENGINEERING AND SURVEYS LIMITED



W.G. FOWLER.

New Liskeard, Ontario.
October 24, 1967.



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RAGGED CHUTES SILVER MINES LIMITED

REPORT ON GEOCHEMICAL SURVEY, TO ACCOMPANY GEOLOGICAL REPORT
ON GILLIES LIMITED TWP. CLAIMS.

SUMMARY

Geochemical soil sampling was carried out on selected portions of claims T 58415, 416, 417 and T 58480, 481 contained in the main group of contiguous claims.

Also soil sampling was done over the whole of claim T 58479 and constituted a separate survey for assessment work purposes.

PURPOSE

The programme was used as a reconnaissance prospecting tool in the search for silver deposits.

Sedimentary areas of light overburden were chosen for sampling.

R. Boyle, G.S.C. Report GG-46, expresses the opinion that dispersion of mineral trace elements, in relation to silver veins, are most wide spread in sediments and most restricted in diabase. The sampling at Ragged Chutes Silver Mines was based on this theory.

METHOD

The following method was used on both claim T 58479 and the main group.

Sand was the underlying soil type on all areas sampled. A typical soil profile of the areas sampled is as follows.

- "A" Horizon - nil to $\frac{1}{2}$ inch of humus.
- "B" Horizon - nil to $1\frac{1}{2}$ inches of whitish sand.
- "B 1" Horizon - reddish sand.

The "A" horizon only was sampled. Samples were taken with a soil auger, bit diameter $1\frac{1}{2}$ inches. All leaf and other foreign matter was rejected, the dark humus layer was placed in plastic bags. Due to the poor development of the "A" horizon much time was consumed in obtaining a sufficient amount of sample. In many cases twenty or more borings would be taken to achieve a sample of approximately two to four ounces wet weight. Samples were shipped in the original plastic bags.

Two men were employed in taking a sample and great care was taken to avoid contamination.

Samples were sent to Technical Service Laboratories,
355 King Street West,
TORONTO, Ontario.

Analyses by spectrographic methods was done for Silver, Nickel and Cobalt. Assay results are enclosed at the back of this report.

CLAIM# T 58479

ACCESS

The main hydro road traverses the northwest corner of the claim.

HISTORY

Prospecting of the surface was carried out in early days. One pit and limited trenching was observed on the northeast portion of the claim.

GEOLOGY

The only outcroppings occur on the northeasterly portion of the claim and consist of a small exposure of sediments cut by a northeasterly striking dike of quartz diabase.

Projection of mapping by the Ontario Department of Mines indicates that the same sedimentary filled trough, which occupies the eastern portion of the main group, extends across this claim.

GEOCHEMICAL SAMPLE DATA

Samples were taken at 100 foot intervals along three lines 400 feet apart. Total line footage covered was 4700 feet.

A total of 47 samples numbered G 151 to G 197 was taken. Results were not encouraging. In all samples, assay values as expressed in parts per million did not show significant increases above normal background.

MAIN GROUP

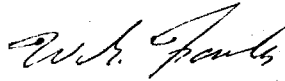
GEOCHEMICAL SAMPLE DATA

Portions of claim numbers T 58416, 416, 417; T 58480, 481 were subject to reconnaissance soil sampling. A total of 44 soil samples numbered C 251 to 294 were taken, generally at 200 foot intervals, on lines 400 feet apart. Total footage sampled was 5800 feet.

Samples covered sedimentary areas extending eastward from the assumed diabase contact area. The samples were taken mainly on lightly overburdened areas and sampling stopped as heavier overburden was encountered to the east.

Sample assay values did not show significant increases above normal background count.

Respectfully submitted.
GEOPHYSICAL ENGINEERING AND SURVEYS LIMITED



New Liskeard, Ontario.
October 24, 1967.

W.G. Fowler

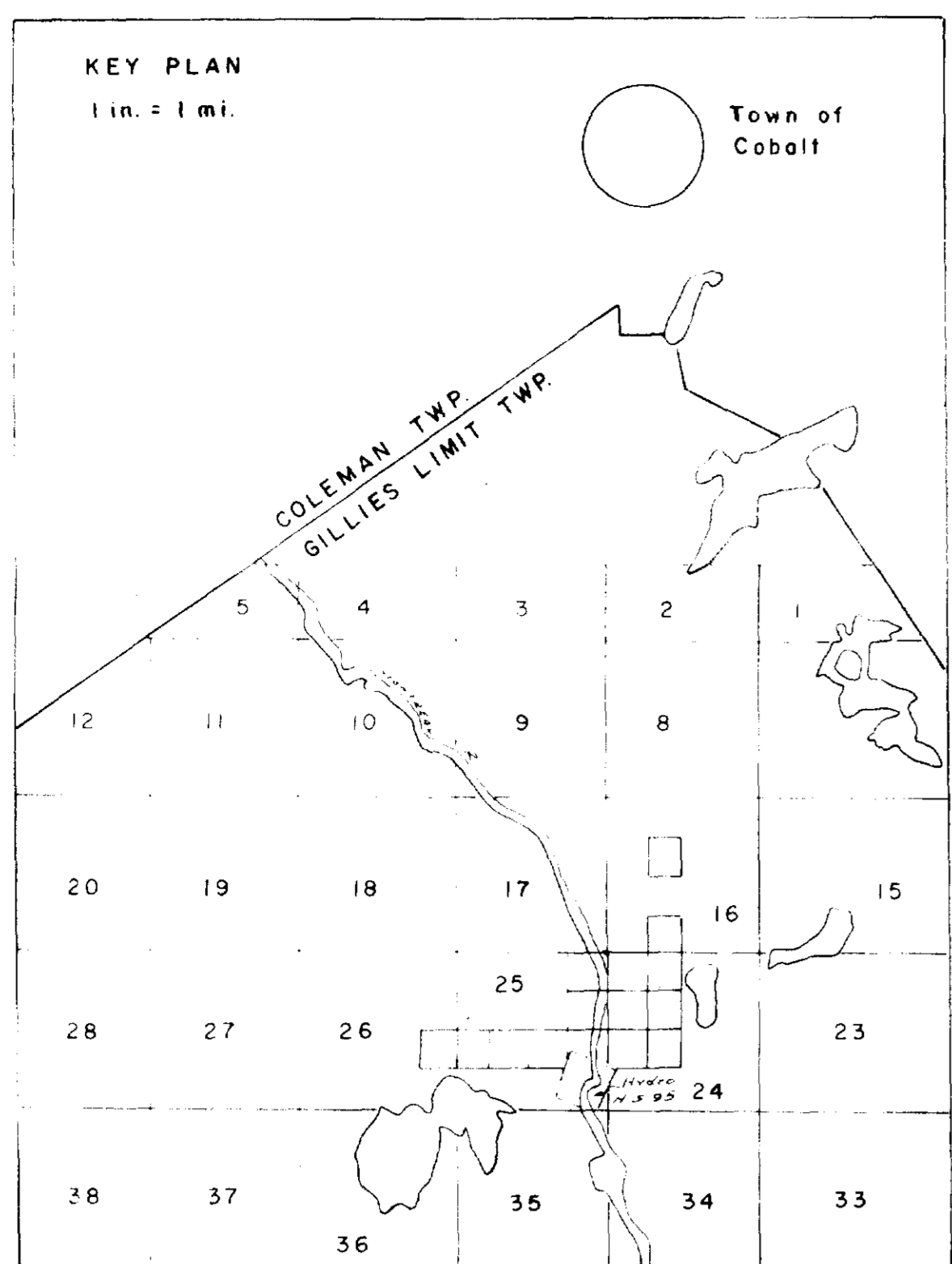
SUMMARY OF SOIL ANALYSES BY TECHNICAL SERVICES LABORATORIES

CLAIM T 58479

<u>Sample Number</u>	<u>Results in parts per million</u>		
	<u>Ag.</u>	<u>Ni.</u>	<u>Co.</u>
C 151	1	10	10
152	1	10	10
153	1	10	10
154	1	10	10
155	1	10	10
156	1	10	10
157	1	10	10
158	1	10	10
159	1	10	10
160	1	12	10
161	1	15	10
162	1	12	10
163	1	10	10
164	1	15	10
165	1	15	10
166	1	15	10
167	1	15	10
168	1	15	10
169	1	15	10
170	1	15	10
171	1	18	10
172	1	18	10
173	1	18	10
174	1	18	15
175	1	15	15
176	1	15	15
177	1	15	12
178	1	12	10
179	1	12	10
180	1	12	10
181	1	15	10
183	1	12	10
184	1	15	10
185	1	15	10
186	1	15	10
187	1	15	10
188	1	15	10
189	1	18	10
190	1	18	10
191	1	20	10
192	1	18	10
193	1	15	10
194	1	15	10
195	1	20	10
196	1	15	10
197	1	24	10
182	1	15	10

MAIN GROUP

<u>Sample Number</u>	<u>Results in parts per million</u>		
	<u>Ag.</u>	<u>Ni.</u>	<u>Co.</u>
C 251	1	22	10
252	1	10	10
253	1	20	10
254	1	28	10
255	1	28	10
256	1	28	10
257	1	28	15
258	1	20	10
259	1	20	10
260	1	20	10
261	1	20	10
262	1	22	18
263	1	18	10
264	1	32	20
265	1	18	18
266	1	18	10
267	1	18	12
268	1	18	15
269	1	18	15
270	1	28	15
271	1	28	22
272	1	20	18
273	1	20	15
274	1	15	20
275	1	15	24
276	1	10	15
277	1	10	10
278	1	10	10
279	1	8	10
280	1	20	10
281	1	18	10
282	1	20	10
283	1	20	10
284	1	20	10
285	1	20	10
286	1	20	10
287	1	18	10
288	1	20	10
289	1	22	10
290	1	20	10
291	1	15	10
292	1	18	10
293	1	18	10
294	1	18	10



LEGEND

KEWEENAWAN

3 Nipissing diabase sill

HURONIAN

2a Conglomerate
2b Greywacke
2d Quartzite

SYMBOLS

Rock outcrop boundary
Geological boundary approximate
Horizontal bedding
Swamp
Stream
Hydro power transmission line
Motor road
Trail
Old trench
Claim lines with posts

T 59097

MONTREAL RIVER

T 59126

T 59150

Hydro reserve H.S. 95
boundaries undefined

BLOCK 17

BLOCK 25

BLOCK 16

BLOCK 24

T 58480

T 58481

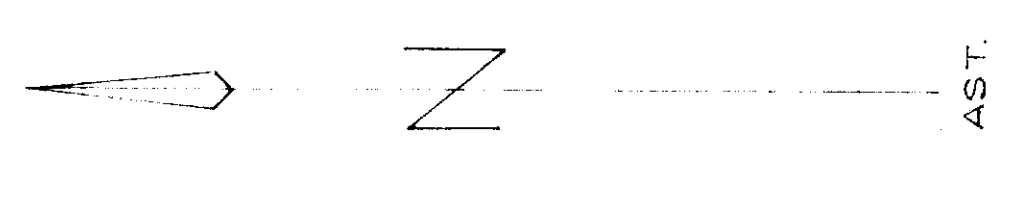
T 58673

T 58417

T 58672

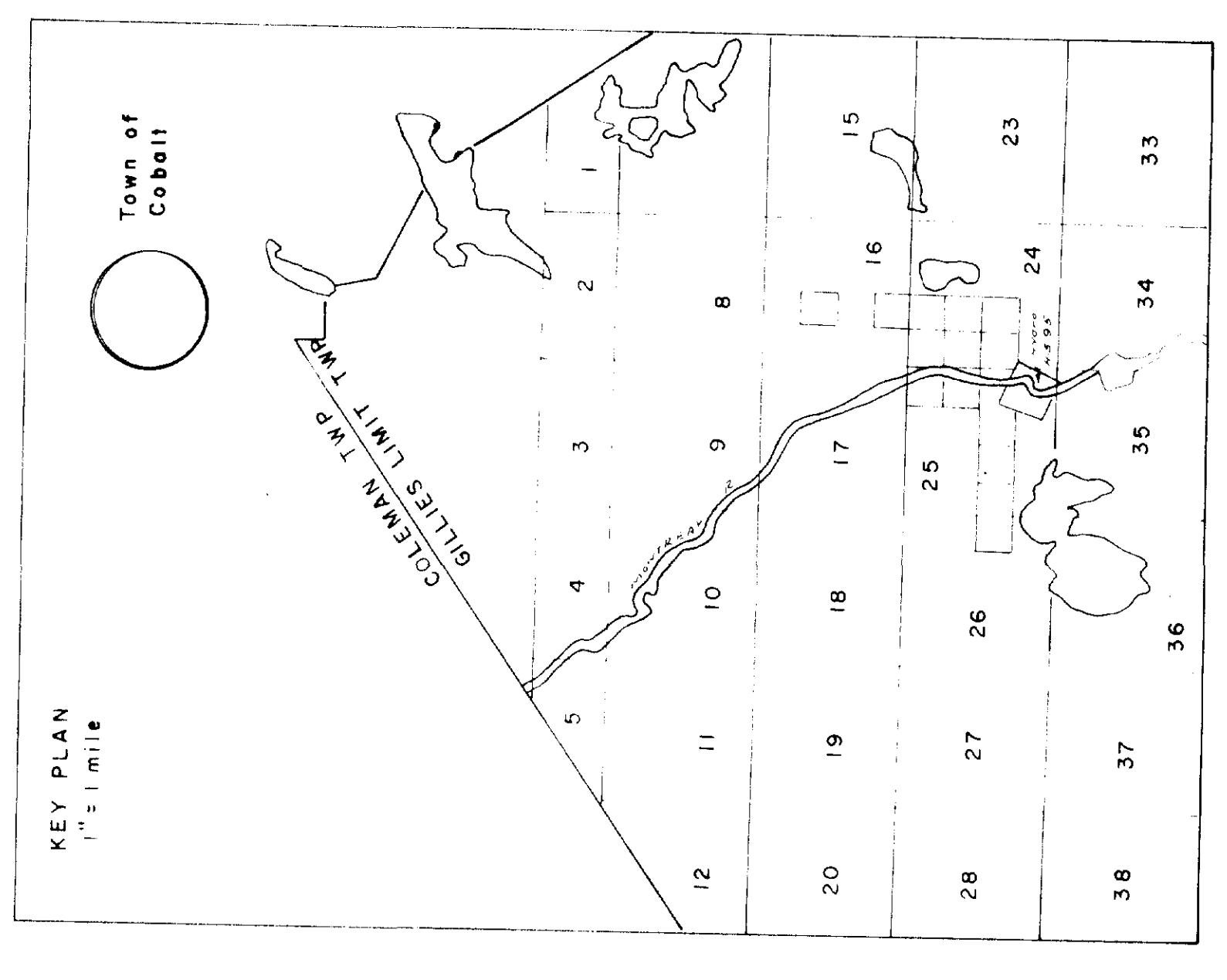
T 584

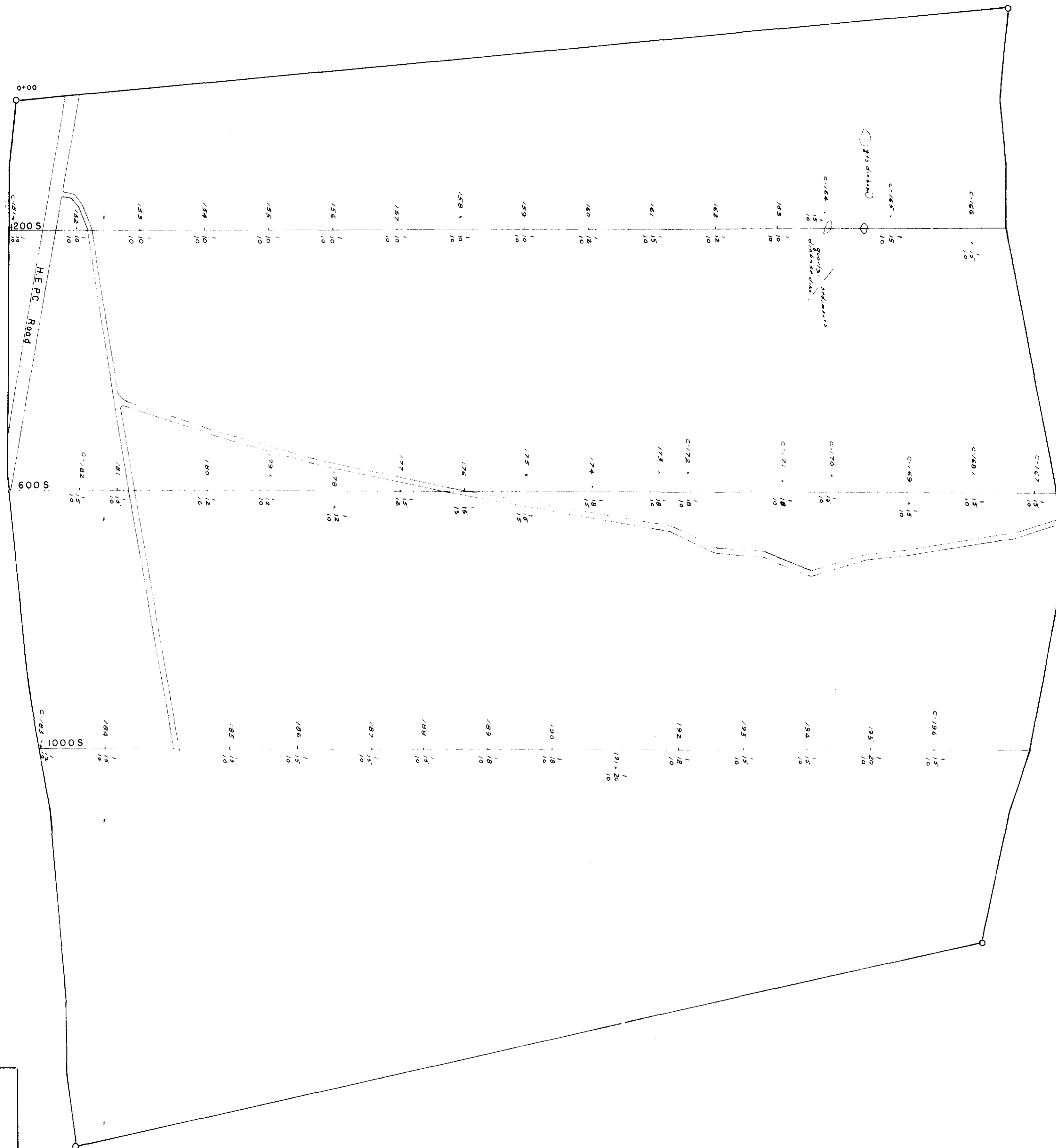
MONTREAL RIVER



- SYMBOLS**
- Rock outcrop boundary
 - Geological boundary approximate
 - Horizontal bedding
 - Swamp
 - Stream
 - Hydro power transmission line
 - Trail
 - Old trench
 - Claim lines with posts

- LEGEND**
- Keweenawian**
- Nipissing diabase sill
- Huronian**
- 2s Conglomerate
 - 2s Greywacke
 - 2c Arkosic quartzite

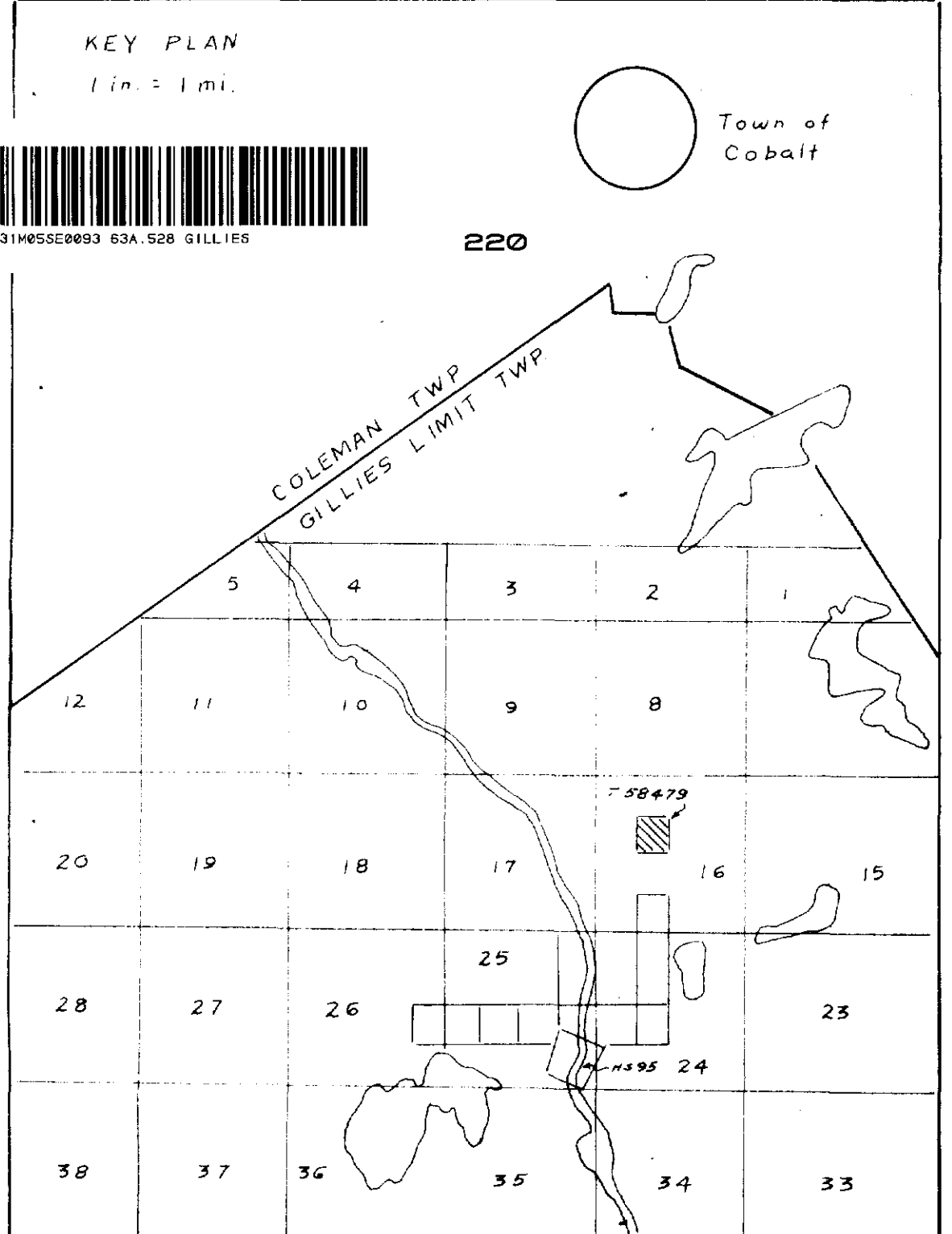




LEGEND

SAMPLE NO. C-166

1 Ag } All values given
 15 Ni } in
 10 Co. } parts per
 million



RAGGED CHUTES SILVER MINES LTD.

MINING CLAIM T 58479

GILLIES LIMIT TOWNSHIP, ONTARIO

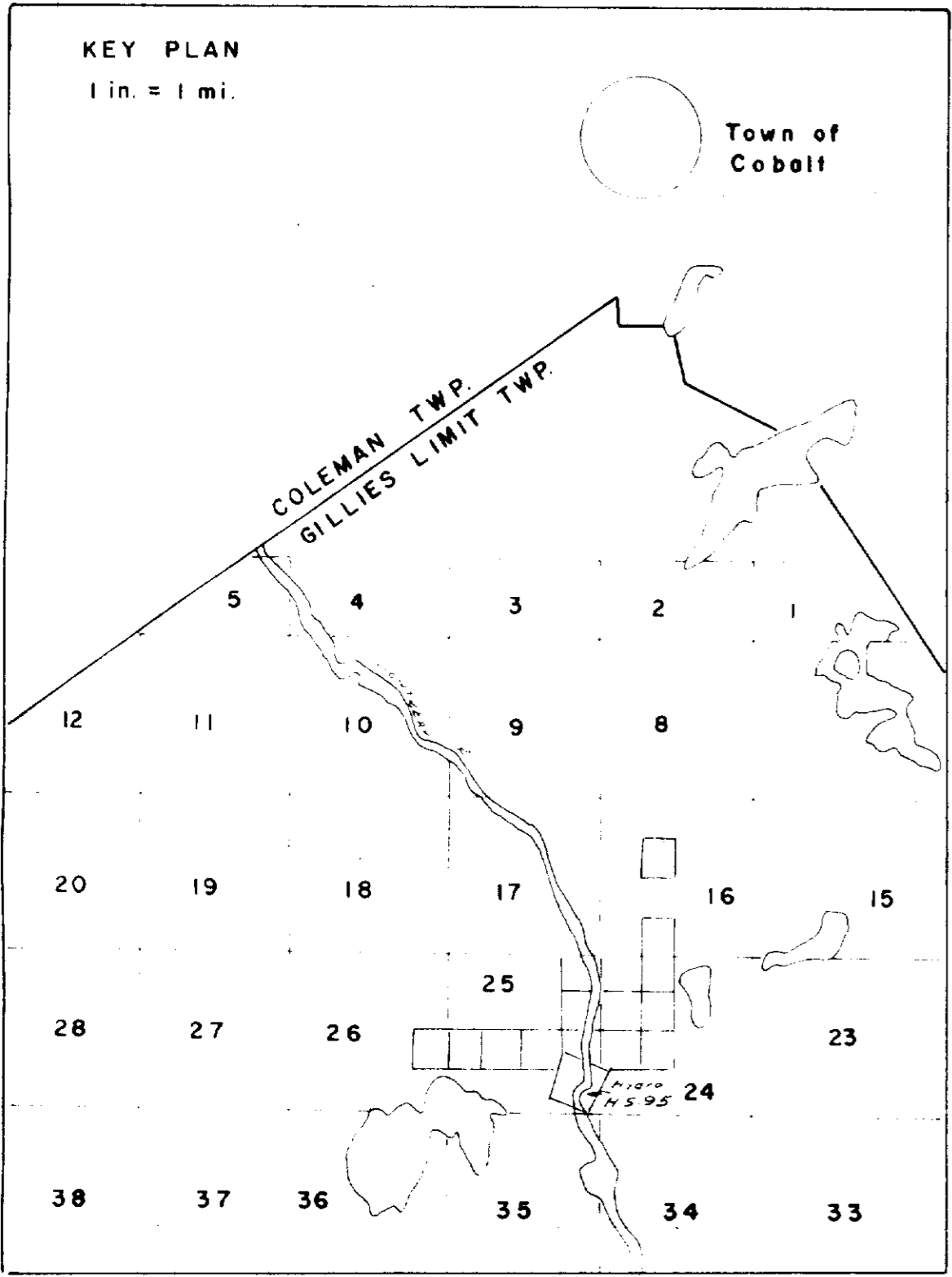
PLAN OF GEOCHEMICAL SURVEY

SCALE 1" = 100'

AUGUST, 1967

W. FOWLER

W. B. Fowler



Sample Number C 291

1	Ag	Values in Parts Per Million
15	Ni	
10	Co	

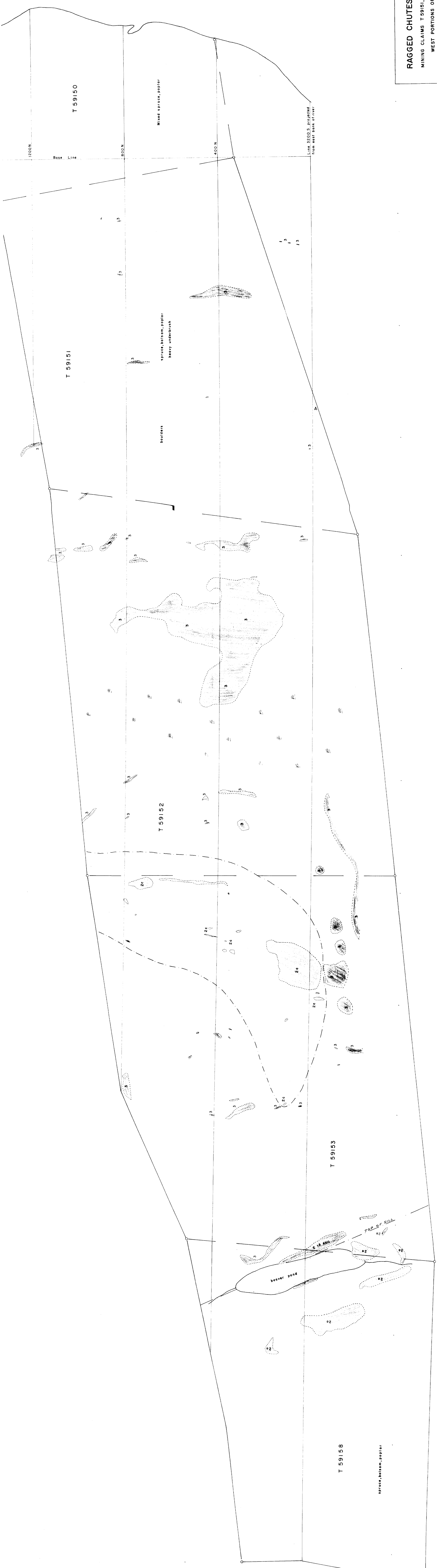
MONTREAL RIVER





RAGGED CHUTES SILVER MINES
 MINING CLAIMS T 58415, 416, 417, T 58672, 673, T
 T 58481 AND PORTIONS OF T 59097, T 59126, T 591
 GILLIES LIMIT TOWNSHIP, ONTARIO
PLAN OF GEOLOGICAL SURVEY
 SCALE 1" = 100'
 JULY, AUGUST, 1967 MAPPED BY

ER



RAGGED CHUTES SILVER MINES LTD.
 MINING CLAIMS T 59151, 59152, 59153, T 59158 AND
 WEST PORTIONS OF T 59150, 59126, 59097
 GILLIES LIMIT TOWNSHIP, ONTARIO
PLAN OF GEOLOGICAL SURVEY

1200 N

800 N

400 N

BASE LINE

T 58415

T 58416

T 58417



RAGGED CHUTES SILVER MINES L

MINING CLAIMS T 58415, 58416, 58417 AND
 PORTIONS OF T 58480, 58481
 GILLIES LIMIT TOWNSHIP, ONTARIO

PLAN OF GEOCHEMICAL SURVEY

SCALE 1" = 100'

AUGUST, 1967

DRAWN BY