

Geology Report - Gull

Intro: Thirteen days (June 23 - July 6) were spent mapping, soil and silt sampling, sampling sections and staking on the Gull group. Two days were lost because of extremely bad weather and one day was spent sorting out the zinc claims.

Staking: A bedded skarn zone (10'-30' thick x ~400') with some sections of massive Zn-Magnetite mineralization, a limestone unit (3'-20' thick x 300'-400') showing a lime-green fluorising mineral Magnetite - Stibnite (Pb_2WO_6) or Cuprosulfite (Cu_2WO_6) were the prime reasons for staking the Gull group (1-2.1).

Gull 1-8	staked	Wayne Butner	June 28	1978
9-10	"	Phyllis Westfall	" "	1978
11-16	"	" "	June 30	1978
17-21	"	Ann's Adick	July 4	1978

Geophysics: Since the skarn is magnetite bearing, a magnetometer survey is planned.

Geology:

Three ages of rocks are represented on the Gull group.

1. Silurian-Devonian: Andesite flows and derived fragments, limestone ~~and~~ skarn in a cherty bedded tuffite, grey wacke (minor volcanic component) and quartzite.

2. Mississippian? Dolomite and Magnetite units with associated skarn zone (possibly caused by a dyke). There is a fault contact ^{and} a ^{or} unconformity? with the Devonian grey wacke and quartzites.

3. Contact cover:

The Scaevall batholith and some minor dykes.

It is curious that the Devonian stratigraphy follows the Scaevall batholith from the Can to the Mon claims (approx 6 miles)

Very little faulting occurs on the Gull, the sharn unit could be in fault contact with the overlying sediments. To the north of the Gull the diabrite unit is faulted, it also forms a syncline. Generally all units strike at 130° - 150° and dip 45° - 85° to the S-W.

Description of Units.

Unit 1 Andesite and derived fragments.

A typical sub-marine (ca-pillow-structured) dark green (Andesite) to light green (chert) fine grained soft greenstone. Most of the section is a lapilli tuff unit (rounded secondary biotite blabs in gas bubbles) and shivered pillows (tops can't be seen). The Andesite is foliated parallel to flowage. The contact with the Scaevall is a coarse biotite-Actinolite hornfels.

Unit 2 Limestone

The limestone is fine grained, gray with later Q_2 veining throughout and is often interbedded with a banded chert unit (3'). There is a Bright lime green fluorog mineral along Q_2 veining and fracture surfaces. This unit is or looks to be along strike of the limestone (W) of the Can claims. A similar limestone, interbedded with Andesite (W, Z) is exposed on the western edge of the Mon

group. The Bull limestone was lumped in several places.

Unit 3. Limestone skarn i.e. Calcareous skarn

A bedded Mgq-Ep-Di-Gr skarn with zoning from a Zn-Ep to Mg-Di-Gr. rock. Below and above the skarn is a fine grained pyritic (with pyrite nodules - deep H₂O) cherty sulfite approximately 2-10' wide - chemical. The total skarn unit is gossanned and has Pyrite + Pyrrhotite + chalcopyrite as disseminations. All of the skarn unit has been lumped and soil sampled. The lumping results showed no shaverite but and minor (Mn-St-CoWO₃)?

Unit 4. Craywackie and Quartzite.

A very hard, brownish Quartzite unit lies above the skarn unit, and is approximately 500' thick - the ~~above~~ weathering the unit weathers - which is hard shows axial plane cleavage & bedding. This unit grades into a more gossanned cherty pyritic unit in the area of Unit 5. Further to the north the unit is a brownish soft meta-granulite with only a minor volcanic component (few Oz eyes). The craywackies are well foliated and bedded. The weathered surface is brown to buff colored and cross bedded.

Unit 5. Dolomite and Dolomite skarn (Magnesian skarn)

Massive white dolomite, about 100' x ^{250'}~~200'~~. Faulted sheared and has a dyke Unit 6 running through it. A dolomite skarn on one edge.

dolomite + Magnesite \rightarrow Mg-olivine \rightarrow ^{Saprophyte} Magnetite + antiperite (Asbestos)

The dolomite skarn is greenish (Serpentine) to black (Massive magnetite) with occasional white talciferous - crysolite (fibrous) occurring in veins and as ^{small} radiating trails on fracture surfaces. This skarn could have been caused by faulting or the dyke Unit 6.

Unit 6 cherty pyritic stonite

This unit is about 3'-10' wide and runs the length of the dolomite, hard, pyritic and pyrrhotitic with calcopyrite. Some brownish globes (Biddle) occur throughout giving it a spotty look. The same type of dyke was seen on the mesa in a similar? unit. The dyke is a long foliation and is gossaned.

Unit 7. Gneiss Batholith.

The gneiss was only seen on two places on the gull in contact with the andesites (a Or-feldspar it, aphte, leuco Or Mon & etc) and on the smart river (Gull csk & Smart River)

Conclusions

The skarn zone can be correlated with the Can-Mun skarn unit, although on the west Mon a very thin (3-5' wide with no seeds) actinolite horizon in limestone was seen. Since the skarn is not very close to the granite contact in many places I propose five types of skarn (base on rock associations)

1. Granite skarn.

Where the granite is in direct contact with the limestone as at J.C., MW-1 heat was derived from granite. W, Sn, Zn, Mag etc.

2. Andesite-Limestone skarn

The andesites are in contact with the limestone and interbedded as a Goll-Car-Moon heat was derived from the andesite W, Sn? Mag, Zn + silicates.

3. Phacolith - intrusive skarn

where a cherty - pyritic (minor spy) intrusive (Sub-volcanic) is in contact with limestone (plug-Goll [see?]) heat was derived from the intrusive.

4. fault skarn:

A skarn caused by faulting & shearing of limestones and Car andesites. No mineralization. MoU

5. Dolomite skarn:

A serpentinite - Magnetite - Antimonite - Cassiterite (Asbestos skarn) heat caused by Unit 10? or shearing. Mag - Zn - spy + py + Po. Goll.

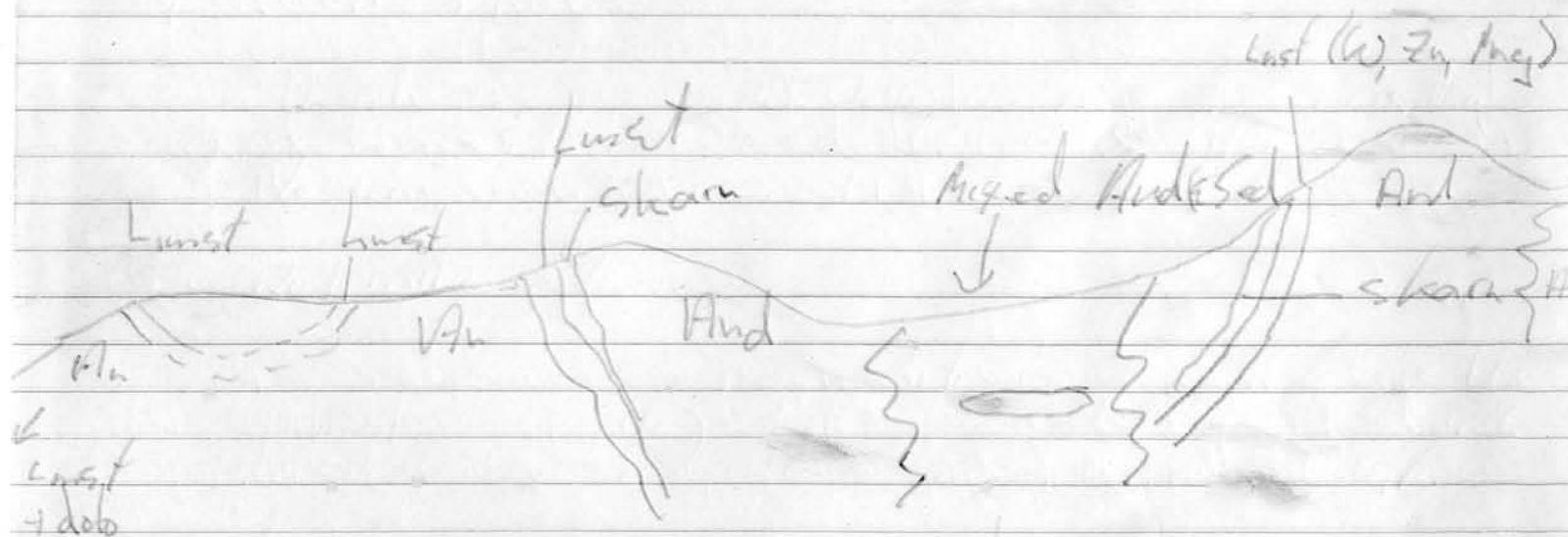
Recommendations:

The geology of the Goll is interesting, depending on the results of geochem. little can be said about the potential. The magnetometer would be a useful tool ~~is~~ for determining strike length

If the geochron. turns out well, and the granite did not disrupt the stratigraphy much (which I think it didn't) the potential would be great.

Note on the Iron traverse

There seems to be two limestone units on the traverse. The first is quite complexly folded, synclinal, faulted, overturned and interbedded with Andesites. This horizon is 3'-10' wide is sheared (W, S, Zn, Mn) and can be correlated with the Gull-Can? The second is a gray to white Ca-Mg limestone-dolomite with an intrusive running through it (similar to Unit 6 of the Gull). The andesites are quite cooked up and in places look like argillite-siltstone. They were pillowed and show columns.



JD

P.S. Hope you can read this mess!

WEEKLY CAMP REPORT

PROJECT D. C. Rocco CAMP NAME & NUMBER Bravo

NTS SHEET _____ DATES July 23 - July 24

AIR PHOTOS All 370-65-3 LAT & LONG _____

SILT SAMPLE SERIES A-1019 - 1024

SOIL SAMPLE SERIES W-1014 - W1055

ROCK SPECIMEN NUMBERS _____

June 23 Set up Camp

June 24 Silted stream on Gull 1-21
-discovered lens in Ck.

June 25 - JAT-BTA mapping first mile, discovered
stone in contact with lens & Amphibole
on West Ridge, east of Cen.

June 26 Staked showing Gull 1-4

June 27 Wet; waited till JCS showed up
decided to stake additional claims
to cover limestone horizon.

June 28 Staked Gull 5-10

June 29 Had to go to Watson to get
claims settled. Zinc group

June 30 Staked Gull 11-16, started to

Rain 11:00 AM

July 1 Snow & Rain

July 2 JAT - mapping 1"=500'
BTA - soil sampling along stream 2 lines 10cm length long

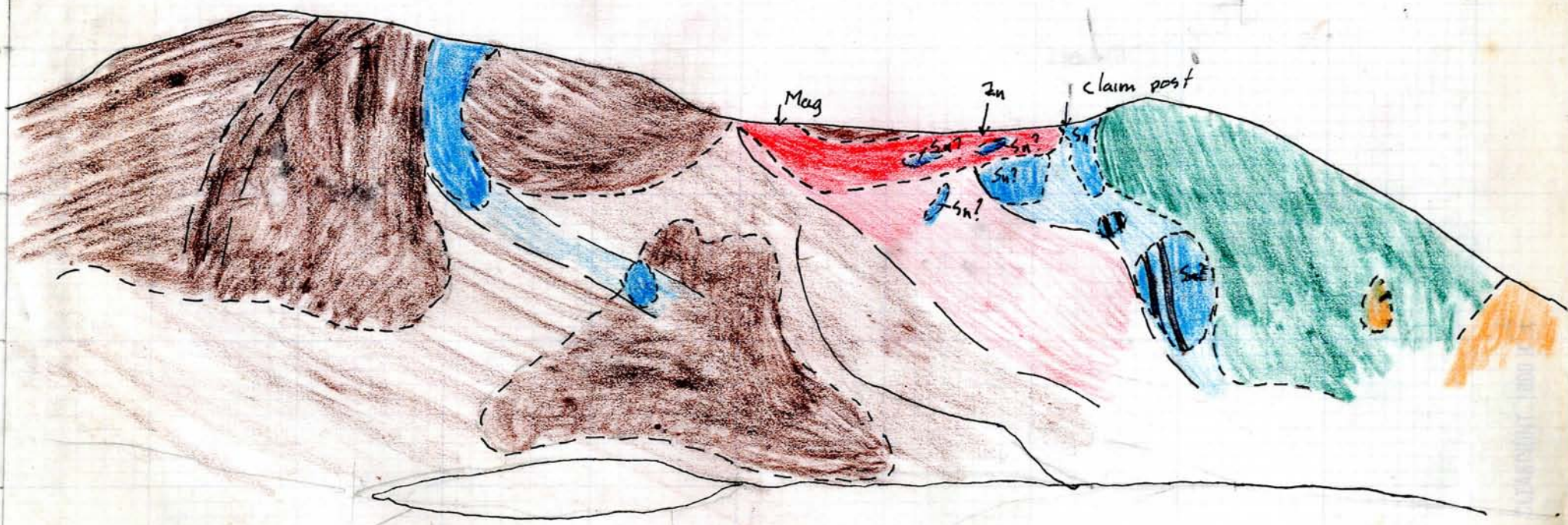
July 3 Wet (25% Rain)

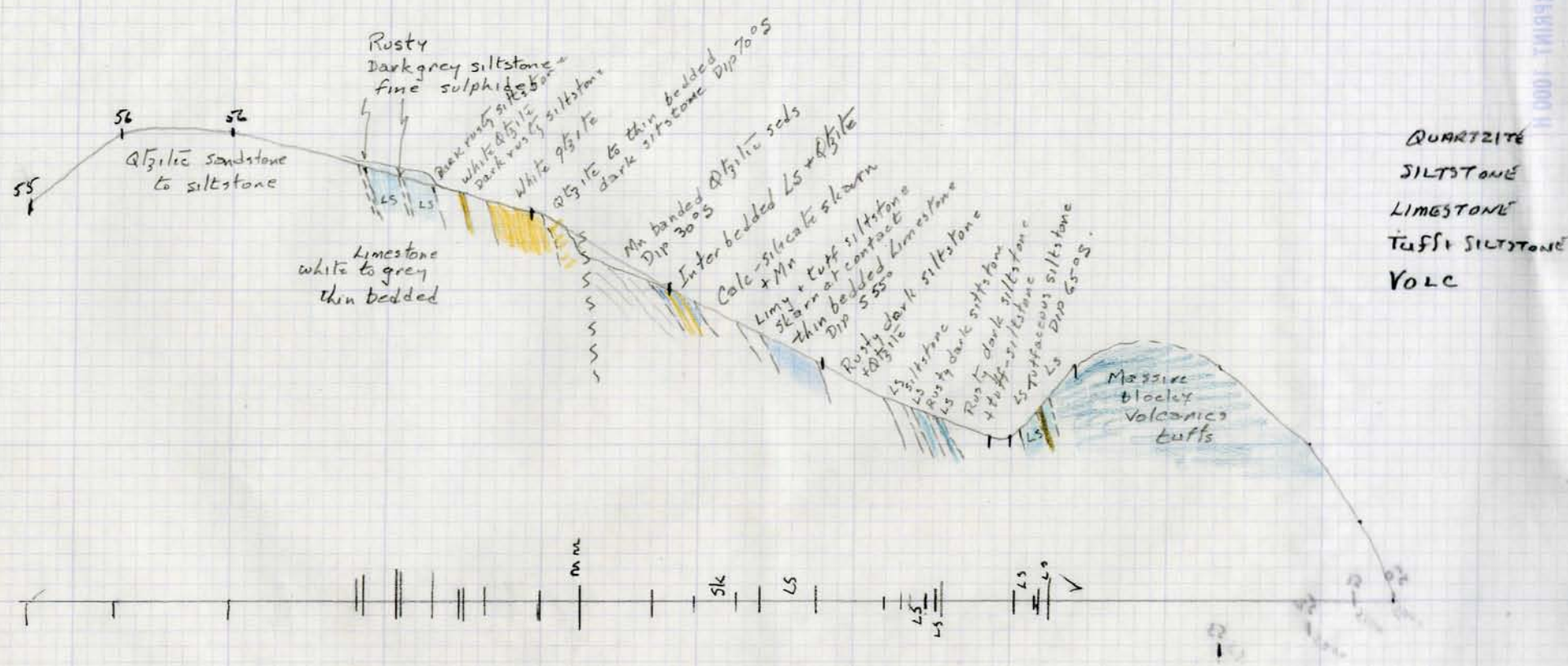
July 4 Staked Gull 17-21 Area Alick

Amos
Hick

A

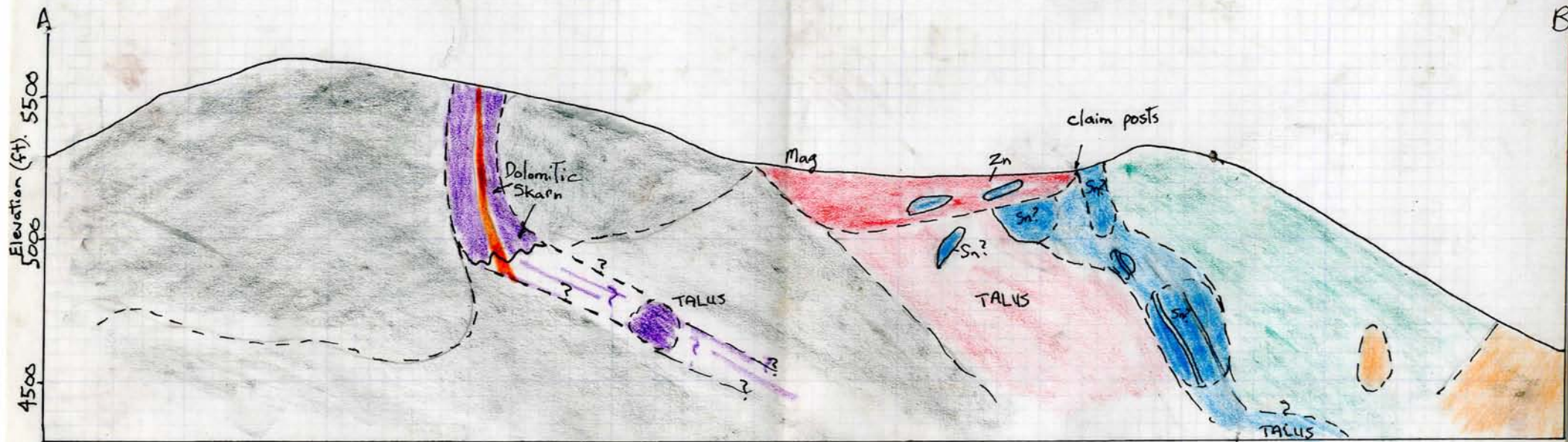
B





GULL GROUP
 105 B-3
 SCALE HOR 1" = 500'
 VERT 1" = 100'
 JULY 1978

GULL GROUP CROSS-SECTION A-B.



**CHEMEX LABS LTD.
SOIL SAMPLES**

COLLECTOR:.....

RESULTS PLOTTED BY:.....

ANALYST:.....

AREA:.....

MAP:.....

METHOD: H.M.:.....

FIELD MAP:.....

DATE:.....

CU.:.....

DATE:.....

DATE:.....

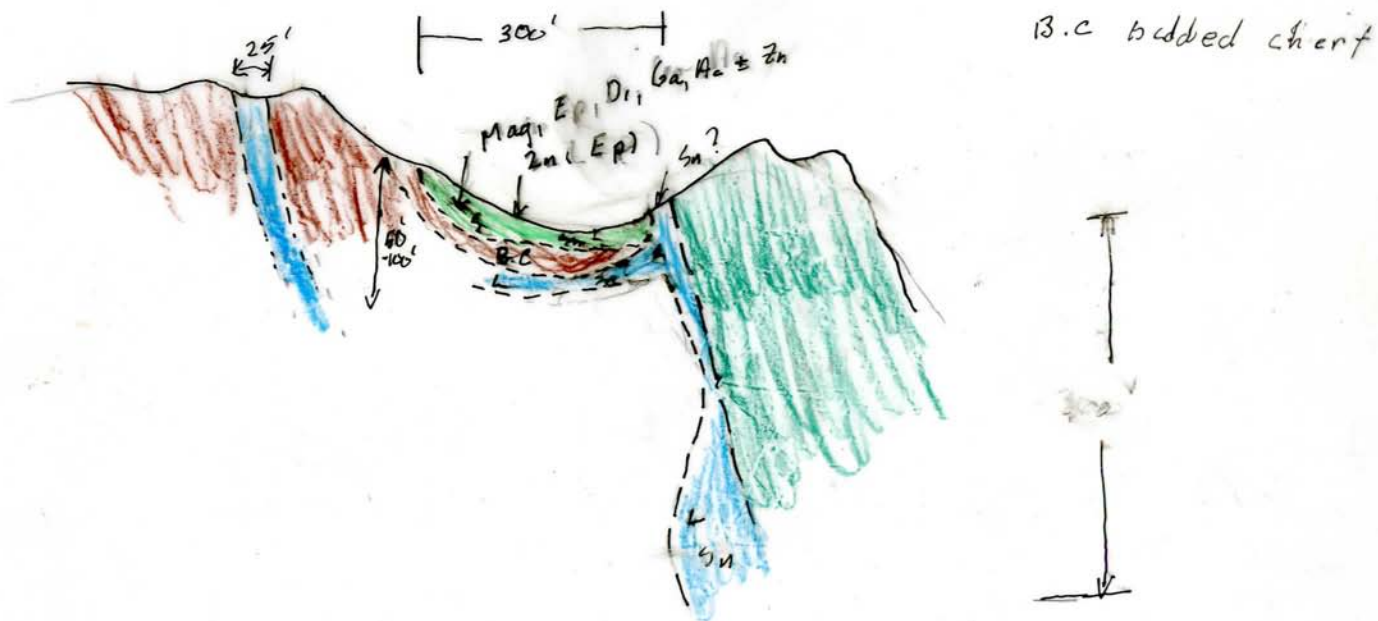
SAMPLE NUMBER	SAMPLE LOCATION	NOTES	TOPOGRAPHY					VEGETATION					SOIL DATA						VALUES			
			VALLEY BOTTOM	SLOPE UP	SLOPE DOWN	HILL TOP	LEVEL GROUND	HEAVILY WOODED	SPARSELY WOODED	BURNT	LOGGED	GRASSLAND	HORIZON SAMPLED	THICKNESS OF HORIZON	GOOD	POOR	HORIZON DEVELOPMENT	PARENT MATERIAL	FIELD SCREENED	Mo	Cu	Pb
78DCW																						
1007	Plug Group																					
1008	"																					
1009	"																					
1010	"																					
1011	"																					
1012	"																					
1013	"																					
1014	Gull Group					X	X				X				✓							
1015						X	X				X				✓							
1016						X	X				X				✓							
1017						X	X				X				✓							
1018						X	X				X				✓							
1019						X	X				X				✓							
1020						X	X				X				✓							
1021						X	X				X				✓							
1022						X	X				X				✓							
1023						X	X				X				✓							
1024						X	X				X				✓							
1025						X	X				X				✓							
1026						X	X				X				✓							
1027						X	X				X				✓							
1028						X	X				X				✓							
1029						X	X				X				✓							
1030						X	X				X				✓							
1031						X	X				X				✓							
1032						X	X				X				✓							
1033						X	X				X				✓							
1034						X	X				X				✓							
1035						X	X				X				✓							
1036						X	X				X				✓							

N-G CROSS SECTION

No Scale:

Coll (1-4) m? showing

June 27 1978



GULL CLAIMS Adjoining CAN GROUP.

1-8 staked by Wayne Bulmer

1-4 dated June 26, 1978.

5-8 " June 28, 1978.

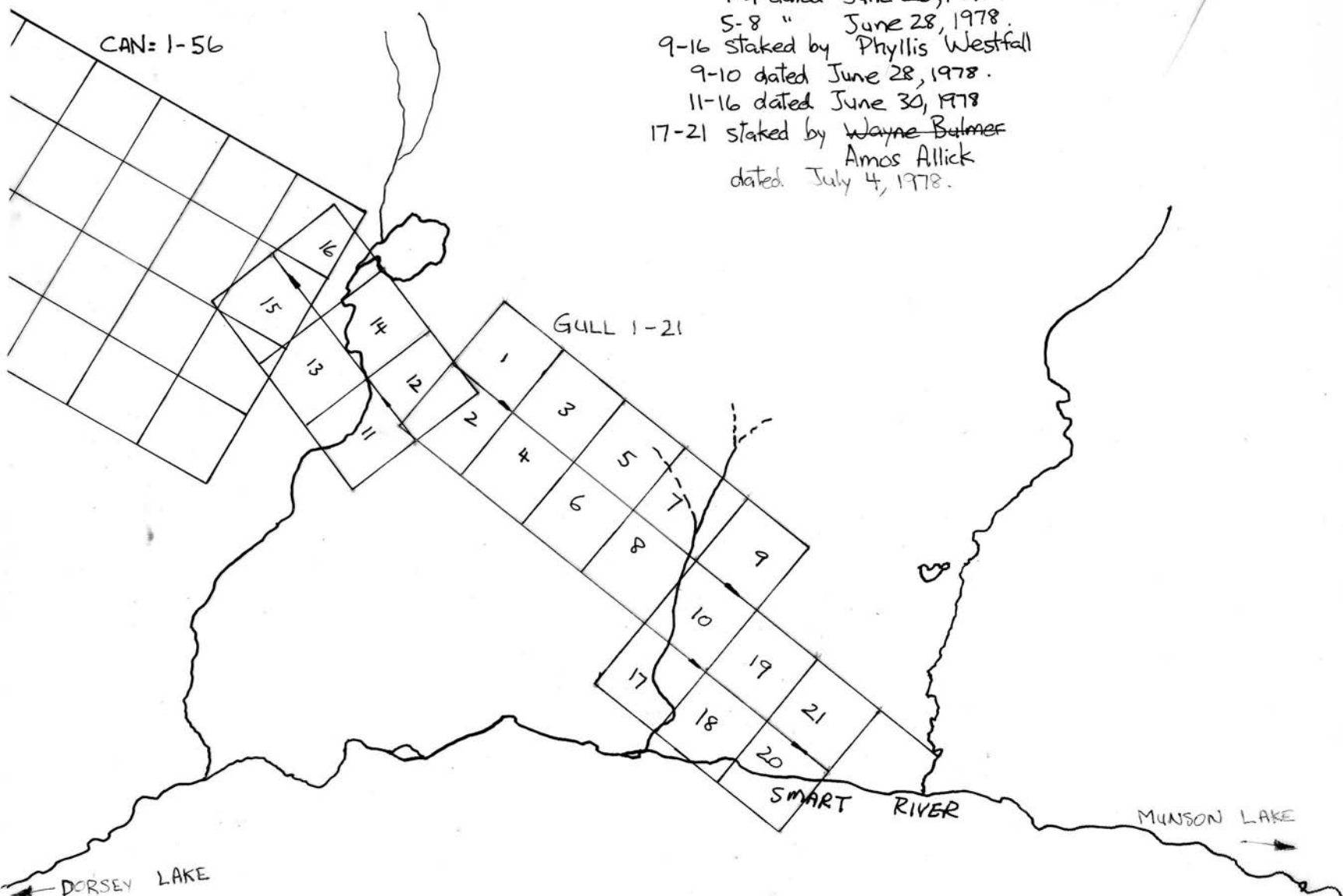
9-16 staked by Phyllis Westfall

9-10 dated June 28, 1978.

11-16 dated June 30, 1978

17-21 staked by ~~Wayne Bulmer~~

Amos Allick
dated July 4, 1978.



ACTUAL

A11370-353

Gull Claims adjoining CAN claim group.

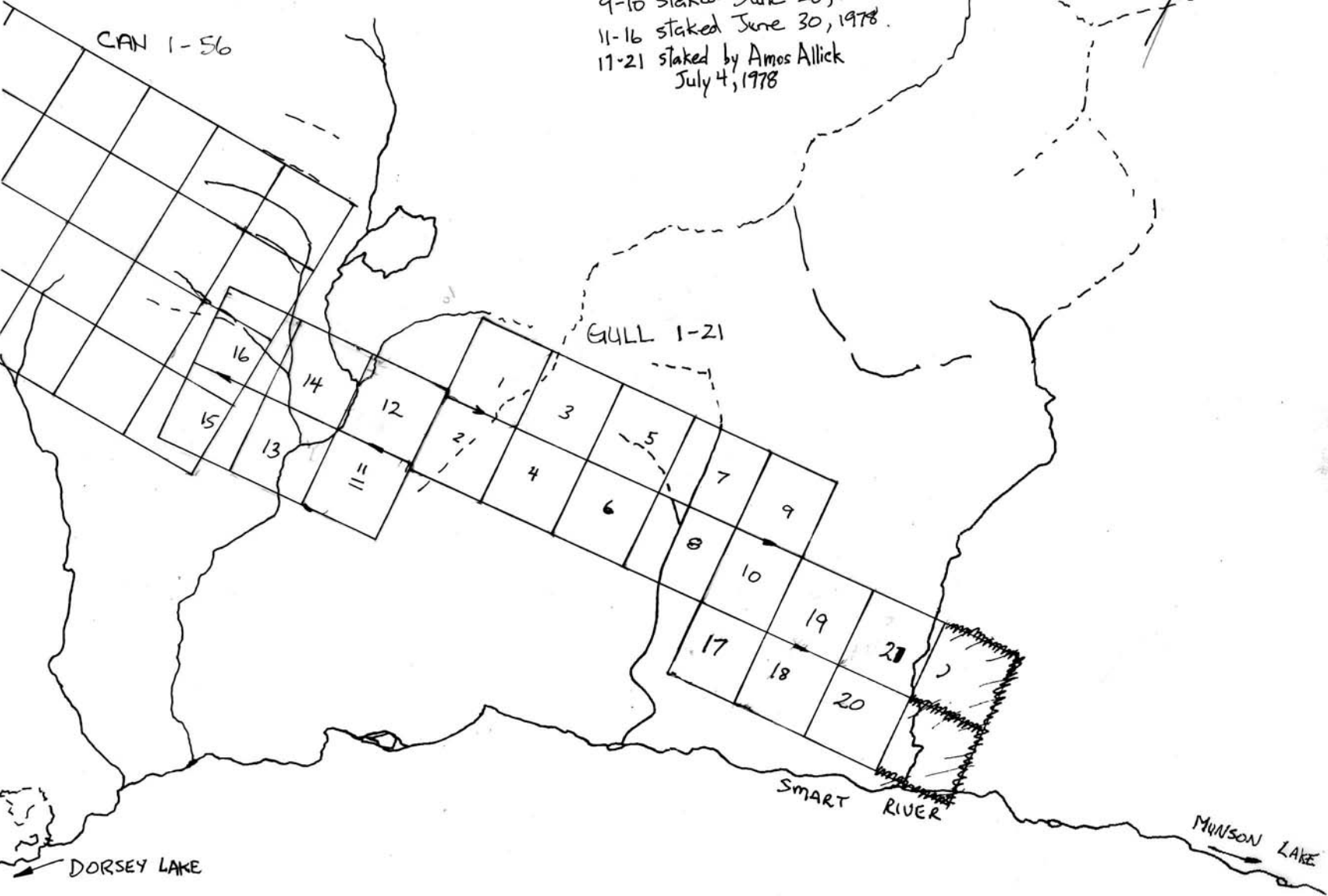
1-8 staked by Wayre Bulmer
1-4 dated June 26, 1978
5-8 " June 28, 1978

9-16 staked by Phyllis Westfall
9-10 staked June 28, 1978
11-16 staked June 30, 1978.
17-21 staked by Amos Allick
July 4, 1978



CAN 1-56

GULL 1-21



PLANNED

A 11370-353

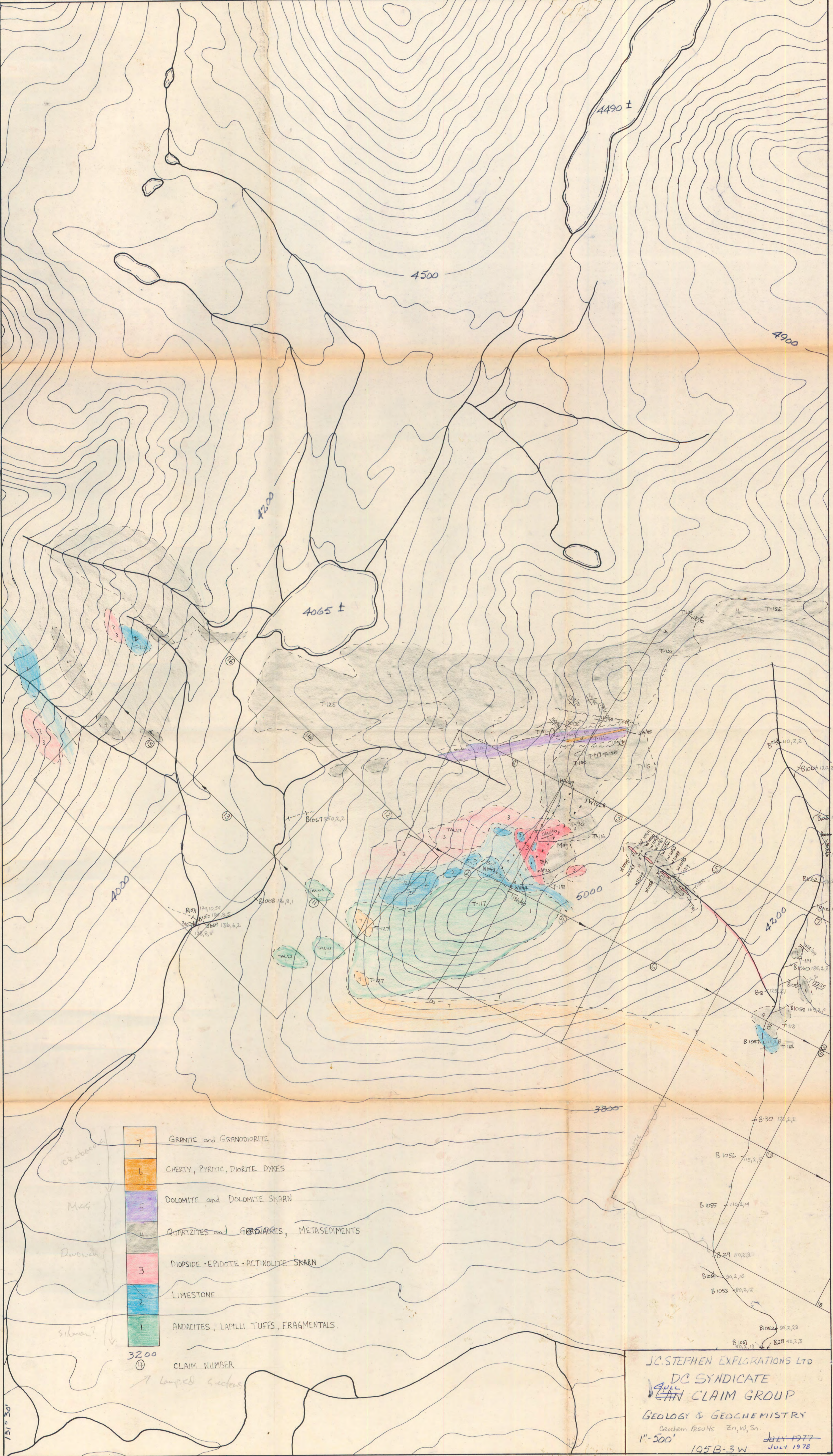


Legend

Granite	7
Sandstone	6
Limestone	5
Gneiss	4
Shale	3
Limestone	2
Alluvium	1

J.C. STEPHEN EXPLORATIONS LTD
 DC SYNDICATE
 CAN CLAIM GROUP
 GEOLOGY & GEOCHEMISTRY
 1"-500' July 1977
 105B-3W

131° 30'



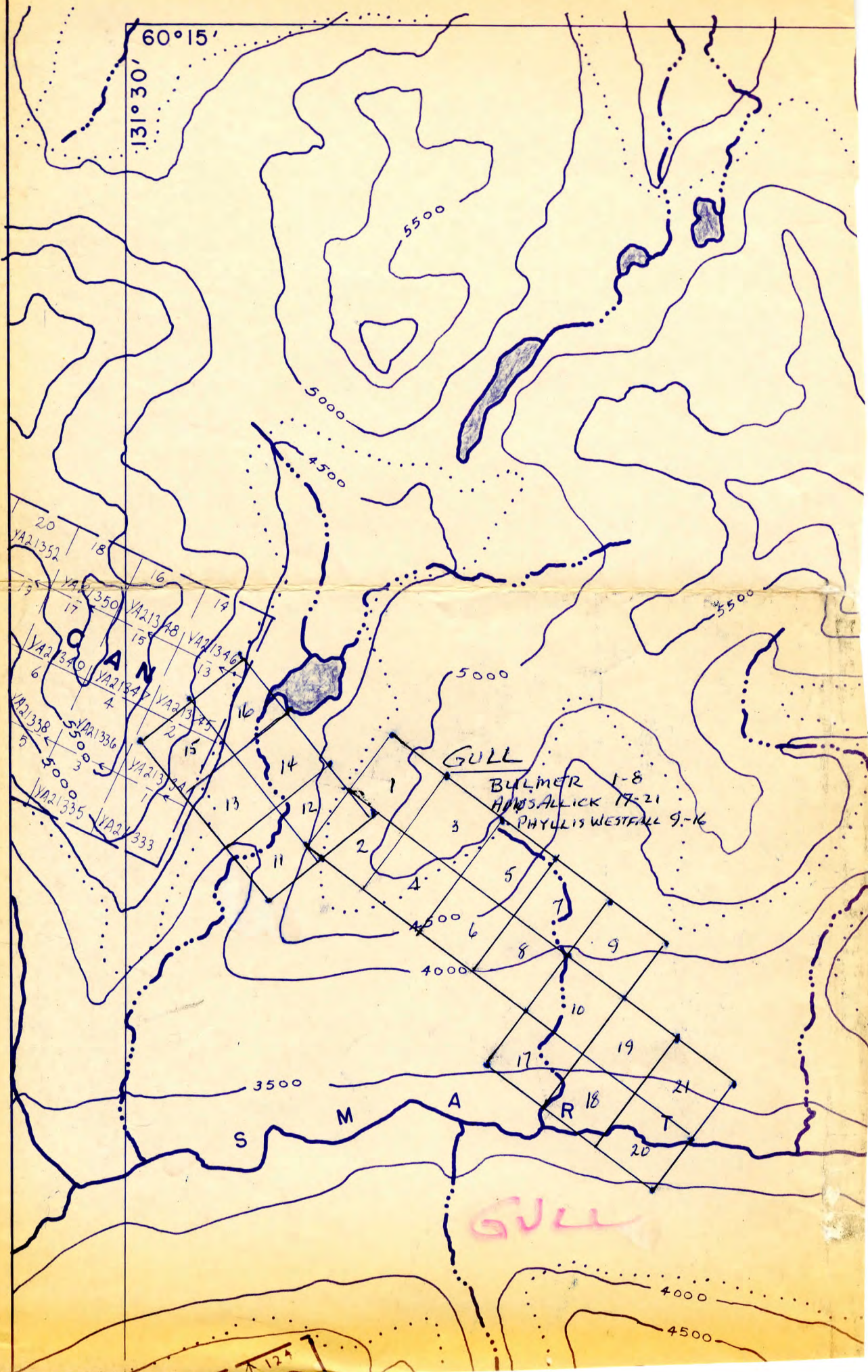
- 7 GRANITE and GRANODIORITE
- 6 CHERTY, PYRITIC, DIORITE DYKES
- 5 DOLOMITE and DOLOMITE SKARN
- 4 QUARTZITES and GNEISSES, METASEDIMENTS
- 3 DIOPSIDE-EPIDOTE-ACTINOLITE SKARN
- 2 LIMESTONE
- 1 ANDACITES, LAPILLI TUFFS, FRAGMENTALS.

3200
 (11) CLAIM NUMBER
 ↗ Lumped together

JC. STEPHEN EXPLORATIONS LTD
 DC SYNDICATE
 GULL CREEK CLAIM GROUP
 GEOLOGY & GEOCHEMISTRY
 Geochem Results Zn, W, Sn
 1" - 500' JULY 1977
 105B-3W JULY 1978

131° 30'

60°15'
131°30'



20
YA21352
18
16
YA21350
YA21348
YA21346
17
15
13
O A N
YA21349
YA21347
YA21345
6
4
YA21338
YA21336
YA21334
5
3
1
YA21335
YA21333

GULL
BULMER 1-8
ANN SALLICK 17-21
PHYLLIS WESTFALL 9-16

124

131° 36'

60° 15'

63

64

65

66

25'

RAM

JURNER 1978
GULL GAP

