

673995  
104P/12W

CASAU

CAS 1

JULY 29 - AUG 5 1983

We set up camp on July 29 at approx. 6,000 ft in the main valley of the property. The intention was that I, James Lawton, was to do the mapping of the surrounding area and that Ian Stephen was to silt sample the creeks and rivers in the immediate area. Henry Aumack, for the short time that he was here, was to provide assistance for me and to prospect the general area around the claims. Henry left to join Charlie camp on August 2nd.

The silt sampling was done with an interval of 500 meters between samples on all the neighbouring streams and creeks. The samples consisted of 83 CAZ-1 to 83 CAZ-55. The samples were run for Au and As.

The rock samples went from 41201C to 41210C. They were all run, geochemically, for Au, As and Ag. However, the first three were run for Mo as well and the fourth and fifth samples for Cu.

The geology of the area is complex and in the main consists of volcanics variously altered, with sediments and ultramafics interbedded and lying alongside them. The whole has been intruded upon by the Cassiar batholith and in various places by porphyritic dikes. The contact with the granite lies along the western and south western side of the property. At one point along the contact there are granitic sills intruding into the neighbouring ultramafics. There are basalts here, as well as ultramafics and the first of the volcanic alterations, ~~a~~ a silicified, slightly hornfelsed andesite.

The volcanic alterations change rapidly over a short distance and almost every outcrop is different in its own way. So I have reduced them into two groups. The first is that which is ~~is~~ chlorite altered and has carbonate with it and the second which is just the chlorite alteration. The latter occurs to the east and south east while the former is more in the center of the property.

AR6  
Throughout the western and central sections there are layers and lenses of a silicified argillite that is interbedded <sup>into</sup> or overlain by the volcanics. By which, I mean that in outcrop one will ~~not~~ find lenses of the argillite in the middle of the volcanics with no apparent connection to the next appearance of it. There are not only lenses, but definite layers of the argillite that appear in some cases to be overlain by the volcanics.

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In the northern end of the property there are two widely separated outcrops of the other sediment, a very slightly silicified grey limestone. These are the only showings of it on the property and consist mostly of rubble.

There was some mineralization to the ~~east~~ west and north west. A few flakes of molybdenum in quartz <sup>veins</sup> and some finely disseminated pyrite. Other than that there is very little or no mineralization on the property.

I mapped the property by assigning a new number to every new unit that I came across. Originally there were 30 such units. The majority of them were volcanics whose alteration had changed in degree and content. However, by using the parameters mentioned earlier (e) that of silicified and hornfelsed, chloritized and carbonated and just chloritized, I reduced the number of units to thirteen. This is not as wild as it sounds since I would declare a new unit at the drop of a hat if I was unsure of what I was looking at. As a consequence however, I have left the map uncoloured in case you did not agree with me on the names or choice of units I have chosen. There is also the more mundane reason of not having enough coloured pencils.

The units are as follows (because of the juggling the unit numbers appear to have no logical sequence):

- ✓ 1 - Ultramafics, in most cases with serpentinite. Weathers a rusty brown. Forms round boulders

2 - Basalts, in some cases a slight bit of silicification

✓ 4 - slightly silicified and hornfelsed andesite

~~5~~ - slightly silicified argillite, pronounced foliation

✓ ~~6~~ - Cassiar batholith - resembles a white granite

✓ 8 - Biotite<sub>2</sub> feldspar porphyry - weathers orange and on fresh surfaces ranges from whitish to dark grey.

4c - Porphyroblastic with a black fine grained matrix. porphyroblasts are large feldspar crystals. Only one o/c though lots of talus

9 - Massive chlorite alteration of a fine grained volcanic. Has some carbonate

11 - slightly chlorite altered diorite

12 - Massive chlorite alteration with black carbonate streaks and bands. possibly originally it was 11

✓ 17 - slightly silicified limestone grey weathering

✓ 21 - disseminated chlorite alteration of a fine grained volcanic, possibly basalt

✓ 29 - disseminated chlorite and carbonate alteration of a <sup>fine</sup> medium grained volcanic.

9, 12 similar to dacite? Loc? ✓

4, 21, 29 andesites

The porphyritic dikes mentioned earlier are all of unit 8. There is only one showing of 4c but there is quite a lot of related talus.

In general I think this property was once or is part of a greenstone belt, which would explain the confusing alteration zones and the aimlessness of the argillite showings, that has been intruded upon and cooled slightly ~~but~~ by the Cassiar batholith and, I presume, attendant porphyritic dikes. I also feel that there is not much here in terms of a worthwhile find.

If a return to this property I suggest a campsite down by the lakes or in some other sheltered spot as the wind is constant and ferocious at this altitude.

# CAS 1 LEGEND.

LAWTON'S LIST.	ROCK UNIT	NAME
8	9	BIOTITE FELDSPAR PORPHYRY DYKES + SILCS
6	8	CASSIAR BATHOLITH Biotite Qtz monzonite
	1	
1	7	ULTRAMAFICS - SERPENTINITE
17.	6	Grey fossiliferous limestone
4C	5	BLADED <del>FELDSPAR</del> PORPHYRY. (AUGITE PORPHYRY) ( <del>AUGITE PORPHY</del> )
9+12 11 A	738 1/2 4 3	Dacite, DACITE BRECCIA <del>DIORITE</del> ARGILLITE - pronounced foliation.
4, 21, 29	738 2	ANDESITE
2	739 1	1 BASALT

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