

July 24 - cloudy

840788

Fly camp Marvel Pass,  
headwaters Aurora Creek;  
Eon Mtn area

1 - Lomenda - Sargent  
- traverse south side  
valley, below Mt.  
Alcantara

Eastward of camp, up hill  
talus + sparse outcrop

up hill → thinly bedded,  
med grey to bluish grey  
weathering l.s., finely lam &  
oolitic, with scattered pisolites  
& pisolite bands, thinly  
bedded, cleaved, siliceous  
greenish yellow to light  
brownish grey with siliceous &  
argillites (interbedded);  
white quartzite

- white gtzite at top  
 - overlain by the bluish grey ls. described before, thin; towards top is more massive or thick bedded with brownish dolomite mottles

- overlain by ~~stiff~~ light brownish-grey, light reddish brown to brown weathering, massive & finely lam (or wavy lam), med. fine X line dol.

~~\* ~~Sequence~~~~

- Sequence (below ~~probably~~ mainly talus so sequence probably wrong)

- bluishish-grey ls. <sup>up</sup>  
 brown dolomite (stromatolitic in places) → greenish slates & siltstone → white, cream, & pink med to coarse gtzite (X-bed, pyritic in places). Gtzite has some thin beds siltstone & minor red shale

- fault? between carb. + slates → bed of slates  $340^{\circ}/30^{\circ}W$
- carbonates flatter dipping
- Carb  $\approx 12^{\circ}/15^{\circ}E$

- Dolomites → white to light grey, fine grained fine, buff to light brown weathering, stratified
- → mottled light + dark grey weathering, massive
- clastics disappear over ridge south of Aurora mtn.

L- 24/7/76-1 soil → creek just at contact dolomite

- & clastics
- brown, 5" down, full of rock fragments

- - talus prospecting beneath cliff → dark + light grey dolomite replaced concordantly by sparry dolomite. looks

120 Pacific Rimpro  
like zebra structure. In  
places fragmentation. Always  
long, narrow plates of  
dolomite separated by white  
dol spar.

- some talus block finely lam  
& massive l.s. & limy dol.  
This stuff not brecciated

L-24/7/76 - 2 - 7350'

- cliff
- dolomite, med. grey, weathering  
light brown, massive but  
lower is finely lam &  
stromatolitic
- 100' higher is dark grey  
massive dolomite
- underlain by the buff &  
pink dolomite seen earlier  
& by thin bedded light  
grey dolomite

~~to 4446'~~  
- lower down - 6900';  
l.s.; finely lam thin bed,  
banded red grey & yellow-  
orange

- with animal tracks on bedding planes

- might be McKay??

- bed  $8^{\circ}/34^{\circ}$  E

Large coarse carbonate talus  $\rightarrow$  X's up to 1" across; dolomite

L-24/7/76-3 - 6600'

- dolomite intensely replaced by dol spar

- veins of dol spar or magnesite?

- lower is grey l.s. than dark grey, purplish grey weather dolomite

L-24/7/76-4 - 6000'

- just large draw, no more sparry carbonate

- talus bluish grey weathering, mottled l.s.

- mottles are black + dol.

- also in place is thin bedded with orange dolomite beds & n mottles

- some ~~large~~ silicification

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- Lower part of thick carbonate is quite limy → underlain by grey, green weathering, thin bedded, cleaved silstone - argillite

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- up creek  
 - white quartzite layer on argillite  
 - further up is rubble area of white, buff & light grey weathering, finely & fine dolomite - massive

July 25 - sunny, hot  
N.T.S.

- Lomenda & Sargent  
- traverse north side of  
Aurora Creek → west side  
of camp

Ridge just west camp but  
in valley is white coarse  
thick bedded gtzite: bed ~~of~~ g

L-25/7/76-1 345°/30°W

- Creek crossed into finely  
cleaved & thin bedded arg. l  
with some siltstone; bed 30/12°
- concordant with gtzite?

- crossed into dolomite: white to  
light grey, fine grained & fine but  
intensely rell to very coarse & fine  
& massive dolomite → before talus  
of steep cliff

up lower Mt Olovie west  
to park boundary ~ 7650'

L-25/7/76-2

- Sequence: l.s., dark grey, weathers  
med. grey, with thin mottled-like  
layers orange dolomite  
- thin, bedded

→ dolomite, light brownish grey, weathers lighter, oolitic, beds 2" to 3", farther up looks massive (no oolitic) but in places can see pisolites.

→ up to thin bedded (1-3") finely lam dol: to white to light grey, weathers buff to light purplish brown

→ recessive layer locally, talus, dark grey (l.s.), weathers bluish grey, with orange thin beds (this may be talus from above)

→ cliff coarsely <sup>to sparite</sup> & lam dolomite, light brown, massive, with veins of chert with xls 2" across; pods of goethite

→ dol, dark grey, weathers light brown, thin bed, but ~~totally~~ brecciated & vuggy

→ l.s.: dark grey to black,



weathers slightly lighter, finely  
lam, thin bed, with orange

- ~~rather~~ wispy laminations
- lots of animal tracks on bedding planes (8400')
- Stephen Fin?

→ Top cliff looks like dolomite.

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- sparry & stuggy dolomite  
is replacing finer dol & l.s. in places. Goethite zone can be seen going southward along cliff
- lower at top of recessive zone are light grey, white weathering thin bed stromatolites

L-25/7/76-3 - ~ 7600'

- base of cliff
- thickly bedded limy argillite & minor l.s.
- light brown, weathers greenish brown
- beds nearly flat.
- this is below lowest l.s. of overlying carbonate

- further south & lower, passes into green argillite with some siltstone interbeds
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2 - 25/7/76-4 - 7250'

- drag folded argillite, close to camp
- axial plane cleavage  $140/78^{\circ}W$
- below beds  $160/78^{\circ}W$  as opposite to nearly flat beds above
- flat beds  $\sim 210/10^{\circ}W$

- 5 ~ 7150'

- up draw: argillite  $\rightarrow$  bluish grey l.s.  $\rightarrow$  dolomite
- Dolomite: white, weathers reddish-brown, buff, finely & coarse massive but in places fine lam. can be seen  $\rightarrow$  algal?
- bed  $165/45^{\circ}W$

# - 6 7400'

- nearly flat, weed covered area near talus.
- soil, med. brown, clayey, 3-7" down, rootlets, with talus

• pierces

L-25/7/76-7 ~ 7250'

- along next westerly draw
- 2 dark bands visible in other draws → dolomite?
- here → band of black, dark grey weathering, fine gr. dolomite
- with wispy white dolomite blebs & fine mottles (concordant)

L-25/7/76-8 ~ 7400'

- talus below cliff of argillites - siltstones
- light grey dolomite fragment with tiny slightly discolored veinlets
- + or Zn in veins

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20/15" w

345/45 w

MOUNT STURDEE

MOUNT ASSINBOINE

LUNETTE PEAK

Lake Gloria

Lake Terrabin

# MOUNTAINS

MOUNT AYE

icefield

Eldon etc.  
MOUNT GLORIA  
Stephen  
Cathedral

argillites

X - geology station  
Soil

Cathedral  
MARVEL PASS  
argillites  
qtzite

CON MOUNTAIN

KOOTENAI RIVER

AURORA MOUNTAIN

L-24/7/76 - southwly side Aurora Creek

L-15/7/76 - westerly side of Aurora Cr.

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Aurora

argillites  
Cathedral

qtzite

BLUE

MOUNT ALCANTARA

Stephen

MOUNT BRUSSILOF

Alcantara

Creek