

R45F -  
2469

6.6 - 94 in cg

4 100/130 at Gillespie.

3 1/2 100/130 at Snake  
7 Aug.

a product of

**J. L. DARLING CORPORATION**  
TACOMA, WASHINGTON 98421 U.S.A.



**LEVEL**

018620

NOTEBOOK NO. 311

R45P-45R → 107R

P. DEAN 25 JULY →

7 Aug.

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\_\_\_\_\_  
\_\_\_\_\_

25 JULY: PROSP. TRAN - 106C-13

Lead-zinc geochem in large drainage w. of LAD CLMS.

$\Delta 1$  SHOWING #1 - pyritic & sil. zone ~10-20FT WIDE - NO VIS. sp. orga. but minor HZ in talus Pb & Zn probably leached from showing by abundant py. Zone continues for 300FT, disappears under talus in both directions. Crosscuts bedding, looks like a tectonic ~~bx~~ - probably a fault zone. Sample

$\Delta 2$  Float of shaley ds coated with HZ - similar to  $1^{\circ}$  mineralization or will, Oz etc. 2 Samples. Also some remob sp in grey ds.

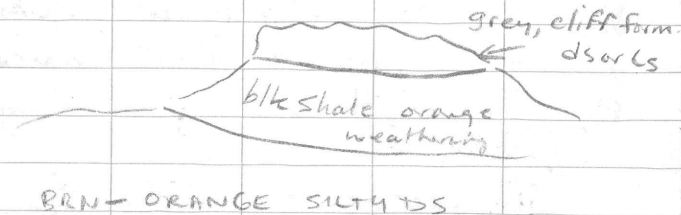
$\Delta 3$  SHOWING #2 - poorly exposed in creek cut - zone of strongly pyritized & bx ds sh. Appears to crosscut bedding & is likely a larger fault zone. outcrop area

measures ~ 300FT x 200FT  
Minor HZ occurs on less pyritized material peripheral to main gossan zone.

$\Delta 4$   $\frac{34N}{110}$  med. grey, buff weathering argillaceous ds with shaley partings typical of much of the outcrop in the valley. Photo - 12  
Note cross bedding at point of hammer. Sample  $\Delta 4$

CLAIM POSTS - QM #53 & 54 #1 posts  
27 JUNE 75 - L. JACKSON 1500E

PHOTO - 13 - FLAT LYING Hc:



$\Delta 5$   $\frac{10N}{140}$  massive med. grey ds in beds 1" - 2FT thick. Elliptical blebs of py

up to 1" across occasional  
throughout outcrop.

Δ6 Shearzone 4 FT wide with  
nearly massive pyrite, no ga  
or sp visible. Trends  $94^\circ$  &  
is vertical. 100 FT N a similar  
fracture oriented the same way  
contains qtz + ~1% sp.

100 FT UPSTREAM - HOME OF  
WORLD'S LARGEST STROMATOLITES!  
8 FT across! photos 14 15  
algals

Block of float in creek  
contains small, indisputable  
collapse bx & fragments are  
coated with weakly Zniferous  
calcite (wk zopper response)

Δ7 mystery rock - occ. floats in  
creek

54, 68, 68

Δ8 RYSP-45R sample  
RYSP-46R sample  
22, 43, 52

- samples for analysis from

buff weathering black shale near  
top of ridge in photo 13.

(HELIKIAN - ~400-500 FT

thick - capped by over 500 FT of  
grey to buff, massive ds,  
underlain by over 1500 FT of  
orange-brn weathering med grey  
silty ds which hosts Zn-py  
showings)

26 JULY - SLAB MTN CU PROSPECT  
106D-16

- copper mineralization occurs in fractures cutting andesitic tuff. No indication of bedded or seq. Cu. Cp & py are only sulphides seen. Co & Mo are supposed to be present but I saw none. Exceedingly difficult mining situation even if grades were better (1500 FT vertical cliff). Cu bearing fractures trend parallel to cliff face & ∴ results in abundant malch & az. stain in spite of narrow zones.

Samples:

- ① cp mineralization
- ② az stain on spherulitic tuff.
- ③ Cu stain on fg grn-grey ands tuff
- ④ tuff sample w. elliptical ferr spherules
- ⑤ similar to 4
- ⑥ limey bed within tuffs.

⑦ spherulitic ands. tuff.

photos - 2 or 3 of cliff faces  
Cu stain.

① ~~②~~ larger sample of cp-mal mineralization of best grade.



27 JULY: SLATE CREEK PROSPECT

106D-16 TOP W  
CORNER

CLAIM POSTS - PIKE #1 & #2 - #1 POSTS

5 JUNE 1975 J. DICKINSON N1800F

All showings are very small & associated with patches of 2° pink fspr in qtzite w. hem Fe-form. Nodes of cg barite are present also. Float in main creek of cg siderite contains cp also. Not seen in place but float boulders suggest beds of sid. ~ 1 FT thick w. ~ 0.1 → 0.5% cp.

One float of qtzite contains diss. cp - this is only mineralization of potential interest. Lotsa claims both upstream & downstream.

Fe-Form samples for analysis

R45P-47R - massive hematite

48R - hem. + qtz, carb, ba?

49R - hem - ba - jasp.

S0R - qtz, fspr?, carb, ? ba?

S1R - cg siderite w. ~ 0.2% cp

Samples:

① cg. specularite

②

28 JULY: MAMMOTH COPPER PROSPECT  
106C-14

A CIRQUE SHOWING

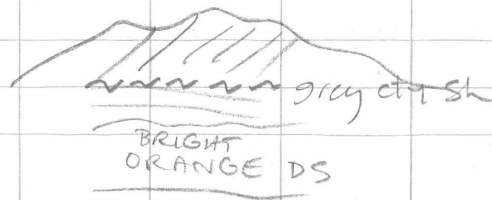
Cp & cobaltite & pyrite occur in outcrops around headwall of cirque in Qtz-siderite veins & diss. along bedding planes in black and greenish grey-greasy looking shale of Katherine Fm?!. Copper occurs far from veins & fractures & looks convincingly sedimentary, while cobalt, which also looks convincing enough in hand specimen, never seems to occur far from Qtz-siderite veins. Cp & cobaltite occur in the same general areas, but are not intimately inter-mixed - very difficult to find any sample of vein or shale mineralization with both cp & cob. in same hand specimen.

Lotsa Samples:

- ① TYPICAL GREASY GREENISH GREY SH
- ② " DARK GREY SHALE

Photo B-4 - view to west from Cirque

B-7 - angular unconformity within Katherine



B - "PORPHYRY SHOWING" -

- mislocated on a.c. map -  
see corrected location

- widespread but sparse, low grade ep-py mineralization in syenite phase of mainly basic dike. Could be source rock for showings in Cirque area & elsewhere. No cobalt bloom or noticeable cobaltite, but may be present.

30 JULY - LARRY PROSPECT  
106-D-16

~~See~~ see Larry's book  
for descriptions & assays from  
Showing #1, #2, and #3.

Both showings occur at  
same stratigraphic level,  
about 400 FT apart, &  
could be contiguous.  
width is ~12 FT at #1, 20  
ft at #2. Sparse cp + mal-az  
occurs as blebs and coatings  
on cleavage and bedding  
surfaces. Estimate 0.1%  
Cu across full width.

At Show. #1 a bed? vein?  
2" thick consists of approx.  
60% hem 38% py & 2% cp.  
R5SP-55R - unmineralized blk sh  
from ~100 FT below showing (stratigraphically)

Showing #3 - not seen -  
see Larry's book

Showing #4:

Talus occurrence of  
cp-mal-az in shales and  
in sandstones - not located  
in place.

Samples:

- ① DIORITE DIKE FLT w py + cp
- ② Showing 2 - cp-py bands // to bedding
- ③ Showing 4 - large sample w.  
az & mal in qtzite-sh fold nose.
- ④ Showing 4 - cp in qtzite.

3 July: BONNET PLUME  
GOSSANS 106C-12813

Δ 1: BRECCIA ZONE ~ 100-200  
FT wide at mouth of upper  
Canyon on Gillespie Creek  
Averages ~ 5-10% marcasite  
throughout as cement  
between coarse by  
fragments. Mostly  
highly oxidized &  
difficult to get fresh  
sulphide mineralization

Samples:

RYSP-56 RG - freshest  
material available

RYSP-57 RG } gooson  
58 RG } samples  
59 RG }

Δ 2: RYSP-60S - SULT SAMPLE  
FROM SMALL TRIBUTARY  
STREAM (N BANK OF  
GILLESPIE) (1000 FT DOWNSTREAM FROM Δ 1)  
2 - AREAS OF GOSSAN -  
UPSTREAM ASSOCIATED  
W LOW ANGLE FAULT  
THRUSTING DS OVER  
STEEPLY DIPPING SHALE.  
LOWER - MORE DIFFUSE,  
DIFFICULT TO KNOW IF  
BX IS RELATED TO FAULTING  
WEAK Zn TEST FROM  
ONE SAMPLE BUT NO  
US. SP.

RYSP-61R - APPARENTLY  
UNMINERALIZED SHALE

Δ 3 EAST BANK OF BONNET PLUME  
OPPOSITE MOUTH OF GILLESPIE  
RUSTY FAULT GOUGE - RYSP-62RG

Δ4: mouth of next main creek upstream from Gilberpie on west side of Bonnet Plume. Fault zone crosses creek at

\_\_\_\_\_ Gossan zone associated with it is ~ 10 - 30 FT wide.

Samples:

RYS P-63 RG

RYS P-64 RG

Δ5 East side of Bonnet Plume 1/2 mi S of DTG CREEK

- solid leached out gossanous zone 200 FT long caused by ~ 10% marcasite in a massively rexlized, cs graded dolomite breccia.

RYS G-65 RG - gossan

RYS G-66 RG - gossanous rock with some marcasite

remaining - see sample RYS P-67 RG - gossan from 200 FT UPSTREAM.

- entire top is rexlized & gossanous - is open at upstream & downstream ends.

Δ6 - RYS P-68 RG - gossan 1000 FT DNSM FROM LAD main showing.

Δ7 - LAD SHOWING - see 2 rk samples + CORE samples.

similar surface exposure to all previous gossans. Lotsa marcasite or pyrite.

Minor sp & ga in fractures and cement in br stromatolite limestone

RYS P-69 RG } typical surface  
70 } bxl samples to  
71 } compare w. previous Δ's.

R45P-72-R - gossan w  
yellowish inflorescence -  
possibly Cd stain -  
analyze for Cu Pb Zn Cd  
12 JB5 2200 4.1 ppm

Gossan zones continue  
upstream for ~1000 FT -  
but main continuous zone  
is ~200 FT long. Bedding  
is ~ flat lying & smaller  
rust zones are lensy things  
conf. w. bedding. Main  
zone probably crosscuts  
bedding.

Δ8 - 2nd drill hole on Lad - only  
one small seam of marcasite in  
100 FT hole. On bx lite grey  
ds, not tx.

Δ9 - showing directly  
opposite DTG creek -  
occ. zones of py (mar?)  
cemented tx. No vis sulphides  
other than FeS<sub>2</sub>.

R45P-73R - FRESH SAMPLE  
w. ~ 5-10% FeS<sub>2</sub>.  
- see hand sample

R45P-74RG  
↓  
76RG

Gossan samples  
from Bersen Ch  
116 B.

4 August: PROSP & STAKING  
ON 106E-2

① Prop. 4000 Pb 3000 Zn, NW  
KIWI LK.

- creek drains a massive  
black shale unit several  
1000 feet thick. Some  
zinc mineralization occurs  
in bx float in creek.  
This is almost entirely  
sphalerite; very rare  
galena. Probably related  
to fault zone but no  
mineralization occurs in  
outcrop which is as  
good as some material  
in float. Very little  
Pb probably because  
of moderately high py  
content in the shales.  
Much of orange bx cement  
appears to be smithsonite  
(slow positive Zn test)

Staked 12 CLOE  
claims to cover main  
apparent source of mineralized  
shale, plus 600 Pb 1600 Zn  
creek to the west. Saw  
no mineralized float in  
this creek, but main  
stream in valley has  
occasional black shale  
chunks which give  $\pm$  interest.

Claim line runs at  $95^\circ$   
1  $\rightarrow$  8 - P. DEAN  
9  $\rightarrow$  12 - R. CARNE

② Prospected 2700 Cu  
in small stream draining  
info KIWI LK.

Creek contains lotsa  
Cu and py in a number  
of zones along length.  
Best mineralization occurs

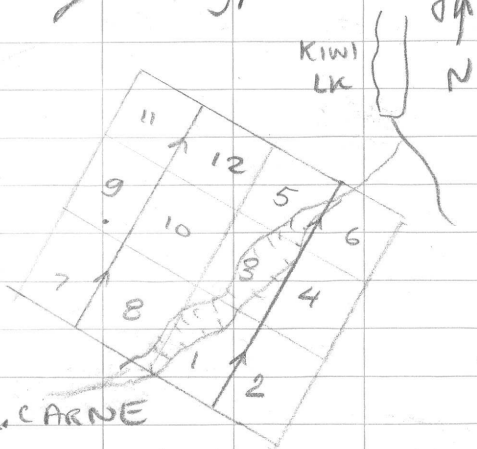
in a conformably massive  
lense-like body composed  
of siderite, quartz, pyrite,  
minor hematite, and  
chalcopyrite. Copper grade  
is very difficult to estimate  
because of 1) not much azr  
mal due to abundant pyrite,  
2) very erratic occurrence  
in veins & disseminations, in  
qtz, siderite, & pyrite.

One block of float from  
creek contains erythrite  
stain. Thickness of  
main lense could be over  
50 FT.

Should be staked.

5 Aug: STAKING & SAMPLING  
GREMLIN CLAIMS

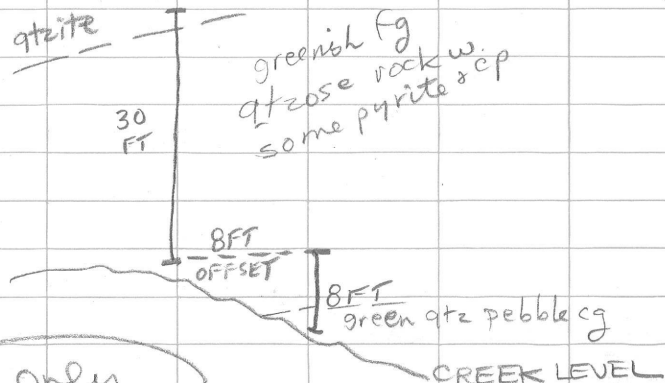
Attitude of chngp -  $30^{\circ}$  E of N



1 → 4 - R. CARNE  
5 → 12 - A. TENCH

ASSAY SAMPLES

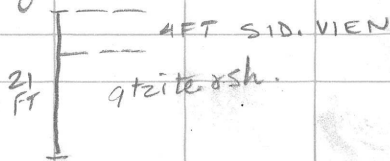
RG5P-1A - chip sample  
across 38 FT OF stratigraphy



Cu only

RG5P-2A - rough chip sample  
across  $3\frac{1}{2}$  Feet at waterfall  
~60% qtz 35% siderite balance  
py + some cp. Cu only

RG5P-3A - chip sample across  
21 FT including siderite-py-cp  
ven + weakly mineralized  
wall rock:



Cu only

RGSP-4A - pyrite-rich material  
From siderite vein - ~50% py 50% sid.  
(Analyse for Cu Ag Au Co)

RGSP-5A - chalcopyrite-rich  
siderite vein material from  
same vein.  
(Analyse for Cu Ag Au Co)

RGSP-6A - poor chip sample  
across 10 ft of massive  
pyrite lens. Much of lens  
is inaccessible on cliff face  
Site is 200 ft down from  
RGSP-1A on opposite bank.  
(Analyse for Cu Ag Au)

Entire canyon is  
mineralized with py & cp  
but cp is very erratic.  
Most difficult to estimate  
grade & even to find cp  
rich areas because no  
az, or mal forms when

cu occurs in siderite  
lenses, which are the highest  
grade occurrences. Copper  
occurs in every rock type  
that occurs in the creek  
drainage & some of  
more promising types  
of mineralization that  
occur in float were not  
seen in place (ie cp py  
in ss.)

Pyrite & siderite lenses  
are definitely conformable,  
but some sid. & py-cp veins  
are also present which  
definitely crosscut.

RGSP-7 } 2 shale samples  
RGSP-8 }

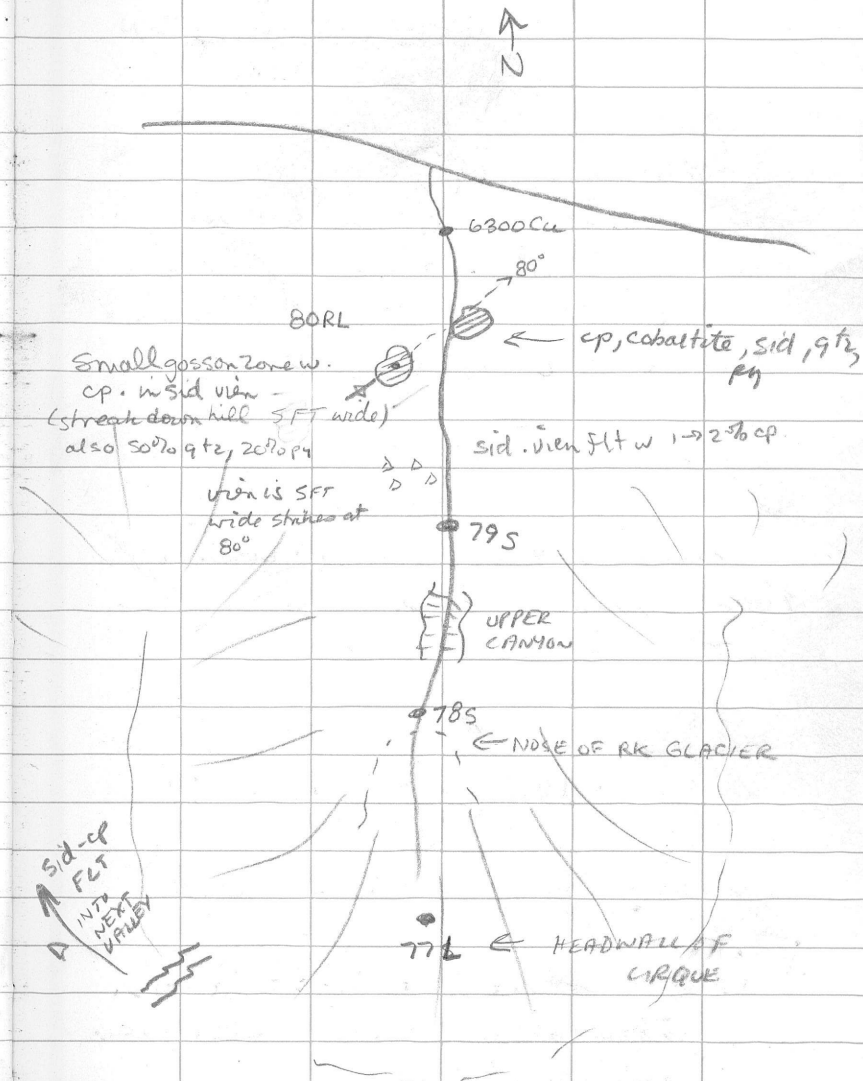
6 Aug: A prosp. Cu anomaly 106D-9  
(6300 ppm Cu)

- cont. rvk in drainage is a Fg,  
block weathering, hard pale greenish to  
greyish, x bedded. qtzite w black  
phyllitic partings. Occ. thin blobs  
& veins of qtz w. py. No vis. cp.

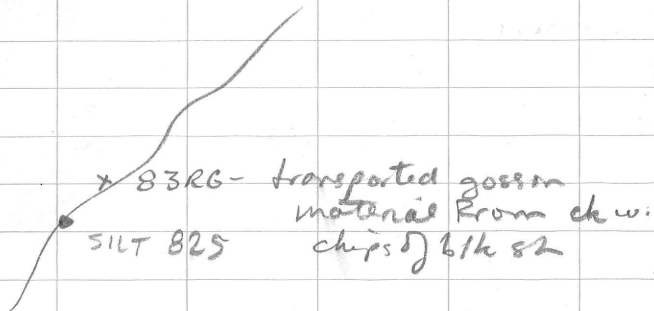
- gossan & vein occur right  
where geochem sample was  
probably taken  $\therefore$  high geochem  
From small source area. Some  
cobaltite in second gossan.

- cp also occurs in sid vein flt  
w next valley & explains 550 ppm  
Cu anomaly there. Small vein  
crosses ridge between valleys.

No cp occurs outside of veins  
in talus or in place. Showings  
are of no interest.



B gossan in creek 106D-16 SW corner



gossan probably result of juxtaposition of sh & ds.

C JOE CLAIMS - now restaked as Bob Claims (2 May 75)

- one huge sid view, several hundred feet long & ~10 FT wide, with erratic cp throughout. No cob. seen. drilled w. several short angled holes.

D. PACIFIC GIANT STEEL

- lotsa core w. lotsa Cu stain

RYSR-84R



RYSR-88R

RYSR-89R - sample from 20 FT of cgm core

RYSR-90R



94R

} Samples of various rock types in core

} more samples

- all to be assayed for Cu

E. Rob's 9000 Zn gossan from 74 on 106D-15

- no vis spargite  
- very small zone of frust along bedding plane with banded aragonite suggesting cove.

R45P-95R - another gneiss  
sample to check original  
value 142, 68, 5000

R45P-96R - petroliferous  
limestone from dev. outcrop  
in creek

8, 66, 36

~~R45P~~ -

7 Aug: Crest Iron Fm.

RYSF-97R



RYSF-107R

- VARIOUS SAMPLES  
OF IRON FM &  
RAPIDAN SEDIMENT  
FOR ANALYSIS

RYSF-108R -

From pyrite box  
in Gillespie Creek  
Canyon