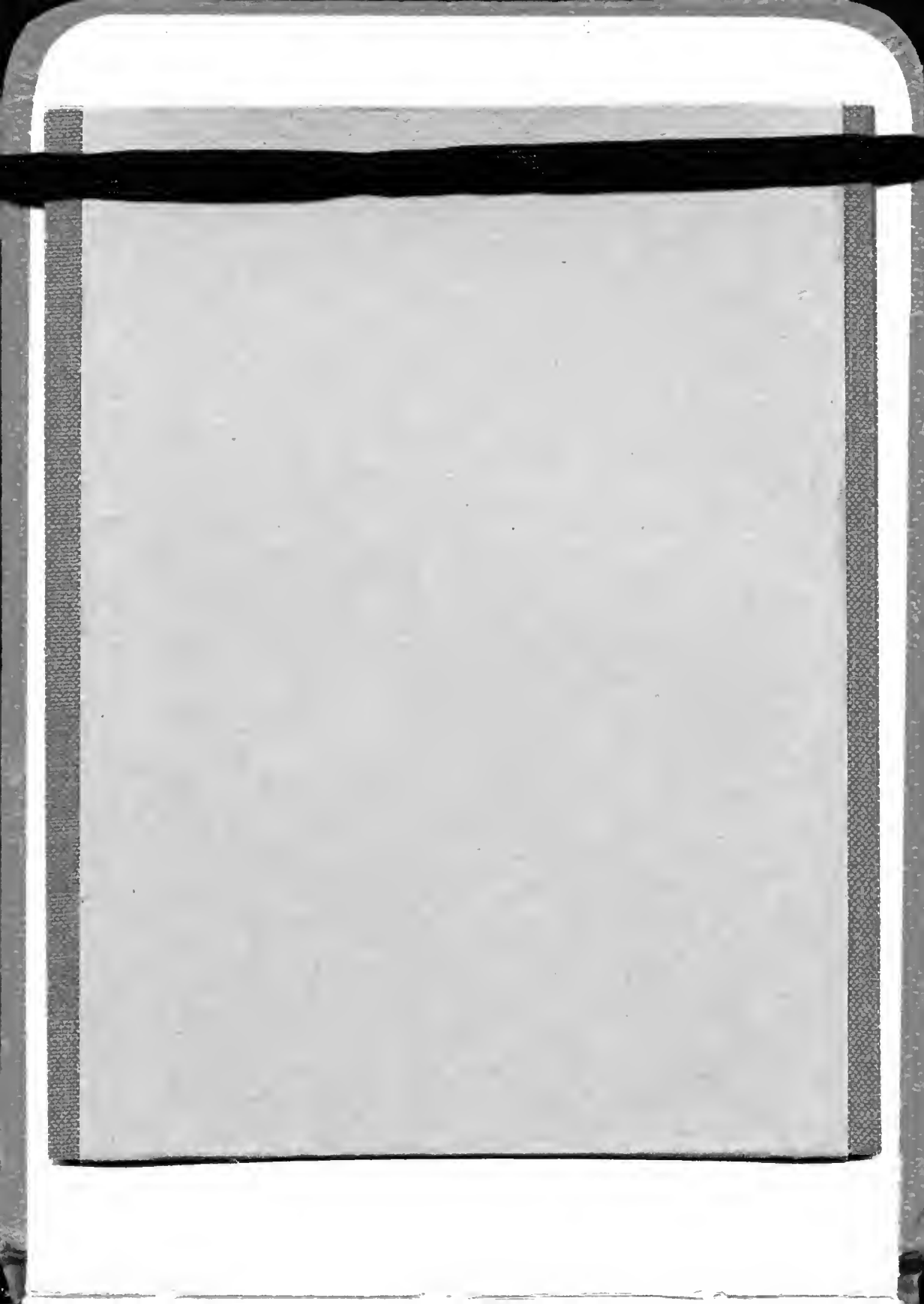


ANTARCTIC

1960

①





Island north of Lewis Is.
18/1/60

Rock is porphyroblast gran
gneiss, like the rock on
Lewis Is. pink felp. p'blasts
(spic).

Consists of pink felp p'blasts
tabular, 1 inch long, $\frac{1}{4}$ - $\frac{1}{2}$ " wide,
average 25% of rock. (Photo)
In matrix of qtz, white
felp (? felp) + list.
Well foliated.

At right angles to strike are
several peg. veins, one
3' wide, mostly pink or
pale fawn to felp, up to
3" across, a small list
plates + some at ^(at) edges
of vein sharp. Also
several thin dirty white
felp veins, 2-3" wide,
straight, uniform width

20

194

10° 45'

3 U

Bearing (from ship's eye) from
Lewis to island $\approx 45^\circ$ (approx)
Another island bearing approx N
from Lewis.

like those on Lewis Is.

Also several small
mag. of lg. but white
(h'f's) (type B)

Strike of rocks 290° (mag)
dip. 45° N (mag)
sun 152° (mag) at 0945
(2345Z). Some shear zones
parallel to sun.

All rock slabs supported
by ice. widely flat, no
massive.

(mag)
Bearing to other islands.
127, 181, 257 (all at $\frac{1}{2}$ mile
distance) 339 (2 miles).

True bearing of sun 61° . : mag
decl. 91° W.
: strike N 200° true dip 45° W.

Water samples.

(1) Surface seawater, near west side of Dibble Glacier tongue. Numerous bergs to west, also. Collected from channel between two bergs, 100' apart, current setting to west through channel. Surface temperature 31°F , air temp. 33°F . Bright sunshine. Collected 1400 approx. 18/1/60

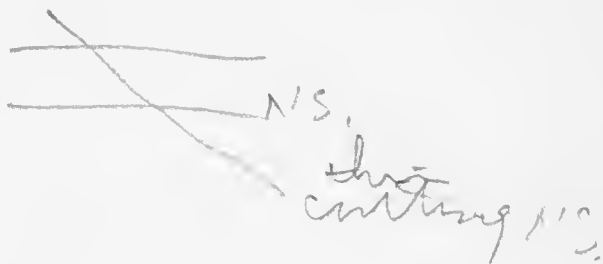
(2) Surface seawater, anchorage, Lewis Is., abt $\frac{1}{4}$ mile north of Lewis Is. Thin high cloud. Collected 1800 approx, 18/1/60.

(3) Two bottles lake water - northernmost lake on largest island of Davis Group. Surface completely frozen, 4" of ice at collecting point 6 ft from edge. 20/2/60.

Lake depths, L. Storer.
31/1/60.

Big N.S. Landing Dykes 2012ish

N.S.



Kamee Group.

3/1/60.

Waternood, Alaska.

On north side of is, rock
dip 60-70° (N35W) dip 60-70° E.
Strat. is uniform on a 2-4
scale, but in places are small
"disg" folds, mostly quite tight.

Rocks are of felp. gran gneiss
etc. felp (with blade) gneiss, and
bands up to 20 ft wide of hybrid
gneiss.

Qty felp but gn. is mg rock,
with poorly defined fol. due to
slight cont. of list. (Spec A)
In places, rock is rich in list
& well banded, giving a hybrid
gneiss.

Normal rock cont small patches
of calc. etc + felp, + "thin"

33 veins of iron material, only $\frac{1}{8}$ - $\frac{1}{4}$ "
wide, straight, uniform in width,
a poorly defined edge, run
through the rock, both parallel to
banding & across it.

In a couple of places are irregular
masses, several feet across
or more a couple of ft wide,
of pink porph. gran. These are
mg - g in center, but edges
grade into Q.F. like quartz
(which here has little but)
with thin vague fingers of
pinkish gran in the lower
quartz ^{along edges}. They give impression
of developing from the quartz.
Some have pink flaps thin.
6" across.

I walked south, which is more later
Benevol. Grain size is variable,
coarser giving impression of

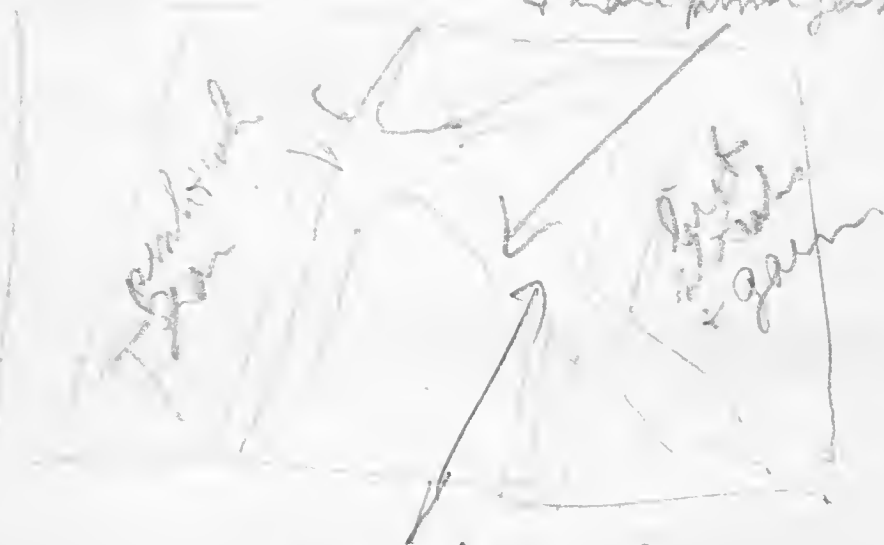
invading green. Patches of
green occur, as do veins of
pink gran, some cutting
across folia of green. This
gran. bands from c-mg
of flaps rock to coarse
pegmatite dol rock & flaps
phen. + brk. plates. Some
green is blue green, & pink
& white alternate ^{Spec B} - "lines
about 6" - 2' wide.

Structures, veins of pink & wh.
(mixed in one vein) gran
become common in places +
gran. is more common. Some
bands are of flaps + gran
(Spec C). Gran. veins are
gen. parallel to folia of green, 1-
3' wide, many are made of
wtz, wh. flaps + some old
gran, & patches of pink top.
Edges of veins are sharp

roughly uniform in width.
 Around these veins, garnet
 common, even in thin sections,
 some patches a few
 inches across almost pure
 and garnet.

[Photo of vein - white
 gran vein & pink feldsp
 patches

vein & creamy feldsp
 white of B zone, white
 big of x to blue zone
 + some pink feldsp.



vein is sim. textured to red s/dge 1" wide,
 along granite.

Slugs of brown. of garnet
begin to be P & C grains
like spec, then dec of
garnet to al. size of garnet
size, then white rather
friable gran & only one
garnet, forms of pink fsp,
brown of pink gran by
lines of fsp. (last phase
rare).

A few veins + masses of white
feldsp + fine qtz, both along +
across banding.

South of outcrop a pink granite
c Ptz in form of white masses
several inches across, and
pink c-mg fsp, has slugs of
magnetite along edge.

Some areas of quartz (commonly
E was quartz. Aggregates nearby)
are stained by lim. Counts
slightly higher on these
compared with other rocks
(100 + 80 respect)

Kauer Group

31/1/60.

Main bed of Brown Gneiss

Rock is forming a flap on E.
faint foliation N31E, 75SE (m.d.g.)
Spec A.

Some places are very massive
fine to coarse of c-mg to c-g.
sharp edges rather resistant

against gress. All seem
stained and much of the
surface with a polish —

"dust varnish"
possibly a faint folia lineation
pitching west.

Several bands 2" to
3" across foliation of
flap blade zone (Spec B)
prob. orig. dykes. Edges
sharp with rough
surfaces but would
be thought to be

In one place a strike
faint, but strike is
at all the same, movement
vertical.

Junction bet. this rusty colored
rock + mig. runs abt parallel to
ve. rock junction, and along
head of fiords.

In general, mig. in the
Haver Group is most intense in
the northern part.

From Brown Glacier north, strike is
abt north, dip vertical. Small tight
folds occur, but bend is straight, to
island 110, where it swings clockwise
to ENE, with some dips of 70° s. or
even $50-60^{\circ}$. South of island 70, it is
E-W, west, and north of this
it is very irregular. But islands
30 and 120 bend is abt north, dips west.

Water samples, Vostok hills
1/2/60.

Aneroid sea level (shipside)
1333 at 0723.

Samples collected by
C. Braunsdorfer.

Spec collected from north E.
side of Clear Lake.
North of north of this type.
Some dark enough to be
brown.

A

2

B

done
v. 1
1

Harold Beaches, Davis ..

31/1/60.

100' W of Salween hut is possible beach, 30' above present L.W.M. There is a sudden deep & shelving area with rather steep slope with a deposit of rounded pebbles, but some flat thin angular ones and scattered large boulders, all partly buried, up to 3-4 ft across.

Area above is of fine pebbles, but many more flat pebbles, angular pebbles and no boulders. (Sketch A p. 32)
Photo looking north.

Trace of higher level of water to north, but of the upper part of upper level. At end of ...

Bay 150' on possible and
dashed line at 30 ft.

On point N. of last light
measured, well rounded pebbles
up to 8" diam, with a
scattering of larger less well
rounded boulders goes up
to 100 ft A.S.C. (level)
This is well sorted, with
no sand.

Rounded pebbles do go higher,
but are less rounded. And
there is much sand among
them. Junction of 12, top
of 12 is a fine shingle is
fairly deep.

In bay around point, at
150' from shore, was a flat area
abt 30' long, then the level
to sea. The penning & beach
about flat area (Sketch B, p.
32), showing what is at

first site. Behind stepping is
a ridge about 1' high, 5' wide,
of small pebbles and sand. Just
behind is a 10' x 10' level. But the
low mound & depressions
only a couple of feet
and remains of a house
seen. The level is about 6' above L.V.M.
where will be rounded shingle
a couple of ins. across
and down to 10' above
ground level. A "beam" of
shingles at top, 5' wide, and
1' high (the top of the mound
is 10' high).

Top of area is 30' A.S.L.

N 40° 30' W
 25 1/2
 N 50° 30' W
 10 1/2
 N 55° 30' W
 10 1/2
 N 60° 30' W
 10 1/2

Bedford Hills

1/24/60.

Allisford.

South from road, rocks are
garnetiferous gneiss, some of f. g.
gneiss, and some bands of f.
f. g. gneiss.

Rapid alternation of types, in
bands from 1 inch to 2-3 ft
thick.

Garn. of type very variable,
ranging from f. g. to f. mg,
some only lavender at f.
pale pink garnet, but most
with minor f. g. Some
parts are mainly f. g. others
over 50% garnet.

Spec. A
f. g. f. g. gneiss (Spec B)
forms only thin bands.
Cutting across foliation, are
thin veins of f. g. gneiss.

Basins generally straight & only
a few minor contortions.

~~Str N130 dip 11. (mag)~~
(Str N070⁰T. dip 70 N.)
Some bands of brown pyrox
xes (hypersthene). These are
at the base of hyp. aggregates, mostly
g. Feldsp. tends to be pale brown,
but rock not nearly dark
enough for color. In these
rocks garn generally absent.
Some of these at fels pyrox
rocks are variable colored
& very e.g. shows through
mg rocks, and a few very
dense gr. feldspaty masses
a ft. or so across. Some
bands of quartz & feldsp.
Towards top of hill, garnets
are less common, and
rock is of above type.

Several sheets, a ft wide

dipping out west, stretching
parallel to main dyke set. One
shear at east has R.H. movement.
A good deal of shearing
around a 15' dyke of the
main set.

Much of rock is stained
by limonite, and cracked &
white encrustation. Some
con staining, both in
country & dol.

Spess of metadyke (C) poadyke (D)
(i. high plate) (pyrolytic slugs
some wavy masses only a ft or
so wide) green chert (E) (sulfate)
green shale. (F)
Metadykes are thin bands a
few inches wide parallel to each other.

Point one east side of ^{edge of} big
dyke on point on S side of
lake

Point 2) north edge of big dyke
on west side of lake

Point 3 big rock but two
beaches at NW corner of lake



Soundings, Deep Lake 2/2/60.

Anemoid on beach at Anemoid

1740 at 0805

Anemoid Deep Lake

1627 at 0908

add 1ft to all depths

(1)	(2)	(3)	Depth
248	004	035	45 soft.
230	353	035	75 firm
231	331	030	114 firm
230	310	027	110 firm
230	291	025	110 "
232	283	016	104 "
236	278	015	83 rock
237	270	349	75 rock
235	273	345	65 "
233	268	342	50 soft
25	from rock on ice.		15 "
242	281	357	75 soft
261	272	305	113 "
280	328	016	109 "
291	315	341	71 "

point of
 from S end of southernmost
 beach ¹ midway bet end of
 beach + two small islands.

40 from shore 26

SECOND RUN

(1110 hrs -)

(1)	(2)	(3)	DEPTH	
288°	332°	014°	90'	SOFT
288°	331°	002°	110'	FINA
286°	320°	027°	118'	"
284°	325°	038°	113'	"
209°	329°	041°	104'	"
200°	335°	053°	62'	V. SOFT
196°	337°	053°	40'	SOFT
192°	330°	059°	12'	FINA
			8'	SOFT

11. 1247 LINDY, 1063 RIGBY, 1110. 117 115.0 111.

177
25.

Ancient shore of Deep Lake
1684 at 1250.

Water level 2 1/4".

Sample (1). North side of valley
running into SW corner of lake.
Just behind small beam
of shingle. This is top beam.
Another beam between it &
lake. 1st above lake of
sample 6'.

Sample (2) North side of
valley. Ancient 1713 at 1306.
On a small above-main
valley.

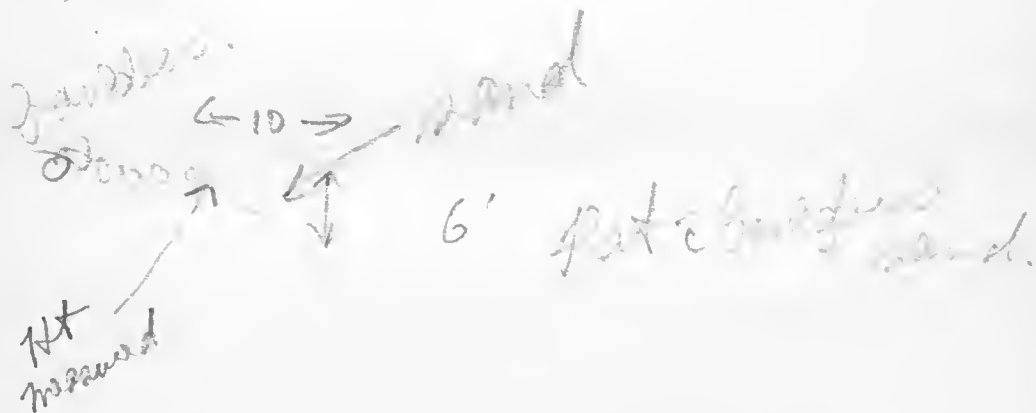
Green clay? covered by 4' of
shell grit & sand.

Sample (3) Ancient 1773 at 1325.
Green clay? North side of
gully.

Sample 4. Collected 12/2 at 1335.
near north side of head of
valley to boulders south
Green way.

Sample 5. East side of col
gravel to R. stream from
head of valley on old
sea level terrace.
An. 19/2 at 1350.

Though col is perfect example
of raised beach. An. 19/2 at
1400. photo.



Location around R. Kumaon

1906 at 1420 (1) 2/2/60
Dune 15' wide (+20)

(2) 1912 at 1440
Mouth of valley. All of
line of boulders (+27)

(3) 1922 at 1515.
Line of boulders at edge of
dune 30' wide. (+26)

(4) 1906 at 1530.
Edge of dune 10' wide (+8)

(5) S.W. corner of R. Kumaon
1852 at 1535. (-46)

(6) 1910 at 1545.
Edge of dune 200' N.W. of
R. Kumaon (1st of small line)
Dune 20' wide

(7) N. side of L. Dungee (Below
permanent ditch)
1871 at 1600

(8) 1930 at 1610.
Terrace at foot of hill N of
NW corner of L. Dungee. 15'
wide, grading into uniform
slope down to lake.

(9) 1934 at 1630.
plain E of camp.
Strong wind affecting
reading.

Top of a raised beach in north
bay is abt. 6ft below level of
plain (reading 9).

Along N side of L. Stem. near eastern
end, is a line of boulders abt 20'
below terrace.

979²+

979².

Relative aneroid readings from
Davis barograph 2/2/60.

Time	Reading	Corr.	Cor.	A.S.L.
0205	1740	+14	1754	0
0908	1627	-10	1617	-137
1250	1684	-102	1582	-172
1306	1713	-106	1607	-147
1325	1773	-108	1665	-89
1335	1818	-112	1706	-48
1350	1920	-114	1806	+52
1400	1912	-116	1796	+44
1420	1906	-132	1774	+20
1440	1912	-136	1776	+22
1515	1922	-142	1780	+26
1530	1906	-144	1762	+8
1535	1852	-144	1708	-46
1545	1911	-146	1765	+11
1600	1871	-146	1725	-29
1610	1930	-146	1784	+30
1630	1934	-148	1786	+32

Add figure for correction algebraically.

Paleomagnetic specs.

4/2/60

From dyke 50' north of
metoc hut. Dyke 20' wide
member of NS set.

Specs from center

Spec (1) seen at 1020.

Spec from center of dyke

Lewis & S. station.
2/2/60.

Only one pole found at
angle of 80° to horizontal.
Height 18', in
an middle of curvase
2' wide. According to
J. Williams, this was the
Southern Pole, and was
put into a narrow
crack last year.

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ANT/MCL/04A

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