

020516 -

June 30

Air photo A12340-49

Locations 140-141

Samples 62-71

~~salinity~~ #5

Gechem - none

105-E/15

Location 140

- outcrop -

conglomerate

ply sorted, lt gy - weathers to tan
cobbles & pebbles of qtz, gylite, chl.
crse gr. igneous rkt (more qtz monzonite)
matrix of med - crse gr. sand size material
- wh. creamy tan feldspar, qtz, chl &
tan clay grain. sl. fine, calc cont
some red iron oxide grain ~~are~~ subrounded - angular

lenses of sandst of same comp as matrix
as - med bed,

Location 141

main section on cliffs

bottom to top

060/10W

- rubble slope

95'

conglomerate

caliche & pebbles of wh. qtz ~~matrix~~

qtz, chrt, ~~sil~~

matrix of N. v. sand, sil, ~~matrix~~

- angular qtz, chrt, feldspar

* clay grains in iron rich clay

lms, sil (cherty cont.)

Sample

T70-1-62

wh. bldgs as cobble
matrix

gtzls igneous k.

outcrop

47'

conglomerate

tan wthy, ply sorted.

~~rotated boulders~~ rounded boulders + cobbles up to 1'

lt gy qtz, dk gy wh ffr - med gr.

qtzic ss with wh clay (feldspar?) matrix,

smaller dk gy chrt + chrt argillite pebbles

cobbles (rounded) of wh - lt gy

v qtzic igneous (qtz monzonite?) - no mafic
minerals

matrix of pebbles of lt gy - creamy (lms)

volcanic material (clayey), qtz, chrt,

and grains of same comp as boulders

med gy chrt cont.

slight imbrication of boulders,

massive, ply bed.

boulder + cobble size ^{rel} constant within beds

T90-1-63

matrix varies from more cherty, cemented
to a greater percentage of sand size
material

3' sandstone

- lenticular shape, varies in
thickness

- lt grey with stain

crs - med gr, ply sorted, angular - 2

- ftylc, ckt + wh. slag grs, muss

lms volcanic clay, lms,

grades to med bed.

wt wt with buff ss

grades to

wh - buff with ss

slt, - v fgr, small muss flakes

matrix of wh clay $\approx$ 50%

reg med bed.

Palynology sample

HP # 5

grades to

wh. lgy tan with ss

- clayey gty ss, f-gs

mus. flakes, plant frag molds

ply med bedd

2

grades to

medgy with medgy sltst.

- v. fgs ss - sltst, v. gty.

carb med, plant frag & plant
frag molds.

some well lam v. fgs ^{gty ss} ~~ss~~

some thin bedd.

- lense shows cross-bedding
and varies in thickness

5' conglomerate

- rel. recessive,

wh with lg,

rounded cobbles & pebbles of st quartz +

glauc., porphyritic th cream,

volcanic pebbles - altered to clays.

matrix of tuffaceous sediment.

med. to gr sand size grains of quartz

+ wh feldspar in clay matrix

grains of chert + carb plant fragments

friable, soft

east end of cliffs

to rec. volcanic material
congl, makes good
marker bed - with nothing.

same sandst. bed

at 70-1-64
64

90' Conglomerate

150' - SKR. as T70-1-62

- matrix varies from very
slt cemented to more sand size
material -
- lenses of sandst
 - wh - mbrg to top
- Darken (wh feldspars + gfs)
- shert + clay grain
- plant frag molds
- pebbles + cobbles of
fgr. clayey volcanic material
- large 6" cobbles less common
- matrix becoming more iron oxide rich in places

T-70-1-64 →

8' Sandstone

- lense, variable thickness

- sub-ltgy - with tan-buff

2'

ftz fgr. 2-5 v. gtye

wh. clay, (No plag?) matrix

laminated, ~~or~~ chd grains, med bdd.

med. well sorted.

grade to

lt medgy - medgy ss

sl. lmn gtye, plagioclase (No plag)

wh. clay chd grain ~~or~~ lmn

iron oxide segregation

features in ss -

(concretion-like)

T-70-1-65

1'-2' sandstone

- red. with red org.
- f. med gr ss (angular-subangular)
qtz, white feldspar
iron oxide rich clay cont material $\approx 50\%$
med bed, ply bed. reveals.

grade to

med-coarse qtz feldspathic ss
sly sorted, angular-subangular
v calc. cont.

sandst - med-thin bed.
small folds (too feature of loading?)

same concl. held as
670-1-65

conglomerate

- rounded cobbles & pebbles of
qtzite, & volcanic material
in a wh clayey matrix
cobbles > 50% volume.

Cobbles of volcanic

matrix - v.f. qz. - clayey material
porphyritic (some with out phenocrysts,
pink, purple, wh. brownish common.

matrix - variable

- v.f. qz. qtzite sand - clayey

- iron oxid. rich clayey

matrix,

also med. qz. qtzite, as

grains of qtz, wh feldspar of volcanic clay
in sil. cherty cement

grains float in it

= grade to core just like
on west side road

Conglomerate

43
- pebbles & cobbles of qtz, qzite
& chrt, & volcanic material.

volcanic ~~material~~ material - soft, easily
wtds, creamy clays, - v calc
- chalky

matrix of v coarse sand size
material - qtz, chrt & ^{wh} feldspar
volcanic mat in a ~~sil~~ ~~cont~~ ~~cont~~
~~not sil also calc cont~~
sil cont

Chalky, clayey volcanic cobbles
T70-1-66

increasing, not volcanic mat
purple cobbles, b.f. gr. small phenocrysts

✓ 70-1-67



✓ 70-1-68

grades to congl. with
iron oxide rich matrix

matrix of v. coarse sand size
grains of qtz, chrt, gylite, feldspar

→ ch. volcanic clasp. is a cement or
matrix of red - red brn iron rich

~~245~~ clay

in other beds it is
gylite - sil cement again

at 245' lenses of sandst

- lt grey with to tan lt grey
ply sorted f. v. coarse gr.

gylite, feldspar & chrt grains

brn clay grain, clay matrix minor flakes

angular - subangular,

chrt, argillite clasts
med bed

770-1-69

770-1-70

at 260' - less volcanic material

at 270' - more cherty porphyritic

volcanic? cobbles - iron

278' - preserved tree remains

- iron oxide replacement

295' sandstone

2'-3' blk - base - varies in thickness
- v. coarse, ph. sorted.

lt. gy - tan - with some gray - red.

gltc, wh feldspar, chrt (minor)

musc flakes, v. iron.

friable, ph. contd. med bed.

grades to

lt. gy, well contd.,

non iron.

290' - conglomerate

- generally better sorted

- pebbles & v crse sand & g

grains of qtz, qzite, chlt,

chlt argillite, wh feldspar

chlt lim clay

- still cobbles etc

305

sandstone

blgy - with tan org

med-crse gr. ply - med sorted med bold

qtzite, wh feldspar, chlt, musc

clay matrix

few pebbles in sandst

300 - more sandst matrix in congl.

sandst matrix

- cherty - thin withy.

345 med - coarse gr. gtyls ss

wh feldspar, minor chrt
muc, lim clays, (withed out)

385 - more sandst layers

congl matrix varies from

iron oxide cmt to sil cmt

sandstone

- reddish - with red ben

med gr., ply sorted subangular

gtyls, wh feldspar minor chrt.

ch iron oxide rich clay matrix

445' conglomerate
7 top of outcrop
4 - rel. well sorted
contains an

445' conglomerate
" rel. well sorted.
pebbles of qtz, chl, chl, argillite ^{up to} 1"
in matrix
of lim, qtz, feldspar
clay, material org. nothing.

475. top of outcrop - congl.

July 1

Air photo A12340-49

Locations 142-149

Samples 72-78

geochem 94, 95

Geochem

FGS-1-94

FGS-1-95

Location 142.

outcrop - limestone

med- lggy mottled limst.

~~stony~~ f- med crystalline

med gr. ~~stony~~ ~~sh~~ grain?

badly jointed & fctd in outcrop

sl. fctd odor

reins of wh. lggy calcite

rather lggy -

some org-red mottling

T 20-1-72.

f gr black ^{grain} in lggy - med lggy
matrix (chert?)

side of ridge (Loc 142 cont)

limestone.

- ^{meddy} ltgy. fine crystalline.

- sl. pet'd sdr.

badly jointed & fold.

within ltgy-ton.

T 70-1-73

145/53° E - ✓

some doubt as to bedding

Location 143.

- outcrop

limestone

- white, with some tan & red

med-crakly crystalline, vuggy

- probably similar outcrop of 142
recrystallized.

fractured in outcrop

attitude of bedding:
150°/47°E

T70-1-74

varies to -

limestone

- light to dark med grey - crakly & thin

Cherty (thin) very cherty.

also pieces of chert

Location 144

outcrop

chert

- ltgy - with to medgy - br
as fctd & veind

calc veins, & fillings on fct surf

T70-1-75

- poss a breccia

also medgy chert ls.

085/45N

Location ~~776~~ 145

outcrop

conglomerate

- rel. well sorted.

pebbles of lggs gts, lggs chrt

rounded, - avg size $< \frac{1}{2}$ "

lack of volcanic grains * gts to pebbles

matrix of

v. gts, v. chrt.

gts, chrt - sil cml.

lma,

with to 85°.

- bedding 085/45°N

- fracture planes ~~can~~ in outcrop.

- within 100 yds of Loc 145.

T70-1-76

Location 146

outcrop

limestone

med. dk grey, f. argillaceous ls

- chty? tan yellow

varies to

- grey cherty crystalline ls

withers to tan.

also some

sandy chty ls -

laminated.

bedding? 115/45° E ?

varies to.

- med-dark mottled ls.
- microcrystalline
- black speck, sandy?
- laminated.

T70-1-77

bedding? 32/53° E°

Location 147

- outcrop

- sheared limestone

- wh. crystalline, no other org.

red iron oxide veins

fault zone? -

appears vertical

vertical fault plane ^{noted} ~~also~~
nearby

attitude of shear planes

- $135^{\circ}/50^{\circ}W$

below + to the west

- f. crystalline -

lt gr - green - limestone

Location 148

limestone

- wh. lbg. with to tan
f. crystalline, fold & jtd

- above this

red argillite

finer claystone

- matrix of red. iron clay
with calcite stringers

T70-1-78

Location 149

- above 148

- limestone

- wh. with tan

- f - med crystalline

grades to

- Stg med gy - with wh - tan

microcrystalline limestone.

feld, jtd.

July 2, 1970

Air photo A12340-49

Locations 150-155

• samples 79, 80

geochem 96-99

FGS-1-96

300 pps @ 350° csl

FGS-1-97

1000 pps

FGS-1-98

460 pps @ 45° csl

FGS-1-99

Location 150

limestone

lt gy medgy - rather tan
medgy - tan

recrystallized, microcrystalline
fctd + jld, some chf.
in veins + ~~chf~~ nodules

above this

- limestone

- chert breccia -

medgy - blue ls - microcrystalline
nodule or cobble of lt gy chert

fctd + veined, pink veins

bedding 125/64 E

T70-1-79

varies to

lt g₂ - wh ls with pink-med g₂
- recrystallized, microcrystalline
massive fctd, pink re-
siduals.

along ridge (top)
limestone.

wh- lt g₂ - with med g₂ blue
- recrystallized microcrystalline
- massive, fctd + jct.
med. crystalline calcite veins.

Location 151

outcrop - limestone

- medgy blue with to ltgy blue

- recrystallized, microcrystalline

no apparent bedding, massive

fr. feld + veined

veins of wt catinite + pink

iron rich material.

Location 152

outcrop

limestone

- limestone breccia.

angular cobbles of sub, coarsely
recrystallized ls, ~~stained~~ red (iron rich?)
calc material in a groundmass
of med. gy - blue
microcrystalline ls.
wined + fctd.
massive.

below this - limestone breccia

- some org. pink
laminated ~~with~~ pieces of ls.,
recrystallized

below this

wh-lt ggs with to med ggs blue

med. xlline, peragilized

massive

- limestone breccia

Location 153

outcrop?

probably outcrop

sandstone - grit

- ltgy with to ltgy - tan

crse gr - gritty, ss

qtz, ^{qz} feldspar grain

matrix of clay, (volcanic derived?)

- sl. lmn some chrt grain,

some hematite & argillite

- some pebbles of ltgy - med gy

clayey rk (tuffaceous)

some volcanic pebbles

massive, in ~~app~~ ~~bed~~

T70 - 1 - 80

Location 154

outcrop?

conglomerate

- quartz, chert, cherty argillite

qtz chert & pebbles in a

qtz matrix of qtz sand & silt
material.

SKR below this

- ~ 50 paces beyond loc 154

Location 155

- stream gravel

- gravel float of Santalino

ss, cong, sh. & coaly shale

also glacial material

July 3

Air photo A12340-49

- Glg. locations 156-164

Glg. samples 81-84

Geochem - none

Location 156

on rubble ridge
at bottom of valley.

- conglomerate

- pebbles + cobbles of
qtz, chl, gylt + wh-
crs, volcanic material (clayey sl
lms)

matrix of crs qtz sand
iron oxide matrix

also sandstone

crs, gylt, wh feldspar.
sil cnt.

also congl.

- matrix of gylt, feldspathic sand
- sil cnt

- There is no limestone
material in this subble

Location 157

outcrop

limestone

- med-dk gy with to med gy
microcrystalline, recrystallized
black spots in lighter matrix
(pelletoidal) massive
gt. felds,

- just above loc 156

Location 158

outcrop

20'

conglomerate

- topographically above loc 157

- pebbles & cobbles of qtz, qtzite
cht, ltgy igneous rck & wh
clays, volcanic material

up to 3"

matrix of fine sand size material

- qtz, wh feldspar & cht grains.

~~l.m. - clay grain~~

creamy colored clay grain (calc?)

sl. l.m.

massive, & subhly.

overlain by Pleistocene material

180' farther S -

conglomerate

SKR - ^{also} purple volcanic pebbles

with gr. sandy matrix

Location 159

outcrop

limestone

- pink-arg with medgy arg
med crystalline, recrystallized
massive -

- also fault breccia

- angular chips of sh & ls
in a matrix of ls & sh chips
limy, stg. brown.

breccia vein in comp

170-1-81

Location 160

- outcrop

driftly above 159

~ 20ft covered.

conglomerate.

cobbles + pebbles of volcanic
material, qtz, qzite, ch.

matrix of coarse sand size
material, qtz ch, chert, argillite
greenish wh feldspar + creamy
volcanic clay grains limon.
also some matrix of
high iron oxide content.

{ Lantana quercus }
ls. - core

80' - 80 ft. or higher

- ~~congl~~ conglomerate

- ltgy gty pebbles (subangular
to subrounded) avg size 1"

in a matrix of well

indurated gty feldspathics

med- coarse gr. predominantly

wh. feldspar, minor ch

T 70-1-82

- congl. - SKR.

140' - sandstone conglomerate

- lt. tan red

- coarse med gr. of feldspar, chert.

wh. feldspar, musc flakes

some iron oxide cont

few pebbles of volcanic material

T 70-1-83

- sandstone matrix x 70%

chert + feldspar pebbles also.

190 - congl

- matrix of v. f. sand.

255' sandstone

- lt grey with red-brown
- v coarse gr. - qtz, chrt + wh feldspar grains, angular - subrounded
lmm. some pebbles

bedding?

- overlain by

Conglomerate

pebbles in white, feldspar rich
sand matrix.

285' conglomerate

- pebbles of lt purple "red
porphyritic volcanic pebbles + qtz in a
matrix of v coarse gr. qtz, chrt + wh feldspar
sand, clay grain lmm

T 70-1-84

This section, ~~is~~ although
comparison to loc 141
outcrop is poor & no bedding
was available, ~~is~~, in comparison
to loc 141.

- ct's more matrix
- few large cobbles
- more crst, wh, feldsparitic
as matrix &
less cherty matrix

440 top of ridge

conglomerate

- cobbles & pebbles of gtz,
gfts, chl, volcanic material
& wh cngl ss (wh feldspar)

in a matrix

of med-cngl gfts, wh
feldspar & volcanic clays
chl cngl.

- fracture planes

attitude 065/49^{to}5

- iron oxide along fracture
planes.

Location 161

outcrop

- Sandstone - grit

lt - med gy

0 Crse gr. sand - grit

angular - subrounded grains of
qz, gfc, ch, ch argillite
w/ feldspar + clay grains

ch, cont, iron, wiggly
ply sorted.

congl along side of ridge

- mostly rubble

some small outcrops

Location 162

conglomerate

pebbles & cobbles of qtz, chl,
qtzite + lthy volcanic material
in a matrix of
very sand size material
grains of qtz, chl & some
feldspar, & clay grains.
lmm, chly cmt

- conglomerate, rubble
all along side of ridge

Location 163

- limestone

' - Stgy with to redgy.
microcrystalline, recrystallized.
veined - fctd, massive

Location 164

- ~ 100' above 163

conglomerate

- qtz, phyte & chrt pebbles

matrix of coarse grains of
qtz, phyte, chrt & volcanic clays
lms.

above this

SKR - more volcanic pebbles

matrix - more chrt, cnt

July 4, 1970

- Air photo ^{12176 ~ 436} A ~~12340~~ ~ 49

Locations 165-172

Samples 85

geochem 100, 101

Geochem

FGS-1- ~~100~~ 100

FGS-1- ~~100~~ 101

Location 165

- limestone,

- ls breccia.

red ~~ls~~ medgy within ls ~~medgy~~ & org.

- angular chips of ~~ls~~ medgy - medgy

micropellitic ls in a matrix

of red, iron rich carbonate

massive in outcrop.

T 70-1-85

also chips of wh, coarse crystalline

& ~~ls~~ medgy limy sand, ~~qtz~~, chert grains

150' covered

72 SKR.

320 - red with breccia

- also medgy blue - 170

v. f. crystalline, ls.
massive, fctd.

- some chert ls breccia
1

Location 166

350 paces on 135° cse.

- Limestone

- wh-tan with tan-meddy.

microporellens - f. crystalline

some puccia material

massive

to

ls - all along top of ridge

Location 167

outcrop?

- chert, + limestone breccia

angular chips of ltgy chert

in medgy-ton fine ls

crystalline ls

massive, fold + jld

Location 168

limestone

- blgy-blue with medgy blue
micropellene, thin vein
of org. iron rich material
massive, veined & folded

rest ridge

- ~~Location 169~~

Location 169

limestone.

med. lt. medgy blue -
withs to tan - lt. gg.

microcrystalline, veined & folded
massive, some breccia
material, some chl.

Location 170

limestone

- lt-muddy blue, with 1/2 in.
- sink hole, beneath ground
- breccia?
- veins of org. material
- veins - fold, massive.

Location 171

limestone

lt-med gr. with tan
microcrystalline, massive
little veining

continues along ridge

Location 172

outcrops

- limestone

- wh, micrystalline, fold & lined.

~~over~~ covered interval

above this

higher up

- conglomerate

cobbles & pebbles of chert & chls

argillite, qtz, & feld

matrix of coarse med gr

fine material

qtz, chert & wh f

wh feldspar grain

2

clayey material cont

congl continues along ridge

July 5, 1970

A.

Glg - no outcrops

Geochem - 102 - 111

Air photo

A12340-49

FGS 102, 103, 106 - 111

Air photo A12178-59

FGS 104, 105

FGS-1-102

300 paces on 300° or so

FGS-1-103

- 750 paces or 300° or so

FGS-1-104

FGS-1-105

FCS-1-106

Loc.
- main stream - 500 paces

FCS-1-107

Transport Cr. 1000 paces

FCS-1-108

Transport Cr. - at Walsh

FCS-1-109

Walsh Cr. - at Junction

FCS-1-110

Walsh Cr.

FCS-1-111

Walsh Cr.

July 6, 1970

Air photo A12340-49

Locations 173

Samples T70-1-86

Geochem 112-115

Geochem

FGS-1-112

Walsh Cr.

FGS-1-113

Walsh Cr.

FGS-1-114

Walsh Cr.

FGS-1-115

Location 173

- outcrop

- schist

~~quartz biotite schist~~

med-sk green. wthrs to med-skgy

med gr. some feldspar

- schistosity 150/61°W

sample T 70-1-86

July 3 1970

Air photo A12340-50

Locations 174-179

Samples 87-89

geochem - none

Location 174

outcrop

conglomerate

~~sandst bed + lenses~~ 005/7°E

Sandstone.

lt gr - tan rather to lt gr tan
ply cont'd v crs gr - med gr.

subangular, v qtz, tc & qtz + chl gr
muscovite, wh - tan clays
some lt feldspar, carb
blebs of carbon,

clay matrix, calc cont'd.
med bed.

- 1-2' bed within conglomerate

V70-1-87, 2, 6 & c

Conglomerate

- cobbles + pebbles of

chh, qtz, qtzite, gntstik,

lt colored volcanic material - vesicular

matrix of

med - coarse sand, matrix

qtzite, lt colored feldspar

chh, tan - wh clayey material

calc mtd. some mica

massive,

also - sandstone

red brn - rather to yellow brn

med cse ~~grain~~ size grains

d qtz, ckt. wh. feldspar + mica

in red wh. oxide matrix, clayey
matrix $\approx 50\%$ vol.

med ldt. pebbles of volcanic
material.

grains of (volcanic?) clays

grade to

brn purple sh.

- ply, ldt. plant frag

molds, sl. lmn. whet
out plant frag.

- numerous plant frag mold on beds
plane.

100's

- much S&R

- some fine gr. ss.

Location 175

~ 145/10°E

- conglomerate + sandstone.
- graded bedding, congl. of pebbles of chert + cherty argillite
pebble size < 2" |
gtye phyllite - shaly

sandst

- ~~orange~~ ltgy with to ltgy.
- med-coarse phy sorted.
- gtye, w/ feldspar, chert grains
- sh. brown micaceous, tan-cream clay. noncalc.
- thick bed.

conglomerate grading thin
of gr gtters 6" blk

fg ~~ss~~ sandstone

- finely lam lt-medgy

gts, fcl, ss + ch grains
med bdd

T70-1-88

Location 176

- conglomerate

- chert, quartz, quartzite pebbles
in sil + clay sand matrix

100 paces further.

sandstone

med - dk grey - flaggy

- f. gr. quartz, argillaceous,
plant fragment molds up to 1' long.

mica, small carb. blebs

T70-1-89

Location 177

gritty, sandst conglomerate

- v. heavy ss - grit, -

pebbles

qtz, wh feldspar, limon clayey

material some chert - cherts very little

grains. clayey matrix

pebbles of qtz, chert, + limon

volcanic material

st gray tan weathers to red - lt gray

Location 178

- rubble + outcrop
- sandstone
- med-lygy with to lt gy-org.
- interbedded v. coarse + f. ss. gr.
fine grained sandst.
- qtz, arg. some w/ clay
grains, carb. mat. plant frag
molds; some v. shaly material.

crse gr. sandst.
lt gy. tan
- qtz + w/ feldspar gr. ch
some ch + carb. mat.
clayey, brown
med. bedd, irreg.

~~T-70 - 90 (24)~~

Location 179

680 paces on 28° rise

~~115°~~ 100/14°N

conglomerate

qtz, gssite + chty argillite pebbles.
pebbles up to 2", avg 1"
angular.

lt gss - tan with to lt gss - tan
matrix > pebble volume.

v. coarse ss - grit

gss & chty gr., argillite gr
some wh. feldspar, clays

lsma. massive, sh. bed

- v. gr. shaly sandstone layers

- med gss with to tan gssite, micaceous
argillaceous, carb mat. molds of
plant frag. thin bed

sh.

wh. lt. gy med-crsg ss
- ftye, clayey -
grains of chert + wh feldspar.
massive, thk bed.

- note - distinctive feature of congl
congl is angular chips of
chert cherty argillite, at random
angles.

July 9, 1970

Air-photo A 12178-59

Locations 180-183

samples 90-100

serchem 116

FGS-1- 116

Walsh Cr.

July 9, 1970

Location 180

outcrop

conglomerate

brown with to brn.

angular pebbles of + cobble of
brn-purple volcanic material.

phenocrysts up to 2-3 mm of
hornblende + /

matrix of v. gr. greywackes

- green-brn v. argillaceous

v. f. gr. qtz sl. calc

170-1-90

over

overlain by

Location

- conglomerate, agglomerate
- large blocks of angular
- subangular or br volcanic material
- blocks up to 3' thick

or very little matrix

- of much same material as volcanic
- blocks, some org. material
- or calcareous

T 70-1-91

- possible gravel zone
- bedding, brn. screwdriver

- relation of relations unknown

greywacke - sandstone

- possibly underlying
congl.

- brown-red - grey green

- very dirty of gl. -

composed of volcanic minerals + some

feldspar + qtz, v. arg. mat.

- calc. cont. ^{few red speckled}
of qz sized grains

fine, crumbly,

- med bold, ph. bold

- outcrop faulted + folded beds,
fractured + jointed

T70-1-92

Location 181

outcrop - org. siltst?

- greywacke

- lt green gey - with st. brn

- v. argillaceous, silt + s. of gr

- med. gr. sand size grains

some qtz + wk. feldspar, phly

sorted - med. thk bed.

jointed - fold

beds contorted,

no consistent attitudes

- overturned folds.

T 70-1-93

overlain by $\approx 20'$

conglomerate

- large vol porphyritic volcanic
boulders in argillaceous
brn sand, slt argillaceous matrix
little $\frac{1}{2}$.

overlain by

$\approx 30'$

- sandstone graywacke

brown withes to red br.

fractured, massive

varg. slt and sandy

~~some~~ ftyl grain - med gr.

well mch ~~with~~ indurated

noncalcareous

T70 - 1 - 94

Location 182

150/24°E

1
sandstone

- med-gr. greenish with tan len

- v.fg. - fg. gtz

5 v argillaceous sh. calc. cont.

med-bdd, sh bdd

fgtz

- coal ^{lense} - few mm thick

- discontinuous

3' sandst

- th bdd, irreg bdd

- carb mat, plant frag

T 70-1-95

2' - conglomerate

- v. ply consolidated

pebbles of qtz, cherts argillite & volcanic material

- matrix of ply cmlt

brown argillite v. cregy sand matrix

T70-1-96

5' sandstone

medgy licks to tan

- med. ore gr. v. arg.

carb mat in pbb.

stringis ply bdd.

v. calc cmlt.

~~T70-1-97~~

- much like qtz sand 95

25' covered interval

Sandstone

lt grey - within to lds

v. gr. - f. gr. -

20' qtz, red feldspar, argillaceous
sh calc.

- some f. lam. - irreg

irreg lam carb sandst

- arg + carb mat

in laminae. ~~thk~~

thk - massive bdd.

- grades to. brn

grades to

sandst - med gr. brn

f few plant frag, sh silt.

feldspar rich v arg.

170-1-87

160°/34E

5' sandstone

- medgy green - bluish
brown

- f-medgy v arg angular.
qz/c, v arg. no scale
thk bed - massive
intbed with 6"-1'

few thin 6"-1' beds of
d med dk gy green
argillaceous siltstone -
crumbly, thin bedded
normal.

conglomerate

- small to med < $\frac{1}{4}$ "

chips of sh, ^{volcanic} pebbles of
qtz & feldspar

10' matrix of med gr. sand

mat. & argillaceous

sl. calc.

massive

med gr. green with to tan-brown

T70-1-98

- interbed with 1' shk

arg. sandst - crossbedded?

Sandstone

- ltgy. whitish brn-lan.

5' med gr. gtye, al. feldspar
+ argillaceous; al. well sorted.
massive sh. bed, noncalc.

~~Sandstone~~ argil. siltstone

med-ltgy. whitish ltgy.

- argillaceous sandy

2' wh. feldspar gran. carb mat
carb blebs.

T70-1-99

thk bed. massive, feld
calc cement.

sandstone

- medgy green. with to tan

med cng. angular.

feldspathic (red feldspar - wh)

v arg. thau. ph. sld

calc. cng. massini

ph. bold

- grade to

blgy green sandst

v arg. felds wh feldspar

frable

T70-

T70-1-100

2' conglomerate

- as 98

3' argillaceous sandst.

2' siltst

- as T70-1 like sample 99

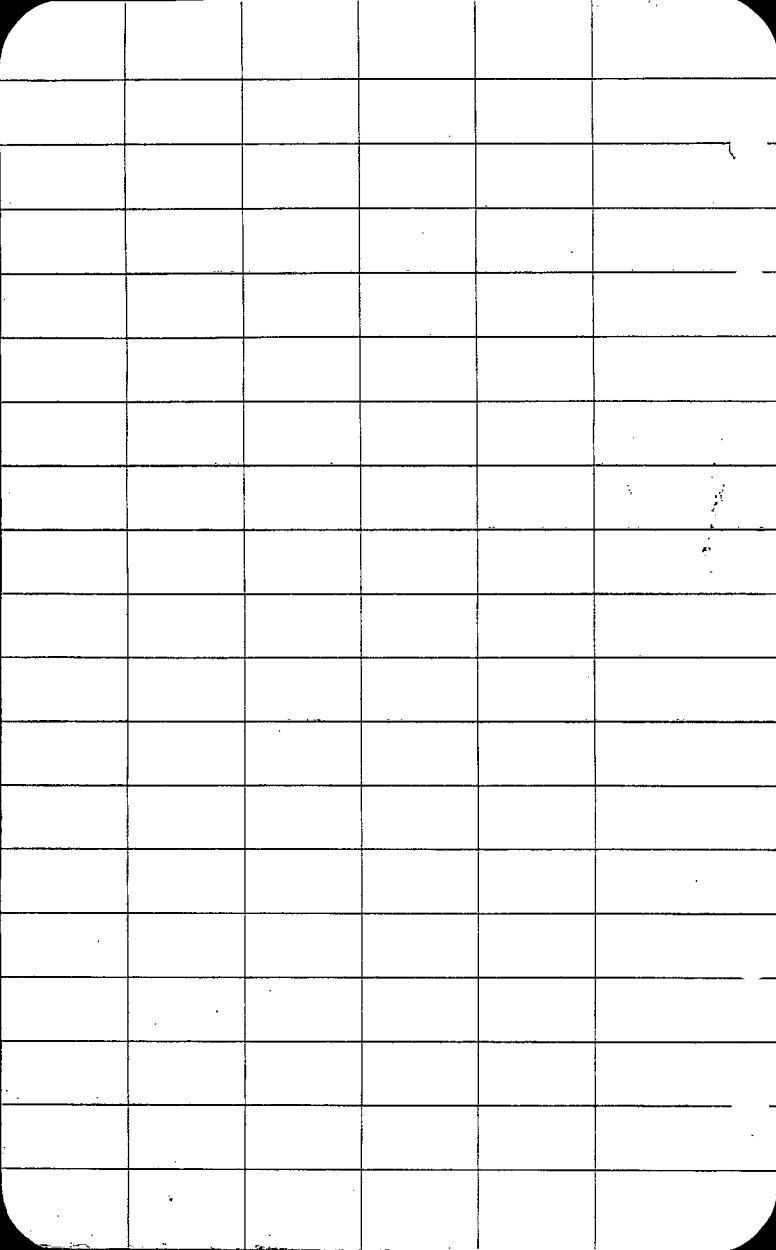
sandstone

- tan withy, varg.

few ~~or~~ sand grain: calc. congl.

(feldspar?) at grain.

massive - thin med bed.



Loc 81 (1831-183)

020

013/37°E

small rocks
as in

small rocks as
calc.

red clay, iron oxide speck
plasma & the grain
substituted for

iron conglomerate

small pebbles of the rock
schist & shale in matrix of

as the rock is very
calc. and

but in

2

25' look within
between org red clay

add $\approx 50'$

July 10, 1970

1 100 150

Locations 184

samples - none

geochem - none

Location 184

- small outcrop (rubble?)

conglomerate

pebbles & cobbles of qtz, feldite

chrt & chrt argillite,

also pebbles of creamy-tan

clay material (volcanic?)

cobbles up to 2", avg $\approx \frac{1}{2}$ "

mat

matrix of coarse sand size material.

angular - subangular grains of qtz

wh feldspar, some chrt grains

- wh clayey material cont. lmn.

matrix > 50%.

poor ply bed, rubblely.

no attitude.

July 11, 1970

Air photo A12340-80

Locations 185

Samples 101

gerchem 117-120

FGS-1-117 (92117)

FGS-1-118 (92118)

~~FGS-1-119 (92119)~~

^{now}
~~sample 400 on 155° (dry station.)~~

FGS- 1-119 (92/119)

FGS- 1-120 (93/120)

Location 185

outcrop.

060/10°N

conglomerate

cobbles, pebbles & boulders of
qtzite, chl., & qtzite granite
most cobbles are of fgs banded
qtzite (micaceous) rounded.

few 8-10" boulders of dk chl &
qtzite granite.

smaller pebbles of qtz, chl, chtz
argillite & vesicular volcanic material
volcanic pebbles - lt pink, consists of wh clayey material

matrix of cusp. sand size material.
subangular qtz qz, some wh. feldspar
& chl wh clay matrix cement, iron

lt qz with lt qz.
med bdd, jointed

interbedded with
sandstone.

lt gy tan with lt gy - tan
med gr angular - subangular
qtz some wh. feldspar &
sk gy chert grains, some wh
mica. clayey,
cal. med some sk gy
chert pebbles -
med bedded, jointed

overlain

- more sandy toward top.

Sandstone lense.

- 18" max thickness

- shows low angle & bedded

med bed

lt gr. with to tan org.

med gr. subangular subrounded

with feldspar chert grains

in clayey cut, some feldspar

overlain by

conglomerate.

- 70% matrix in matrix

small f. chert & chert angular pebbles

clayey, volcanic pebbles

matrix of coarse gr. f. sand, chert

chert gr. feldspar.

clayey. brown. normal.

overlain by.

conglomerate

- pebbles cobbles & boulders
up to 1 foot.

qtzite (banding micaceous)
igneous rock, chert.

Matrix small pebbles of
qtz, chert & pink volcanic rock
in med. coarse gr sand size
material

qtzite, chert gr. feldspar.
Lenses, some.

Q25/15°W

Sandstone

ltgy with to tan.

f-meds. gfk wh feldspar

cht grains of clay, matrix

cross laminated

sed. structure (worm burrows)

overlain by

medgy with to lggy.

vfgr ss - siltst gfk

argillaceous, st

laminated

plates in outcrop

T70-1-101

July 12, 1970

Air photo A12340-50

and A 12178-59

Locations 186-192

samples 102, 103

geochem 121, 122

FGS-1-121 (92/21)

925 p.p.m. on 258°

FGS-1-122 (92/22)

1000 p.p.m. on 98° line

Location 186

285 paces

outcrop -

010/11°W

conglomerate

most less than 2"

pebbles & cobbles of wh & ls, shgy

cht, lined medgy gste + fgs.

volcanic sh - int

also pebbles of wh - clayey gste

rock - thin contorted laminae of
iron oxide material

matrix & shgy with ls

med. coarse gr sand sz material

gste some wh feldspar & shgy cht gr.

some irregular chky argillite gr.

clayey. Imm

interbedded with

2' thick layers of sandst

lt grey with fine tan org.

med bed low angle + beds dipping
to west.

- med. org. of some crs.

qtz - some wh. feldspar

chrt, chrt, argillite gr.

clayey matrix. low

some micaceous matrix

well bedded, med indurated

25 paces - further sand west

- Conglomerate

- larger cobbles - up to 6"

sandstone

SKR as other sandst

- but red within, coarse gr.

sl. calc cont.

Location 187.

89 400 paces

160/14° W

int bedd cong + sandst

congl - up to 50% ss matrix

pebbles: cobbles of gtz chert

qtzite + fgs porphyritic

creamy, clayey, volcanic material

matrix fgs sld. matrix cre -

v cre - gtz, material of same comp

clayey lmr.

lt gtz with to red

sandst

lt gtz with to red cre - v cre gtz

gtz, sub mica some int feldspar

+ chert clayey lmr.

massive - med bedd.

15 paces SW

- conglomerate

- massive, tan coloring.

pebbles & cobbles of gts chb,

ls banded gbs & igneous rx,

volcanic material - lens matrix

u coarse sand

Location 188

outcrop - small - 335 paces

- conglomerate

- angular, well-sorted

- cobbles & pebbles - mostly of
gneiss (granitic, biotite rich
~~thin~~ lineated)

Matrix -

red-rose gr. subangular

qtz, ~~muscovite rich~~

muscovite, feldspar

clayey sand, lim.

- massive

25 paces N

360/194 W

- conglomerate + sandstone

- congl - greater volume of
matrix.

small pebbles of qtz, chrt + chrtz angulata

matrix of coarse gr. sand.

qtzite, feldspar - some chrt

subangular, some muscovite

little clay or clay cont

- sandst - same as matrix

- ph. bed, massive

underlain by

360/18°W

interbedded sandst & congl

congl. - pebbles & cobbles of
qtz, gtz, etc. & grains or
volcanic material - fgs cream ~~gray~~ clayey.

sandst

- SKR as matrix of sandst
overlying

Location 189

outcrop on butte

- volcanic

bl - med green

aphanitic - v. f. gr.

feld + jtd

ruh qtz in fractures

with red - dk ggs

T 70 - 1 - 102

some dk gm - porphyritic

fgr small phenocrysts of

plagioclase + qtz

some amygdala

Location 190

outcrop

volcanic

med green with to red brown

v. of gr. some phenocrysts

folts & jts

145/39°E. main fol. plane

some lesser sulfides

some large plag. phenocrysts

Location 191

outcrop

- volcanic

SKR

- series to dk (apple) green

fig.

Location 192

outcrop

- volcanic

alkali. v. gr.

some phenocrysts SKR

varies to masson-dk gr
mottled.

170-1-103

July 13, 1970

Air photo A12340-50

Locations 193-196

samples none

geochem 123

FGS-1-123

300 paces on 180° line

Location 193

outcrop 015/7°W?

- poor outcrop.

- sandstone, conglomerate

pebbles of qtz , cht &

wh-buff laminated clayey qtz ite.
some creamy colored volcanic material.

matrix of coarse - v. coarse sand

size material, few pink qtz grains

subangular qtz & cht , some feldspar

matrix of wh-tan clay some

clayey grains of volcanic material.

ply sorted, stalk bed - massive

- sandstone same as matrix

- also rubble, cobble conglomerate

oring nothing

Location 1914

outcrop 146/8°W

conglomerate

- pebbles of gtz w/ gtz

chtz argillite + chl.

wh. gtz pebbles subangular - subrounded

dk grey - blk chtz argillite pebbles r.t.

2" - angular - elongated

pebbles imbricated

some pebbles of dk grey gtz + argillite

matrix of v. coarse gr. - gtz

material - gtz, cht, argillite

grain some muscovite +

wh. feldspar - w/ wh.

clayey matrix sl. brown

shy bed.

dk grey color

matrix > 50% volume

Location 195

rubble - no outcrop.

- sandst - siltst

v/gs sandst - siltst

wh. siltst within wh.

qtzite, feldspar?

frag. some cor. coat

plant frag. or burrows

med bedst. ply bedst

~~195~~

- also sandst

- v. coarse gr. siltst, within 6' len.

- siltst, qtz, wh. feldspar. chl. gr.

clay, matrix, len.

med bedst.

Location 196

outcrops

conglomerate

pebbles of wh qtz , $gltz$
& angular elongated pebbles of
chly argillite - slight
subrotation

avg pebble size $< 1"$

matrix

- coarse, phys. sd. sand size material
 qtz & chly gr. some at fl. par
chly matrix sl. brown.

July 14, 1970

Air photo A12340-50

Locations 197-203

samples 104-108

Geohem 92124

FGS-1-124 (92124)

Location 197
~~July 1st, 1970~~

(290 paces @ 117° true)

outcrop

~~H679~~ slumped.

050° true

- intbdd congl + grit

conglomerate

- predominantly qtz + $slqz$ - black

cht argillite pebbles avg size < 1"

$slqz$ with tan - $slqz$.

some imbrication, ply bdd

matrix

matrix of v ply std sand size material -

med gr - $grit$. qtz , cht +

mica gr . - some w/ feldspar

sl w/ clayey matrix sl lms

well cmt'd, noncalc

sandstone - grit

blgy-tan with to tan-red

ply std gts gr

chly argillite & musc.

some ~~arg~~ feldspar - wh clay matrix

sh. lmn. lmn

carbonaceous ~~gr~~ blebs

* large molds of plant fragments

thk bed, ply bed

sil contd?

- variation in grain size
between beds

some met crop is

- sh. laminated

Location 198

105/9°W

SKR

ltg, g₂, ckt + ckt₂ - elongate

shg₂ - blk ckt + ckt₂ argillite

contacted pebble alignment

Crse of sand ~~beds~~ lenses

ben - red w/ths so lenses

Location 199

outcrop - slumped
conglomerate

- pebbles + cobbles of chl,
chls argillite, & banded
qtzites + qtz some
lamination cobbles up to 5" long.
angular - subangular -
with tan - ltyg.

- matrix of medgy qtzite
material argillaceous, some
carb mat. grains of
v. phs, sld - ^{floating} grain of qtz,
plant frag, qtzite + feldspar.
phs bold, massive
some fractures -

T70-1-104

interbedded with?

Sandstone

lt gy^{wh} with to tan. lt gy.

med. crs. gr. ph. sld.

med. gr. subangular ght

cht. argillite gr. feldspar

wh clayey matrix - trace

lenticled aligned gr. elongated grains

sl. lms

thk bed. massive

Location 200

165/6E

- outcrop

- pos. slanted

Conglomerate

Med. Sggy with ltgy - org - med
rel. well sorted. pebbles of
qtz, chrt, argillite + Sggy gylt
phyllite - few pebbles > 1"

med $\approx$ 70-80%

Matrix of med. Sggy with gylt
material, argillaceous

floating grains of size med - pebbles
of qtz, chrt, feldspar + ltgy
- creamy clumpy ~~sub~~ grains

thk bed. plant frag molds

some carb material well cont

thk bed. massive

70 - 1 - 105

Location 201

- outcrop

conglomerate

ltgy - tan with ls. ltgy.

rel. well sorted pebbles of gts
cht + cream, clays (volcanic?)
rk avg size $\frac{1}{2}$ "

matrix of med coarse gr
sand - gts.

also cht + feldspar grains.
wh clays cont. fma.
massive.

on S side of stream

conglomerate - ltgy - wh with same

pebbles of pred gts + gts.

matrix of coarse gr angular gts. feldspar + ch
grain, clays cont.

Side of stream

sandstone - underlies congl.

106a ltgy - tan - with to tan

med - coarse gr. angular - subangular

qtz, feldspar, clay grain

fine sh grain clay, ss, matrix

limestone, coralline plant frag.

siltstone

rubble - probably underlies

coral

med - dkgy with ink - ltgy

silty - vfg as somewhat feldspar

grain, arg. mat. carb. mat

plant frag.

106b

shy bed, well indurated

70-1-106

Location 202

85 paces up stream

- outcrop

conglomerate

pebbles of qtz , ftz , chl +

chl argillite some volcanic pebbles

rel. well sorted

matrix of ~~weak~~ ph silt

sand size material - qtz ,

feldspars, chl + chl argillite grains.

some musc. $chys$ grains

clays, matrix $lamin.$

some med gr. red grains

silt contd. rubbly

Location 203

outcrop

Conglomerate

- platy. 1495 within 100 yd.
- cobbles & pebbles of medgs
- qtz - alk feld. rk. large
- grains sub feldspar, igneous
- rk & banded medgs, chl.
- smaller pebbles of qtz, qtzite & chl.

matrix of medgs - quartz, size
material - 1/2 qtz grains, alk
feldspar & chl grains, clayey grains
- sil. cont. 1mm.

cobbles - T 70-1-107

- also in creek

~~float - b~~

Float rubble - black
coaly shale. ply bdd.

~

slty carb shale coal lenses

T70-

T70-1-108

100' downstream

conglomerate

SKR

more ltgy banded chert pebbles

July 15, 1970

Air photo A12176-436

Locations 204-207

samples to T70-1-109

geochem - none

~~July 15, 1970~~

Location 204

100/10°E ?

outcrop

conglomerate, interbedded sandst

- cobbles + pebbles of qtz , cht
+ lt qz qtz , banded qtz (micaceous)
some igneous

- matrix of sand size material
 plg , std , qz , qtz + some
 pld per + cht grain clayey.
sil cont. low.

sandst.

- lt qz with lt tan qtz
f-mesh. subrounded
 qtz some with pld per + cht grain
some lt qz creamy fgr. $grains$ $larger$ grain
sh. fragment grain low
also some pebbles.

Location 205

- rubble ridge

- no outcrops

- interbedded sandst + conglomerate

& sandstone

thin red mudstones

med gr. subarkosoidal argillite

subarkosoidal - subarkosoidal gr. fine

fine gr. clayey argillite brown.

med. bedded

p

conglomerate

- ph. std, cobbles of gr.

argillite & argillaceous st.

Location 206

outcrop?

- limestone

- dk gy with to dk gy blue
micrystalline, sandy or
poss pelletoidal
massive, fctd & v. v. v.

T70-1-109

Location 207

rubble

conglomerate

pebbles & cobbles of chert

$\frac{2}{3}$ white

matrix of sand size material

qtz, feldspar chert, clay

limonite, sil. cement.

July 16, 1970

Air photo A12340-50

Locations 208

sample none

geochem 125-128

FGS-1-125 (92125)

- 500 paces on 275°

FGS-1-126 (92126)

900 paces on 275°

FGS-1-127 (92127)

1050 paces on 275°

FGS-1-128 (92128)

1100 paces on 275°

Location 208

outcrop (47' over cliff)

- conglomerate

- clay-tan buff

ply, sorted - large cobbles of chert, micaceous
laminated siltstones, cream-pink
clayey volcanics, igneous rx, argillites
avg cobble size 4-5"

matrix of med-fine sand size material
grain of tan-creamy clayey volcanics
qtz, chert, feldspar,
chert sil cont lmm
tan wthy color.

- rubble outcrop, field

pos altitude

070/24°N