

015901

6-1

PROJECT: DY

STATION: _____

DDH: 79-X-6DEPTH: 1584DESCRIBED BY: T.L.J.UNIT: 5B2(3)DATE: July 25/80 -1

T.S.

HAND SAMPLE:

nor. Probably graphitic sericite bearing (q+g) phyllite.

PURPOSE:

	mole %	EST.	POINT CT.
Q	70	mosaic, skewed	
Sor	8+8		
chl	X		
cal(carb)	~2		
graphite	15		
(?) dusty min.	2		

COMMENTS: Fine alternated bands of (graphite + muscovite) and (quartz + sericite).
($< 1\text{mm}$)

Fabrics of sericite in quartz-rich layer is oblique to bedding (S₀ plane) and ~~it~~ sericite tend to be parallel with S₂ foliation. On the other hand, sericite in graphite-rich layer is high in birefringence and parallel to bedding. Sericite doesn't cut graphite. Carbonate does not show any deformed structure and cuts everything, indicating its later origin.

PROJECT: DY
 STATION: _____
 DDH: 79-X-6
 UNIT: 5A0

DESCRIBED BY: T. U.
 DEPTH: 216
 DATE: July 25 - 2

T.S.

HAND SAMPLE:

graphite rich phyllite. no sulfides. S_1 and S_2 foldings are clear. calcite veinlets cut S_1 plane and tend to be parallel to S_2 .
 Finely banded. ~ 0.01 to 0.03 mm thick.

~~PURPOSE:~~

mineral	mode %	EST.	POINT-CT.
Q	50	Fine (very fine) grained, not massive	
Ser	5	is ~~not~~ bent by S_2 folding.	
Chl	X		
cal	10	see below	
graph.	35		

COMMENTS:

Calcite occurs in two different modes, that is, ① calcareous ~~to~~ fine layers (~ 0.2 to 0.5 mm) which are alternated bed with graphite ..., and, ② vein which ~~are~~ is described in Hand Sample. Therefore, ① calcite can be primary component of this rock. Quartz in this unit is characteristic with its very-fine grain-size. ... metamorphic or igneous origin??

PROJECT: DY

STATION: _____

DESCRIBED BY: T.U.DDH: 79-X-06DEPTH: 241.7DATE: July 25 - 3UNIT: 5B 7

T.S.

HAND SAMPLE: Greenish in color because of banded chlorite. Segregation veinlets of quartz run nearly parallel to S. plane. Buff carbonate fringes quartz vein, in some places.

~~PURPOSE:~~

	Mode %	EST.	POINT CT.
Q	40~ ~~40~~	0.05 ~ 0.15 mm ϕ	mosaic.
Ser	10	mass. + mixed	layer??
Chl	5		
Cal	40	mainly recrystallized into 0.21 mm crys.	
Graph	~5		
py	~1	euphrat.	

COMMENTS: Calcite shows recrystallized texture. Some of it is still fine grained and brownish (slightly), latter can be dolomitic.

Biref. of ^{ser}~~ser~~ is ^{low}~~low~~. ~~the~~ Further check is needed.

Chl. is slightly greenish in color, ~~low~~ ^{low} color birefringence. May be, Fe-rich.

Greenish band is actually a mixture of ser and cal.

PROJECT: DY

STATION: _____

DDH: 79-X-06

UNIT: _____

DESCRIBED BY: T. C. I.

DEPTH: 251.2

DATE: July 25 - 4

HAND SAMPLE: Quartz-feldspar porphyritic dacite. Quartz is euhedral with ϕ of 1-3 mm. Feldspar(s?) are altered and glass is bleached. field name might be altered porphyritic dacite. dike? or diorite quartz

PURPOSE:

		EST.	POINT CT.
Q		igneous & phenocrysts. + secondary.	
Ser			
Chl			
Carbonate			
graphite	X		

COMMENTS: carbonate-chl assemblage replaces mafic minerals (pyroxene??).
matrix part is a mixture of Q, ser. + chl + calc

6-5 (chilled margin) indicate that this rock is basic
(because we have corroded qtz) and biotite bearing.

PROJECT: DY
STATION: _____
DDH: 79-X-06
UNIT: 587

DESCRIBED BY: T.U.
DATE: July 25 - 6

HAND SAMPLE: tuffaceous calcareous quartz (quartzite) schist. Few mm thick alternative bands of tuff (?) and quartz (calcite) layers.

PURPOSE:

sometimes mix with calcite finely (need more check)

	mode %		EST.	POINT CT.
Q	40	10		
✓ Ser	5	20		
chl	1	40		
Cal	55	30	recrystallization	
graph	1	5		
dol.	10	?		
	cal + clay layer			

COMMENTS: Carbonates can be divided into dolomite ~~to~~ porphyroblasts and calcite matrix.

If we divide this rock into (i) clay rich (tuff) layer and (ii) Q-calc layer

(i) ~~could be~~ could be entirely volcanic. (graphite is very small in amount).

(ii) could be sedimentary + chemical. (free from graphite)

little

biogenic contribution.

this sample is ~400m above ore horizon. Still, chemical precipitation?

PROJECT: DY
 STATION: _____
 DDH: 79-X-6
 UNIT: 586

DESCRIBED BY: _____
 DATE: _____

HAND SAMPLE: *non-calcareous phyllite. Thickness of quartz and clay+gyp layers are 0.5~1.5 mm and 0.5~2 mm, respectively.*

PURPOSE: _____

	mode	EST.	POINT CT.
Q	98 ~2	Mosaic, ~~no~~	relatively coarse.
Ser	2.5 90		
chl	X ?		
cal	X X		
graph	X 5~8		
	Qtz clay		
	layer. layer		

COMMENTS: *Sericite fabrics (flake orientations) are parallel to S_1 fold plane if S_2 does not exist. If the latter exists, sericite flakes ~~change~~ rotate its orientation to become sub-parallel to S_2 plane.*

Graphite is limited in sericite layer and doesn't exist in quartz layer. If this is an original feature, we can tell that (i) clay component can be originally silt or clay size sediments (ii) slow rate of sedimentation ~~gives~~ gave time for organic activity. (iii) quartz sedimentation or precipitation ~~can~~ be much faster without enough time of organic activity.

