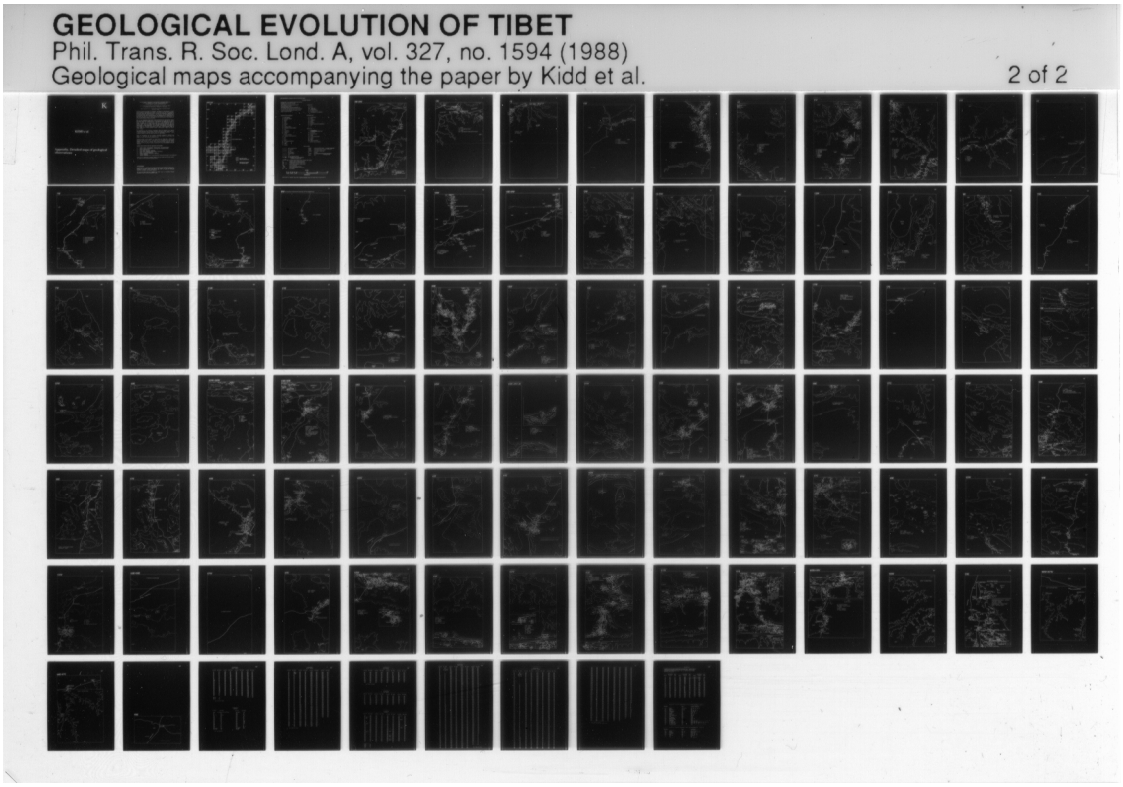
(microfiche of geological outline maps included in pocket at back of volume)



Detailed Maps of geological observations to accompany Chapter 11 -
Geological mapping of the 1985 Chinese-British Tibetan
(Xizang-Qinghai) Plateau geotraverse route

W.S.F. Kidd, Pan Yusheng, Chang Chengfa, M.P. Coward, J.F. Dewey,
A. Gansser, P. Molnar, R.M. Shackleton, Sun Yiyin.

Maps compiled by J.F. Dewey and W.S.F. Kidd; revised and drawn
by W.S.F. Kidd

Originals plotted and drawn on topographic map base at 1:100,000 scale. A full set of original topographic map sheets, and another full set with (unrevised) geological data and localities plotted during the traverse are deposited in the British Museum (Natural History). Data shown on the maps reproduced here on microfiche have been checked against, and supplemented or revised from the map sheets and notes of the Royal Society participants of the geotraverse. A copy of the notes of most of the Royal Society participants is also deposited in the British Museum (Natural History).

Most of the topographic map sheets used are divided into east and west halves for these microfiche reproductions, identified by the index number or letter and as the east (E) or west (W) part. Map sheets are identified by number or letter as given in the index map (Frame 2). A few sheets have only one portion taken from the centre; these are identified as centre (C) with the index number. Some sheets have been combined with adjacent sheets where the distribution of data permitted. In two cases, observations fall outside the area covered by available topographic base maps. These have been shown on bases taken from orbital-derived images (specifically LANDSAT and metric camera images).

The boundaries of the original topographic maps are nominally at 30 minute longitude intervals and 20 minute latitude intervals (Frame 2 index map) but do <u>not</u> necessarily coincide exactly with such geographic coordinates. Exact placement cannot be made from data available to the authors.

Where map boundaries are not exactly juxtaposed between two adjacent map sheets, an indication of the position of a map corner is given along the border of one of the two maps reproduced here

Locality and/or outcrop numbers on these maps are given with a letter and sequential number (e.g. M244). Any locality can be connected with the working group(s) that visited it by the letter used, according to the list below. Further details on any locality may be found in the notebook(s) of the member(s) of the particular group, deposited in the British Museum (Natural History).

<u>Working group letters used for localities on the maps</u>

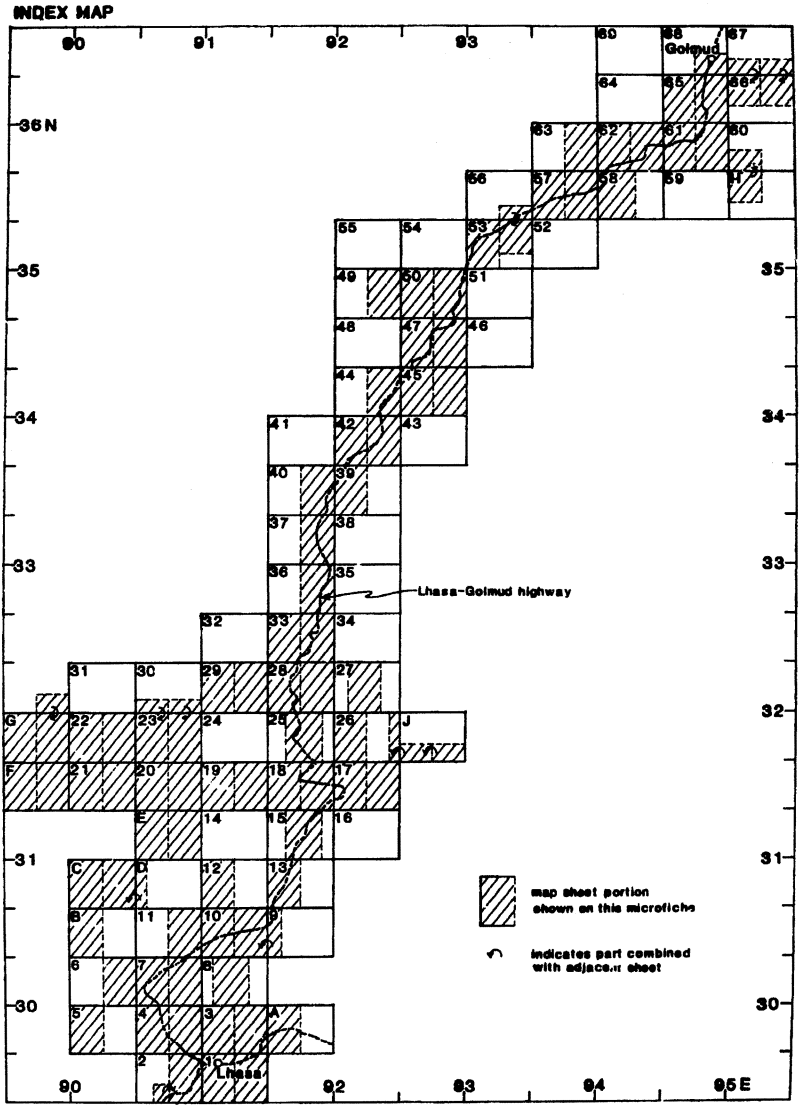
B - Leeder, Smith (Stratigraphy, Sedimentology, and Palaeontology)
G - Harris, Pearce (Geochemistry, Petrology and Isotopic studies)
H - Molnar (Neotectonics)
M - Kidd, Dewey (Structure, Mapping)
N - Kidd, Molnar (Mapping, Neotectonics, Structure)
P - Watts, Lin (Palaeomagnetism)
S - Coward, Shackleton (Structure, Mapping)
T - Gansser (Mapping)
X - samples renumbered by G; from localities visited by B,H,S and T (see Frame 92).

Lists of all localities by group, keyed to the map sheet on which each occurs, are found on this microfiche (Frames 86-92).

<u>Acknowledgments</u>

We thank Susan L. Anderson for design and much of the drafting of these maps. Thanks also to Diane Paton for typing the tables, and the Department of Geological Sciences, State University of New York at Albany for providing essential equipment and material supplies.

Pan Yun and Wang Ping are thanked for their help in translating Chinese geographic names from the topographic maps.


INDEX MAP
90
91
92
93
94
95E
36N
35
34
33
32
31
30
Golmud
Lhasa-Golmud highway
Lhasa
map sheet portion shown on this microfiche
indicates part combined with adjacent sheet

EXPLANATION for symbols used on microfiche maps

Lithology indicators

Indicators have no age implications. Ages of litho-units are designated on each separate map sheet.
Ages of plutonic rocks based on isotopic dates or intrusive/provenance relations
Where lithology indicators are used in combination, the order used does not necessarily imply relative abundance.
A number (e.g. Ra2) distinguishes one similar unit from another on the same map sheet.

Sedimentary rocks and sediments

- A — arenite, siltstone
- Ra — red arenite, siltstone
- Q — quartzite
- Af — flysch
- W — wacke
- Si — siltstone
- Sh — shale
- Sm — mudstone, argillite
- Rm — red mudstone, siltstone, marlstone
- S — slate
- Sc — siliciclastrome
- Cg — conglomerate
- Cb — breccia
- L — limestone, carbonate
- Lcg — limestone conglomerate/breccia
- H — chert
- F — coal
- E — gypsum
- Ml — lake beds,soft marls,sand
- Mg — gravels
- Mo — moraine
- T — travertine

Volcanic rocks

- Vm — mafic
- Vmp — pillow lava
- Va — andesite/dacite
- Vs — rhyodacite/rhyolite
- Vc — volcaniclastics, tuff, agglomerate

Metamorphic rocks

- Kn — granitic gneiss
- Ks — schist
- Ka — amphibolite
- Sp — phyllite
- Ph — phyllonite
- Sv — phyllitic/cleaved mafic volcaniclastics
- S — slate

Plutonic rocks

- G — granite/adamellite, or undifferentiated granitoid rocks
- Gd — granodiorite
- Gl — diorite/qtz diorite
- Gy — syenite
- Vp — porphyry dikes and sills
- Bd — dolerite
- Bg — gabbro
- Bgp — gabbro & pyroxenite
- U — ultramafic rocks, serpentinite

Other symbols

- edge of bedrock outcrop
- dirt road/track
- main road
- limit of mapping
- geological contact
- fault
- fault, with Quaternary movement
- fault displacement; normal reverse strike-slip teeth/ticks in direction of dip
- bedding, flat, inclined, upright, vertical, overturned: dips in degrees
- younging (in absence of bedding measurement)
- cleavage/phyllitic cleavage, inclined, vertical
- gneissic foliation/schistosity, inclined, vertical
- minor fault orientation
- plunge of minor fold hinge (degrees)
- plunge of fabric lineation (mineral, stretching)
- dike orientation

- OM244 — locality/outcrop with number — see Frame 1 for explanation of prefix letters
- C867* — fossil-bearing locality or section
- ■ Amdo — town, village, or highway depot
- ● — hot spring
- ·6179 — spot height (metres) (highest and/or lowest specified elevations on map)
- lake

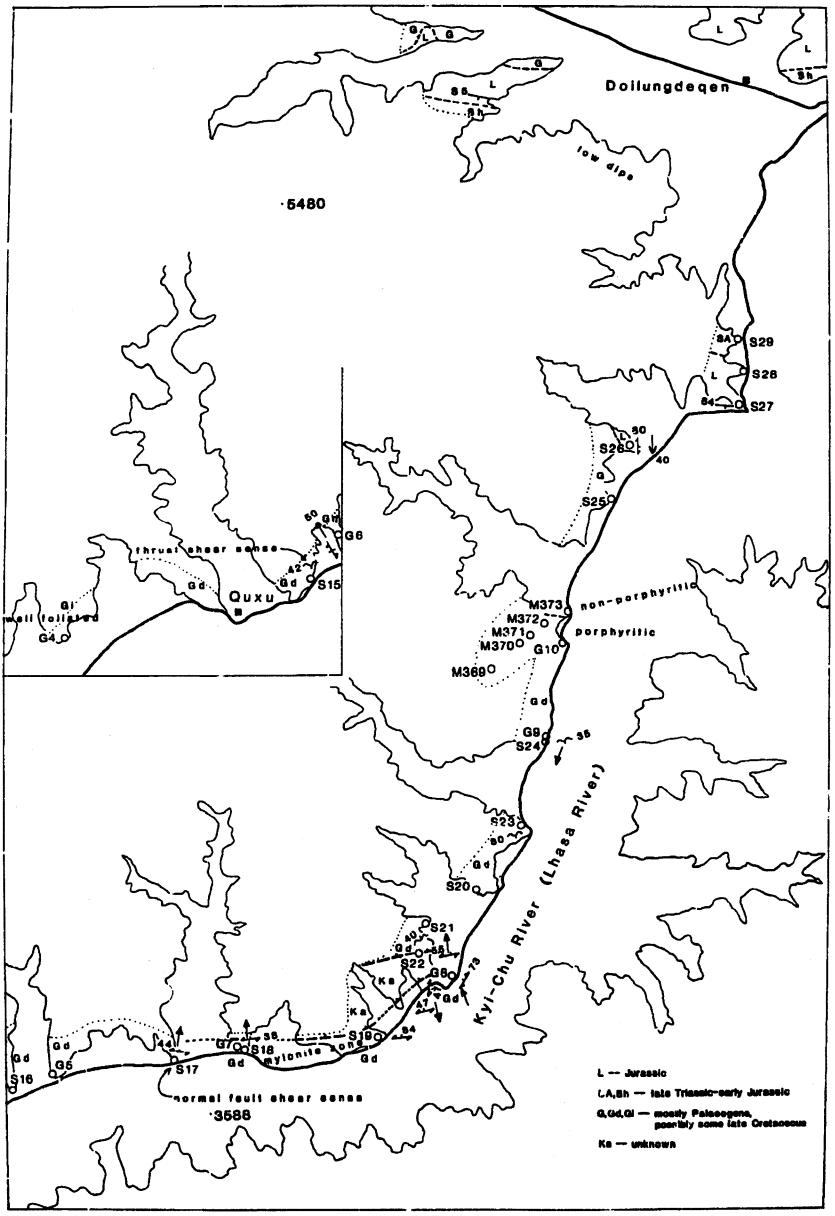
Scale

0 1 2 3 4 5 10 15 20

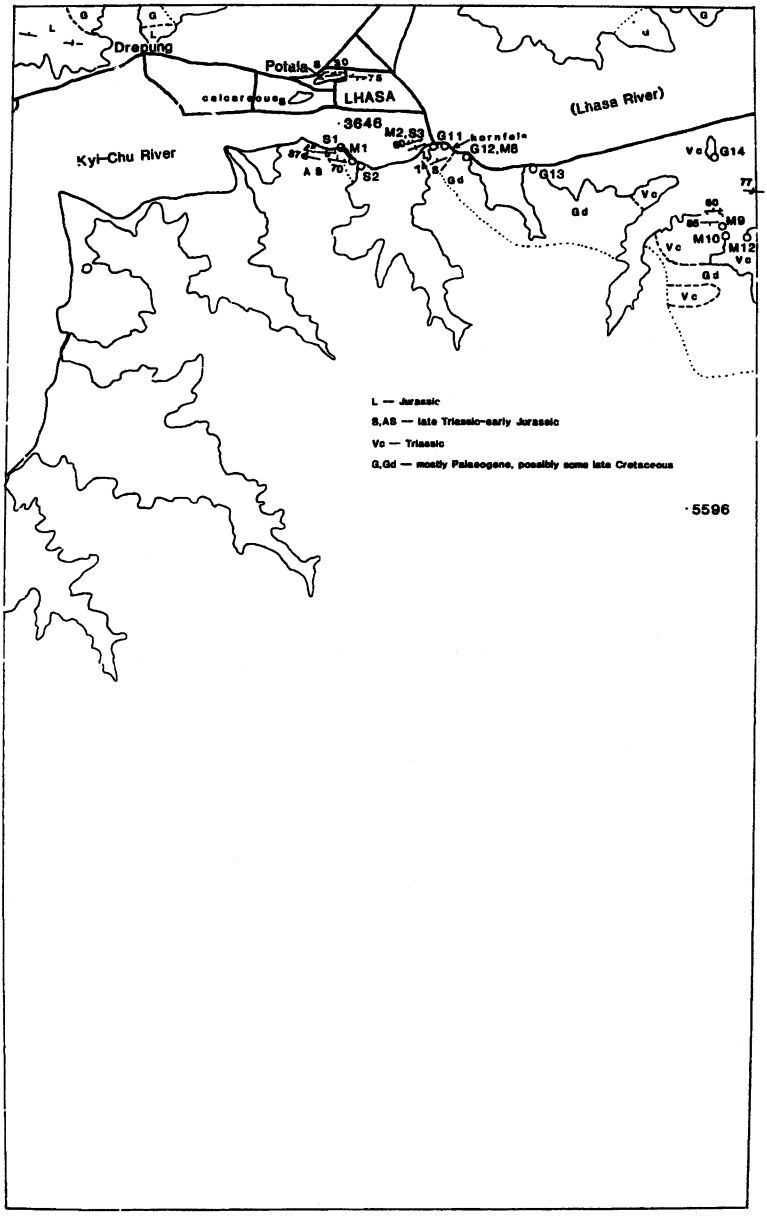
kilometres

Maps drawn at 1:100,000. Base: PRC 1:100,000 topographic maps, most dated 1973-75 (see Frame 1).

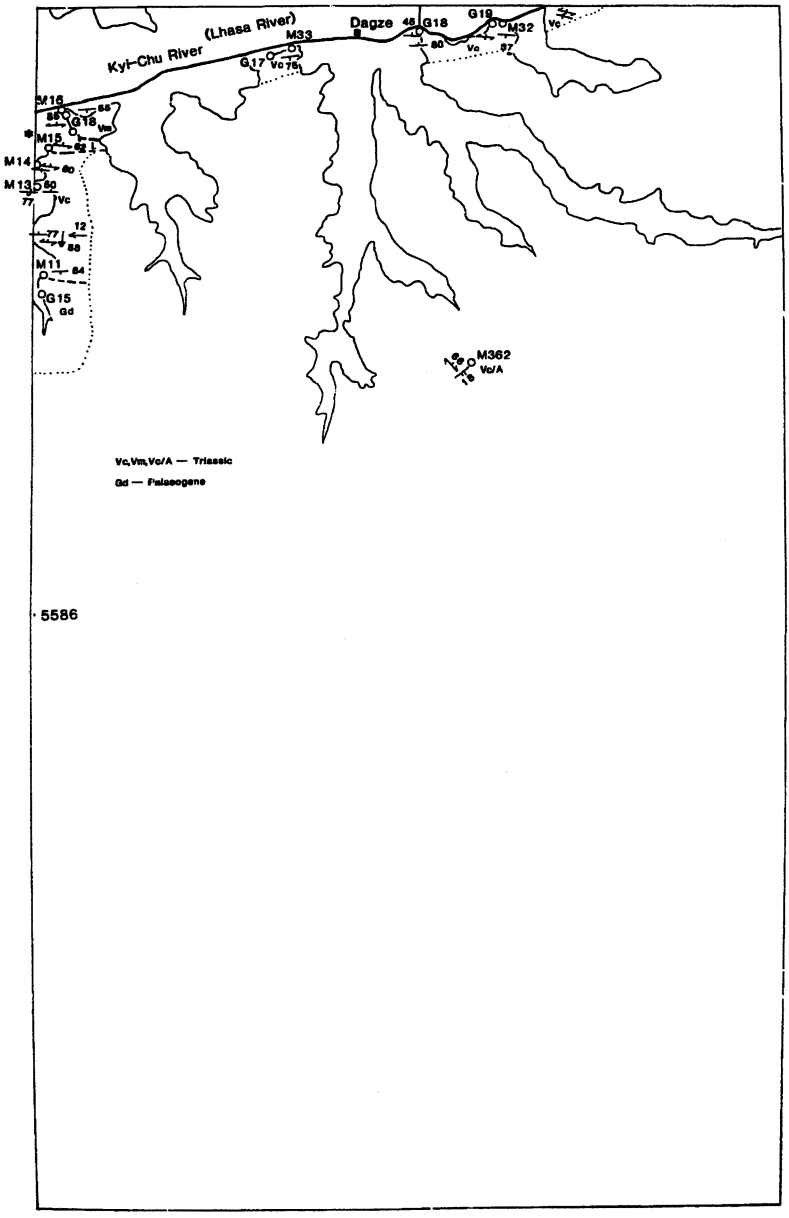
2E+2W


Doilungdeqen
low dips
·5480
S29
S28
S27
S26
S25
M373
M372
M371
M370
M369
non-porphyritic
porphyritic
G10
G8
S24
S23
S20
S21
S22
G9
Ka
S19
S18
S17
S16
G7
G6
G5
G4
S15
Quxu
thrust shear sense
mylonite zone
normal fault shear sense
·3586
Kyi-Chu River (Lhasa River)
L — Jurassic
L,A,Bh — late Triassic-early Jurassic
Q,Gd,Gl — mostly Paleogene, possibly some late Cretaceous
Ks — unknown

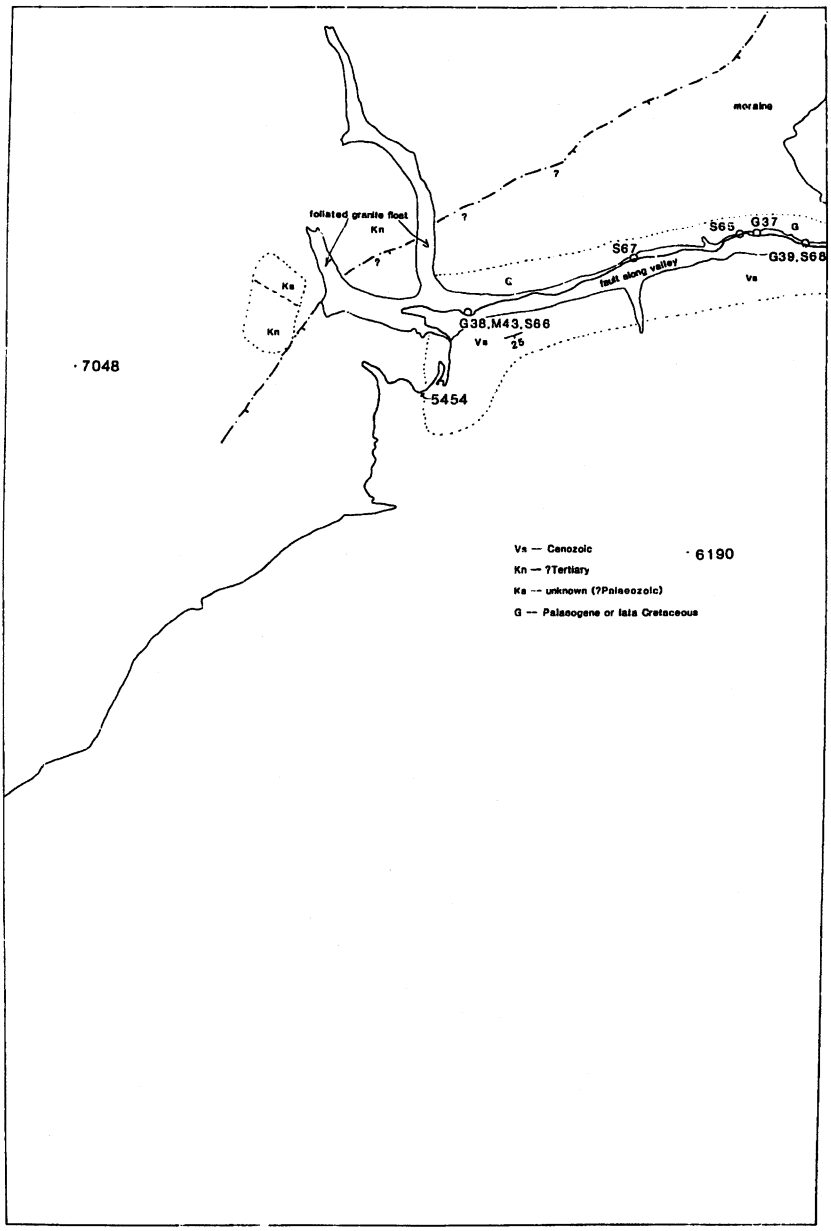
1W


Drepung
Potala
LHASA
calcareous
3646
M2,S3
G11
hornfels
G12,M8
S1
M1
S2
A B
Kyi-Chu River
(Lhasa River)
Vc
G14
G13
Gd
M9
M10
M12
L — Jurassic
S,AB — late Triassic-early Jurassic
Vc — Triassic
G,Gd — mostly Palaeogene, possibly some late Cretaceous
5596

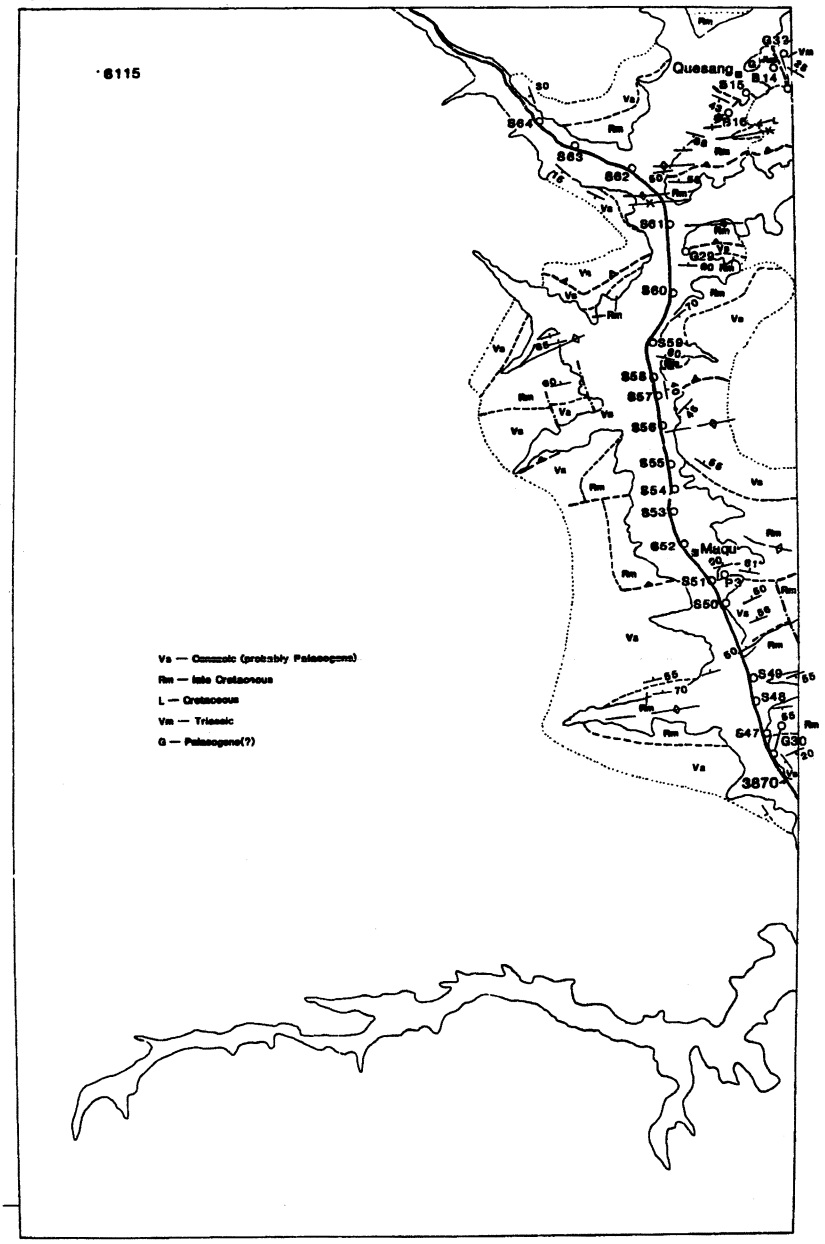
1E


(Lhasa River)
Kyi-Chu River
Dagze
M33
G17
Vc 75
G18
48
80
G19
M32
Vc
87
M16
G18
M15
M14
M13
M11
G15
Gd
Vc,Vm,Vc/A — Triassic
Gd — Palaeogene
M362
Vc/A
5586

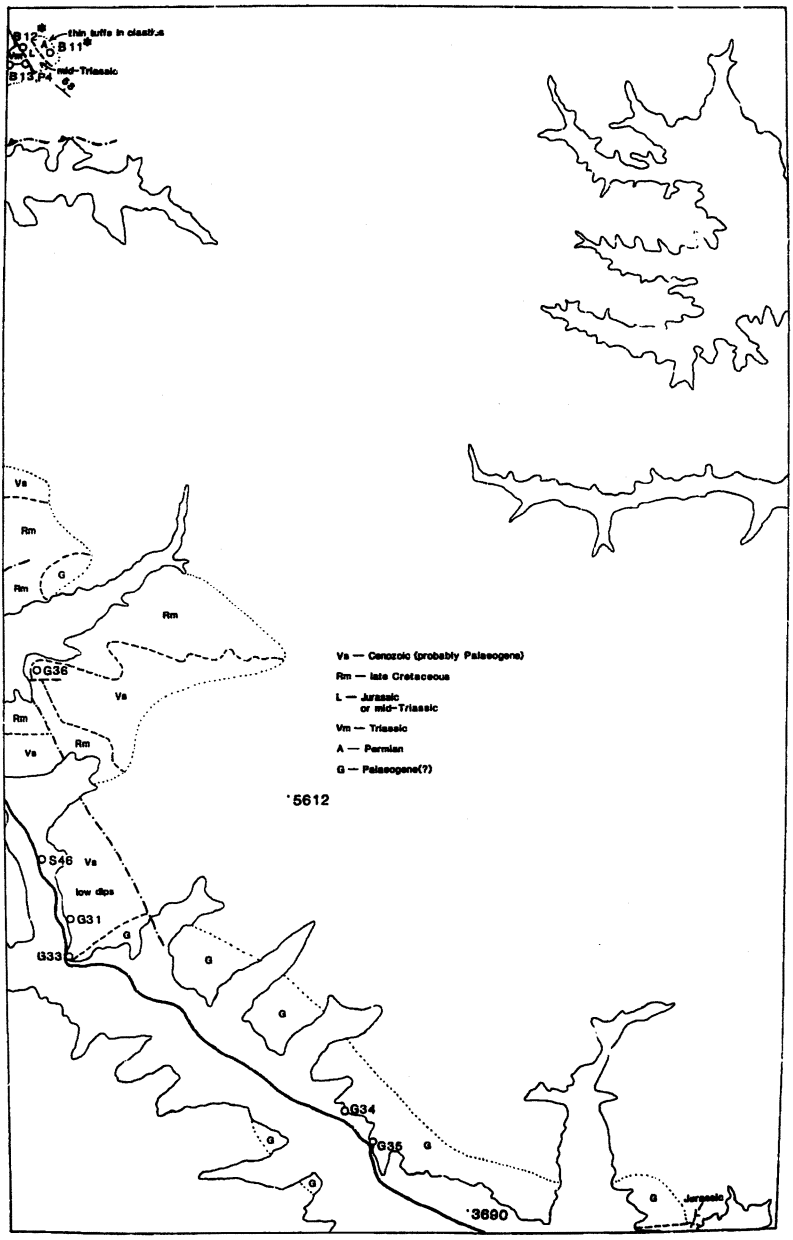
5W


moraine
foliated granite float
Kn
?
S65
G37
G
S67
G39,S68
fault along valley
C
Vs
Ka
Kn
G38,M43,S66
Vs
25
7048
5454
6190
Vs — Cenozoic
Kn — ?Tertiary
Ka — unknown (?Palaeozoic)
G — Palaeogene or late Cretaceous

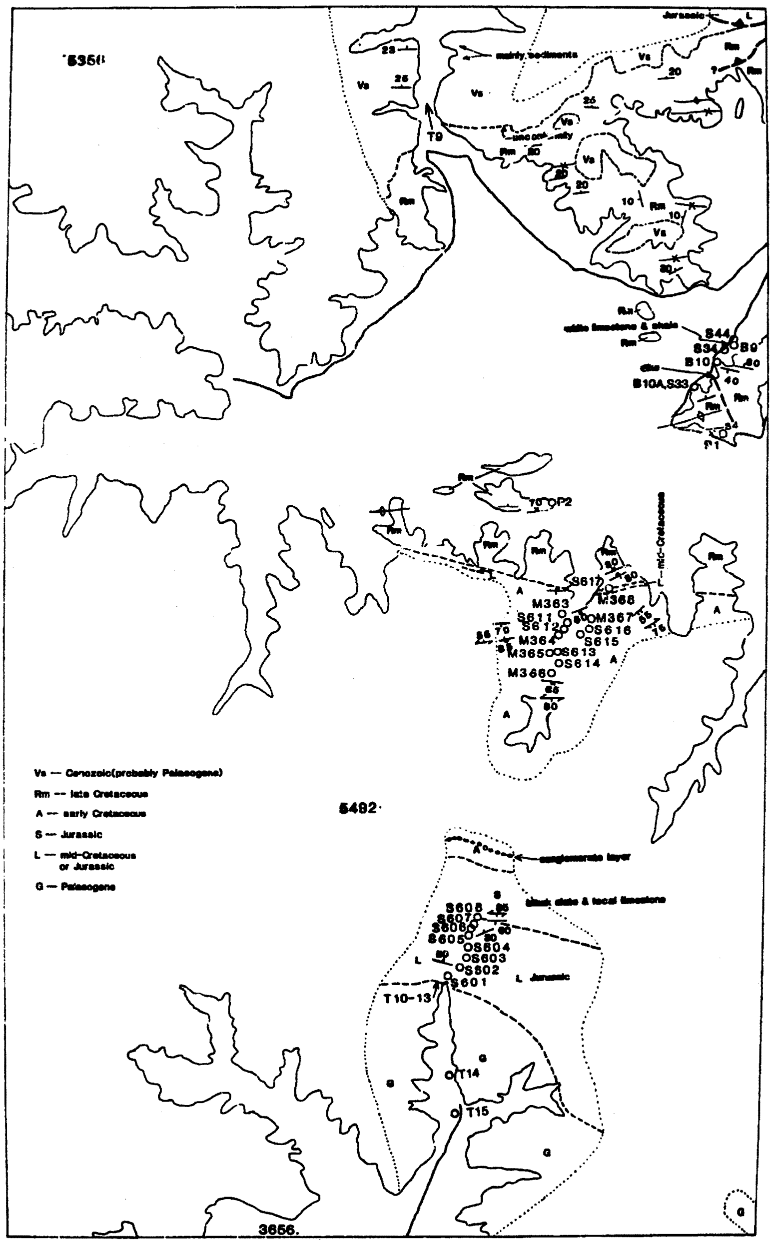
4W


·6115
Quesang
Maqu
3870
Va — Cenozoic (probably Palaeogene)
Rm — late Cretaceous
L — Cretaceous
Vm — Triassic
G — Palaeogene(?)

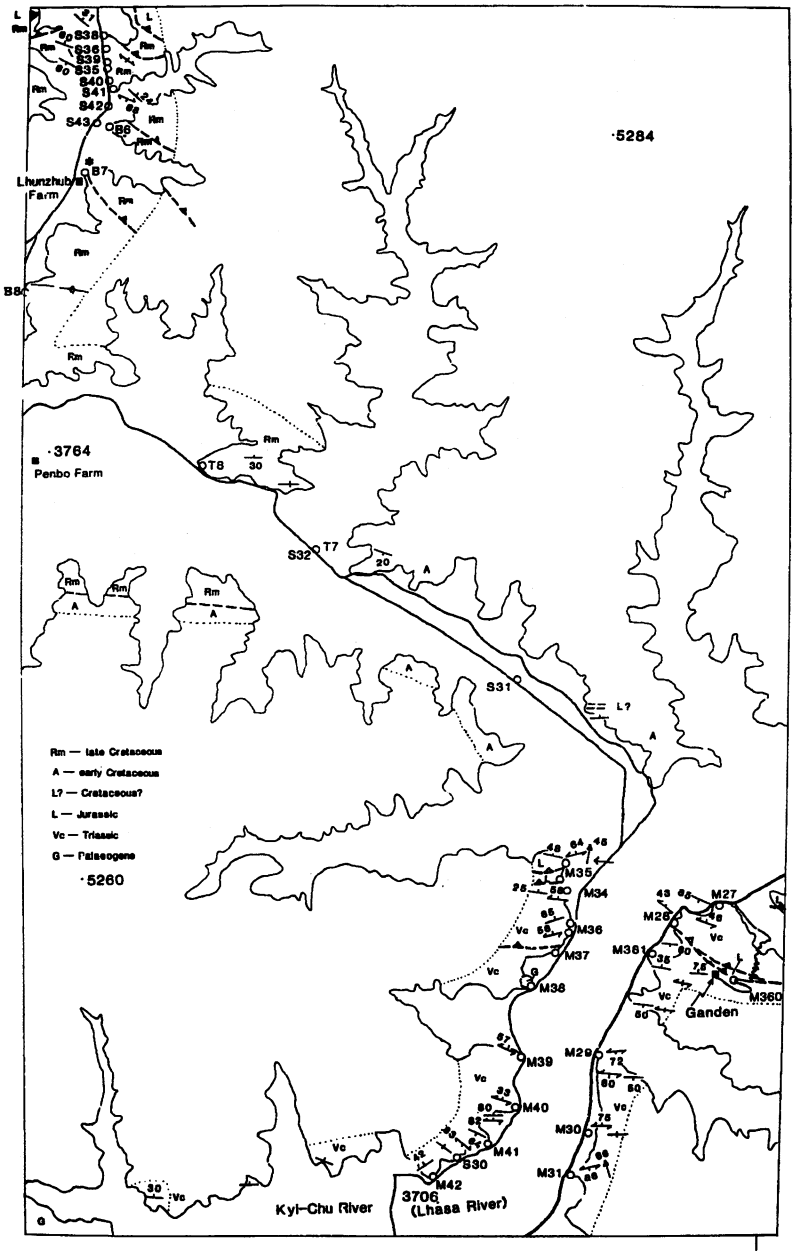
4E


B12
B11
B13,P4
thin tuffs in clastics
mid-Triassic
Vs
Rm
G
L
A
Vs — Cenozoic (probably Palaeogene)
Rm — late Cretaceous
L — Jurassic or mid-Triassic
Vm — Triassic
A — Permian
G — Palaeogene(?)
G36
G31
G33
S46
low dips
G34
G35
5612
3690
Jurassic

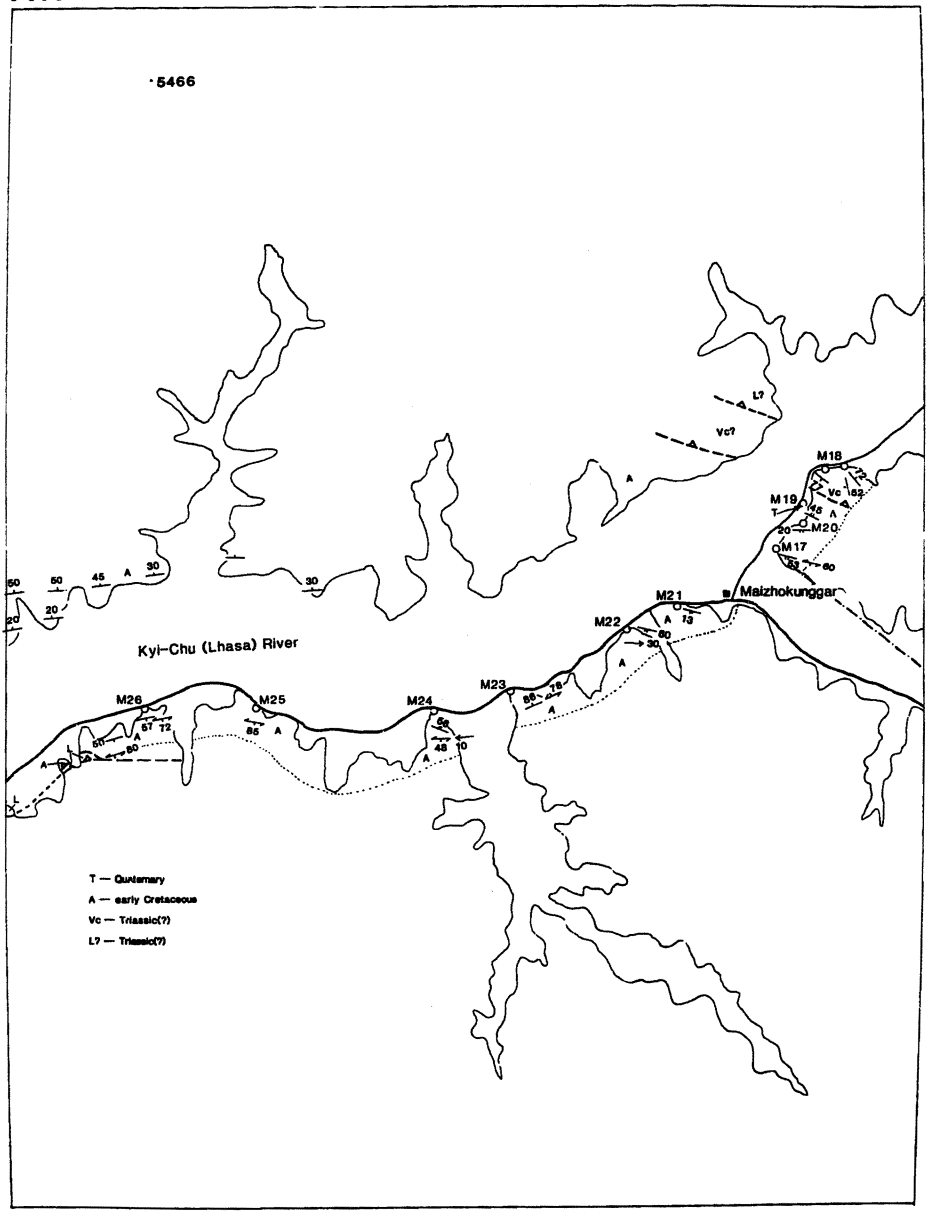
3W


5356
5492
3656.
Jurassic
mainly sediments
unconformity
T9
white limestone & shale
dike
S44
S34
B9
B10
B10A,S33
P1
P2
mid-Cretaceous
S617
M363
M368
S611
M367
S612
S616
M364
S615
M365
S613
S614
M366
conglomerate layer
black slate & local limestone
S608
S607
S606
S605
S604
S603
S602
S601
L Jurassic
T10-13
T14
T15
Vs — Cenozoic(probably Palaeogene)
Rm — late Cretaceous
A — early Cretaceous
S — Jurassic
L — mid-Cretaceous
or Jurassic
G — Palaeogene

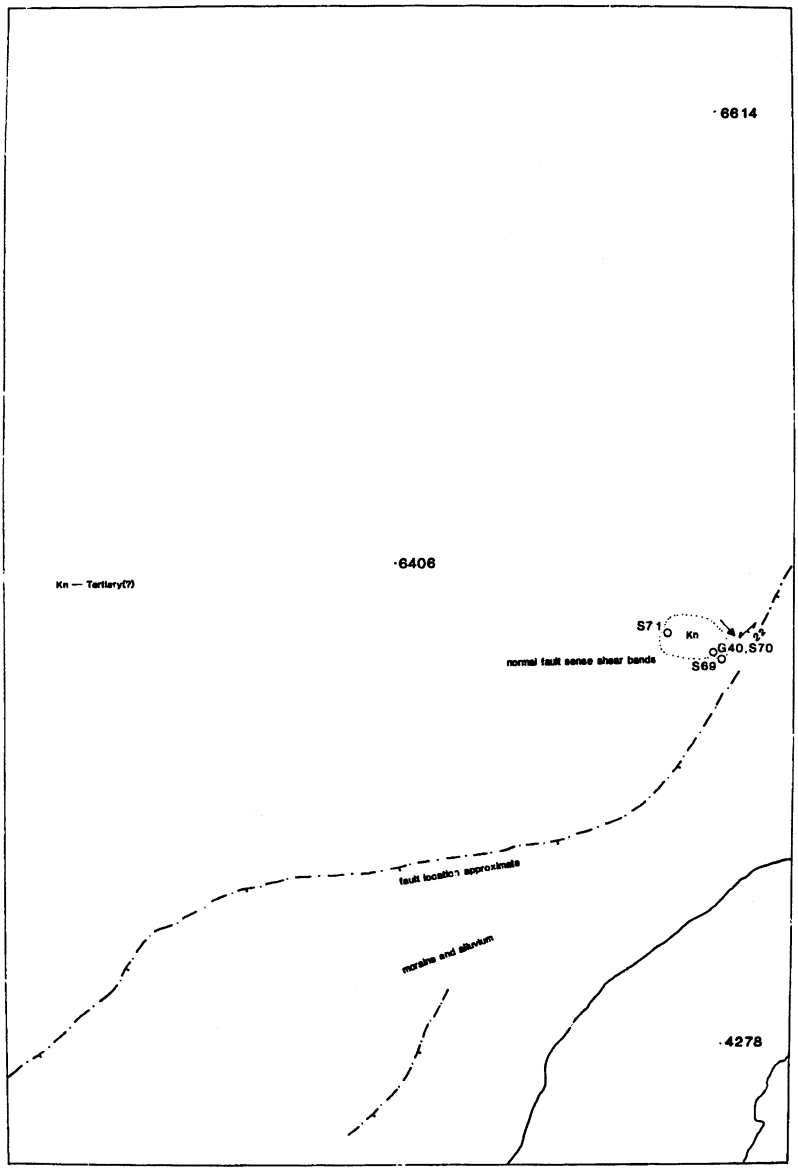
3E


·5284
Lhunzhub
Farm
B7
B8
S38
S36
S39
S35
S40
S41
S42
S43
B6
·3764
Penbo Farm
T8
30
S32
T7
20
S31
L?
Rm — late Cretaceous
A — early Cretaceous
L? — Cretaceous?
L — Jurassic
Vc — Triassic
G — Paleogene
·5260
M35
M34
M36
M37
M38
M39
M40
M41
S30
M42
3706
(Lhasa River)
Kyi-Chu River
M27
M26
M361
M360
Ganden
M29
M30
M31

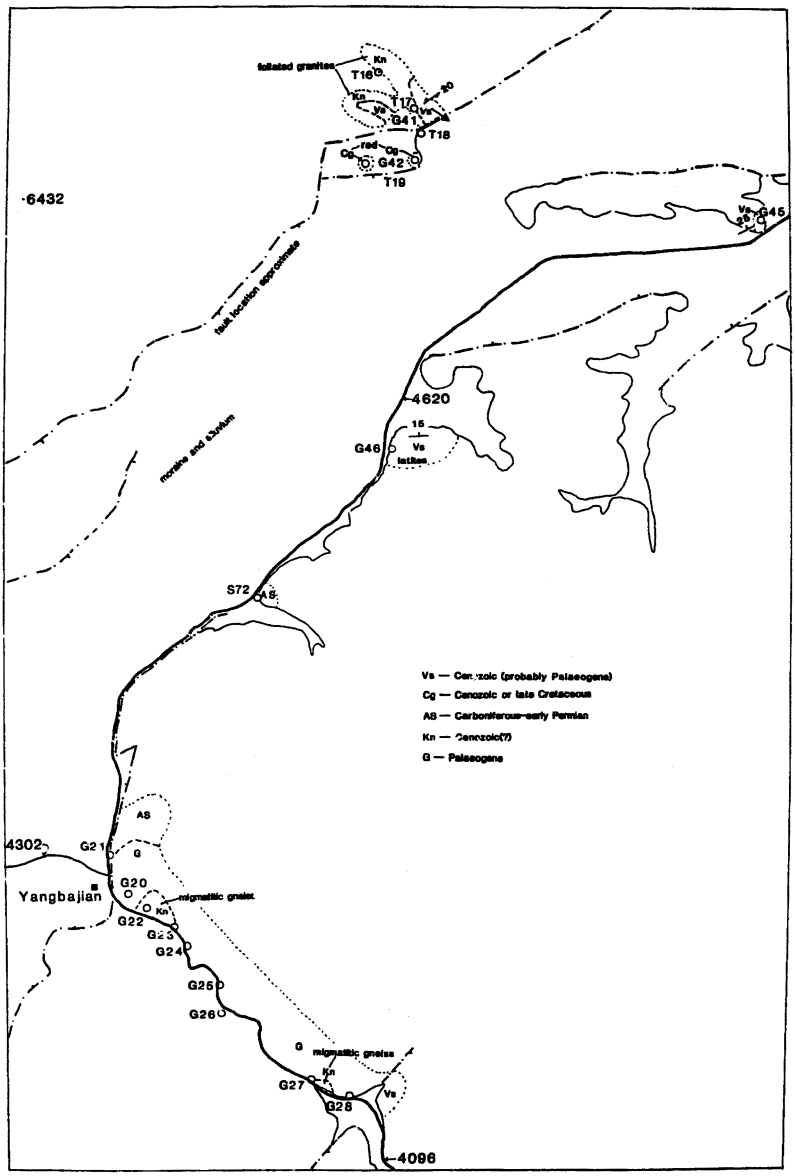
AW


·5466
Kyi-Chu (Lhasa) River
Maizhokunggar
M17
M18
M19
M20
M21
M22
M23
M24
M25
M26
T — Quaternary
A — early Cretaceous
Vc — Triassic(?)
L? — Triassic(?)

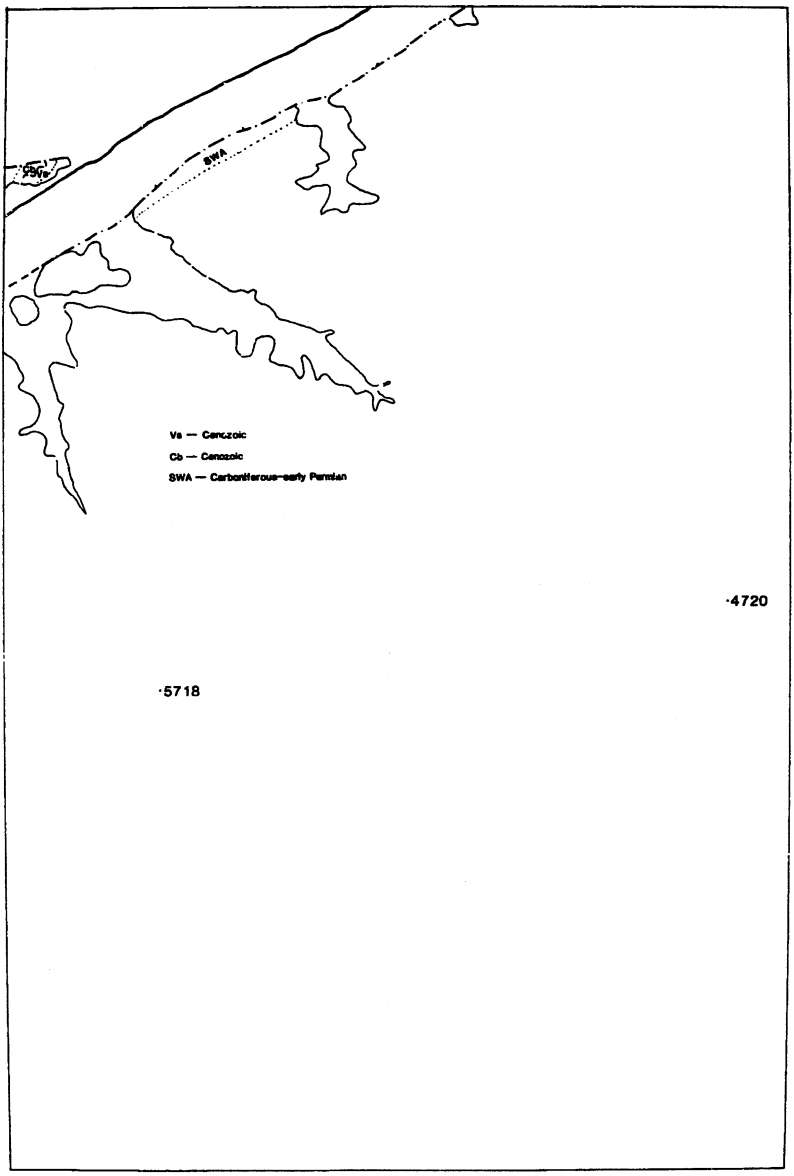
6E


6614
6406
Kn — Tertiary(?)
S71
Kn
S40,S70
S69
normal fault sense shear bands
fault location approximate
moraine and alluvium
4278

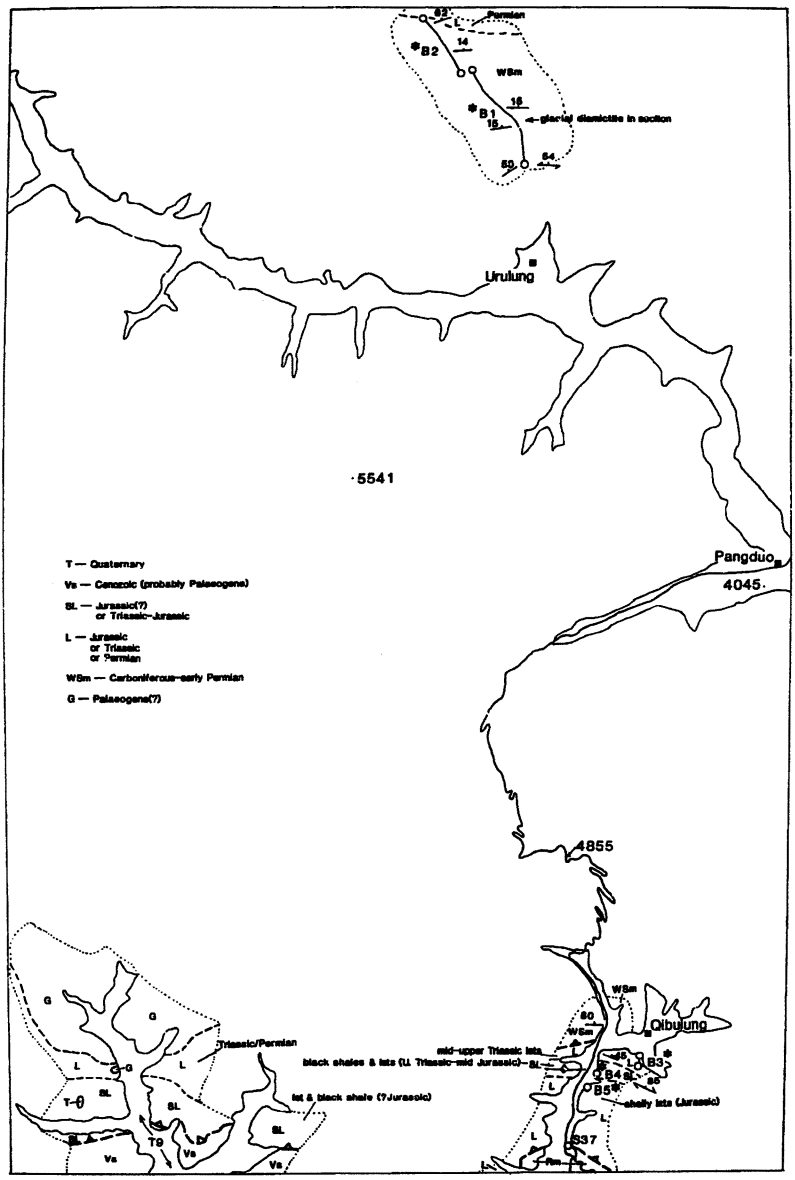
7W


foliated granites
T16
Kn
T17
Vs
T18
G41
Vs
ab
red
Cg
G42
T19
6432
G45
fault location approximate
4620
15
Vs
G46
lathes
S72
AS
moraine and alluvium
Vs — Cenozoic (probably Palaeogene)
Cg — Cenozoic or late Cretaceous
AS — Carboniferous-early Permian
Kn — Cenozoic(?)
G — Palaeogene
AS
4302
G21
G
G20
Yangbajian
migmatitic gneiss
Kn
G22
G23
G24
G25
G26
G
migmatitic gneiss
Kn
G27
G28
Vs
4096

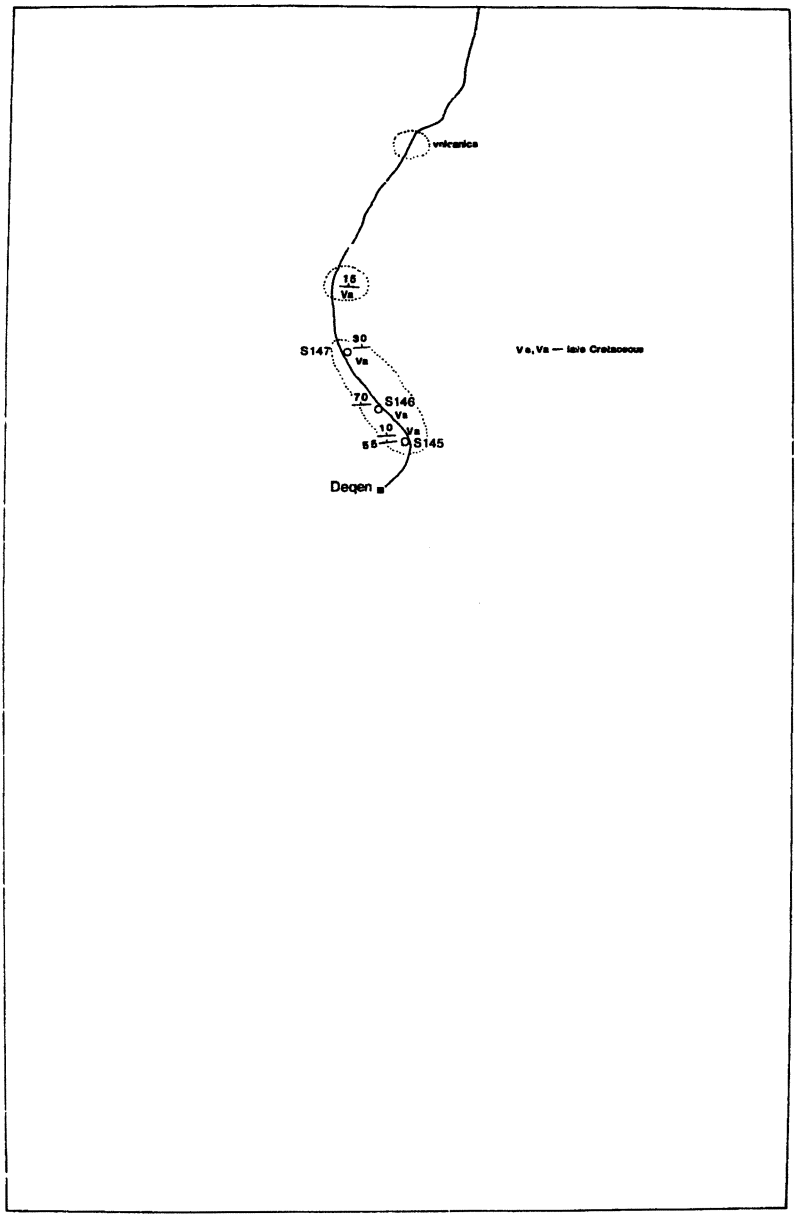
7E


Cb
Vs
SWA
Vs — Cenozoic
Cb — Cenozoic
SWA — Carboniferous–early Permian
·4720
·5718

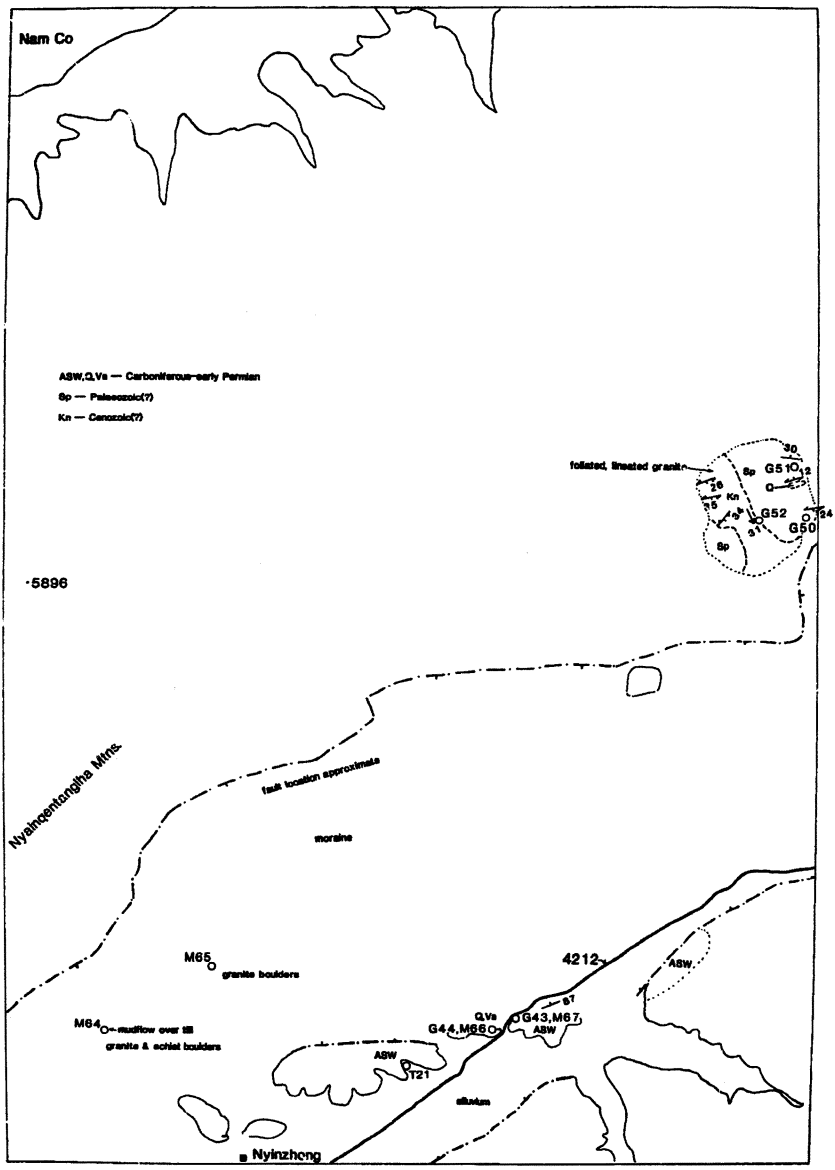
8C


Permian
B2
14
WSm
B1
15
glacial diamictite in section
Urulung
5541
Pangduo
4045
T — Quaternary
Vs — Cenozoic (probably Palaeogene)
SL — Jurassic(?) or Triassic-Jurassic
L — Jurassic or Triassic or Permian
WSm — Carboniferous-early Permian
G — Palaeogene(?)
4855
Qibulung
B3
B4
B5
B37
mid-upper Triassic lsts
black shales & lsts (U. Triassic-mid Jurassic)
lst & black shale (?Jurassic)
shelly lsts (Jurassic)
Triassic/Permian

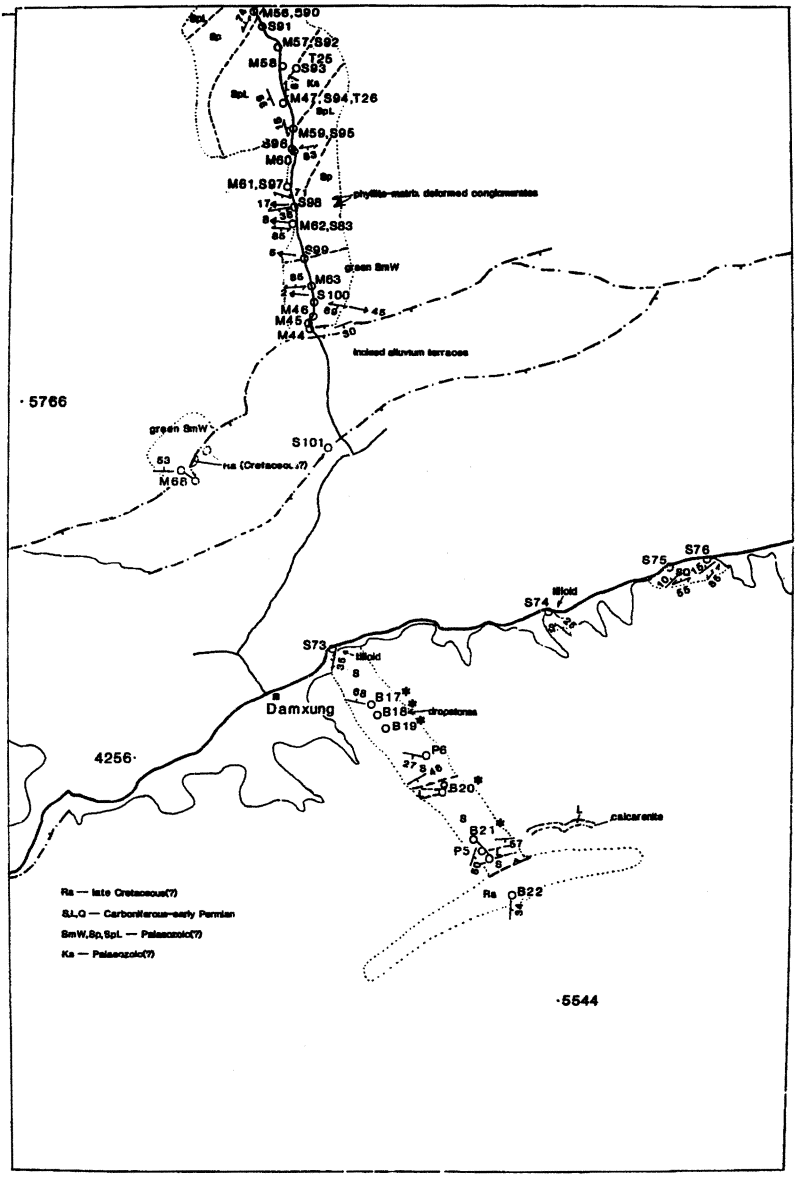
BW From enlargement of Spacelab metric camera image. NOT from topographic base



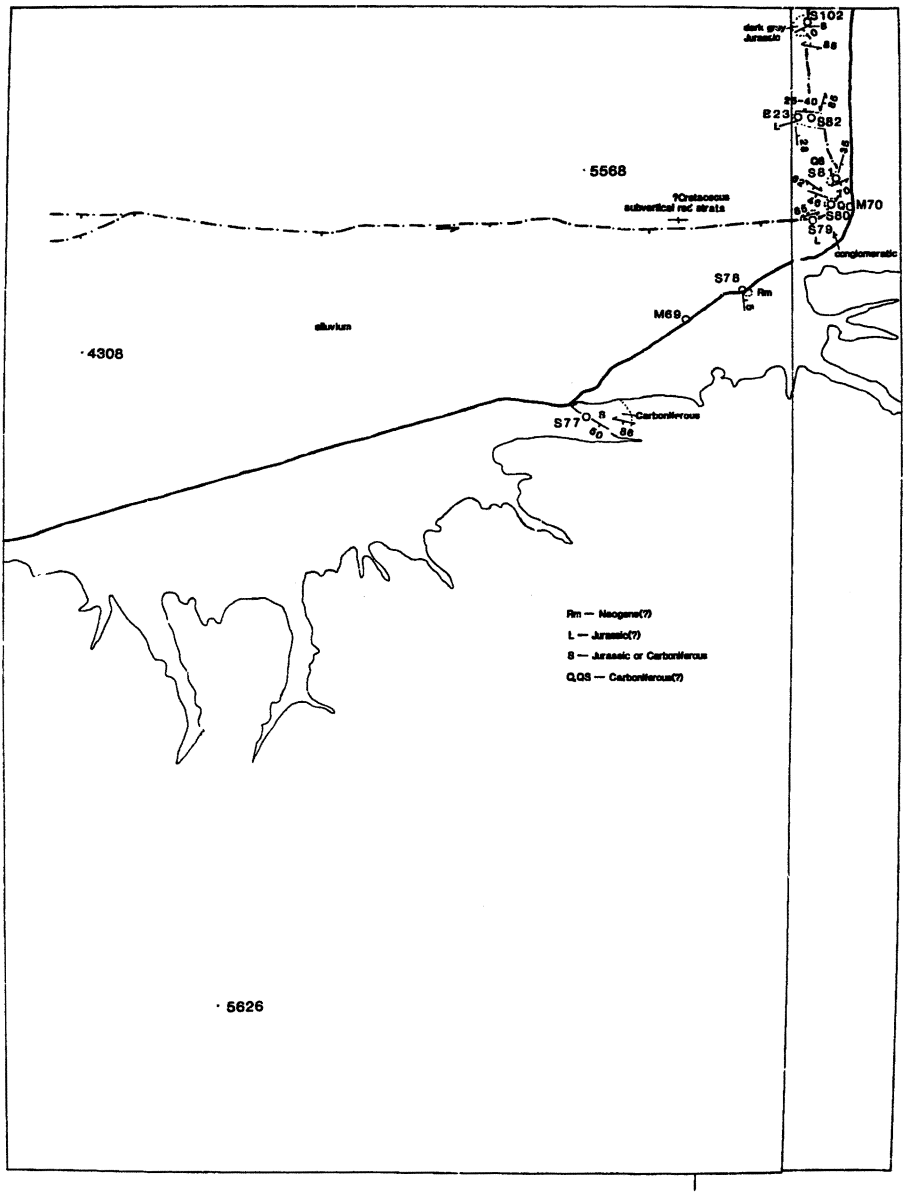
11E


Nam Co
ASW,Q,Vs — Carboniferous–early Permian
Sp — Palaeozoic(?)
Kn — Cenozoic(?)
foliated, lineated granite
Sp
G51
Q
Kn
G52
G50
Sp
5896
Nyainqentanglha Mtns.
fault location approximate
moraine
M65
granite boulders
4212
ASW
M64
mudflow over till
granite & schist boulders
Q,Vs
G44,M66
G43,M67
ASW
ASW
T21
alluvium
Nyinzhong

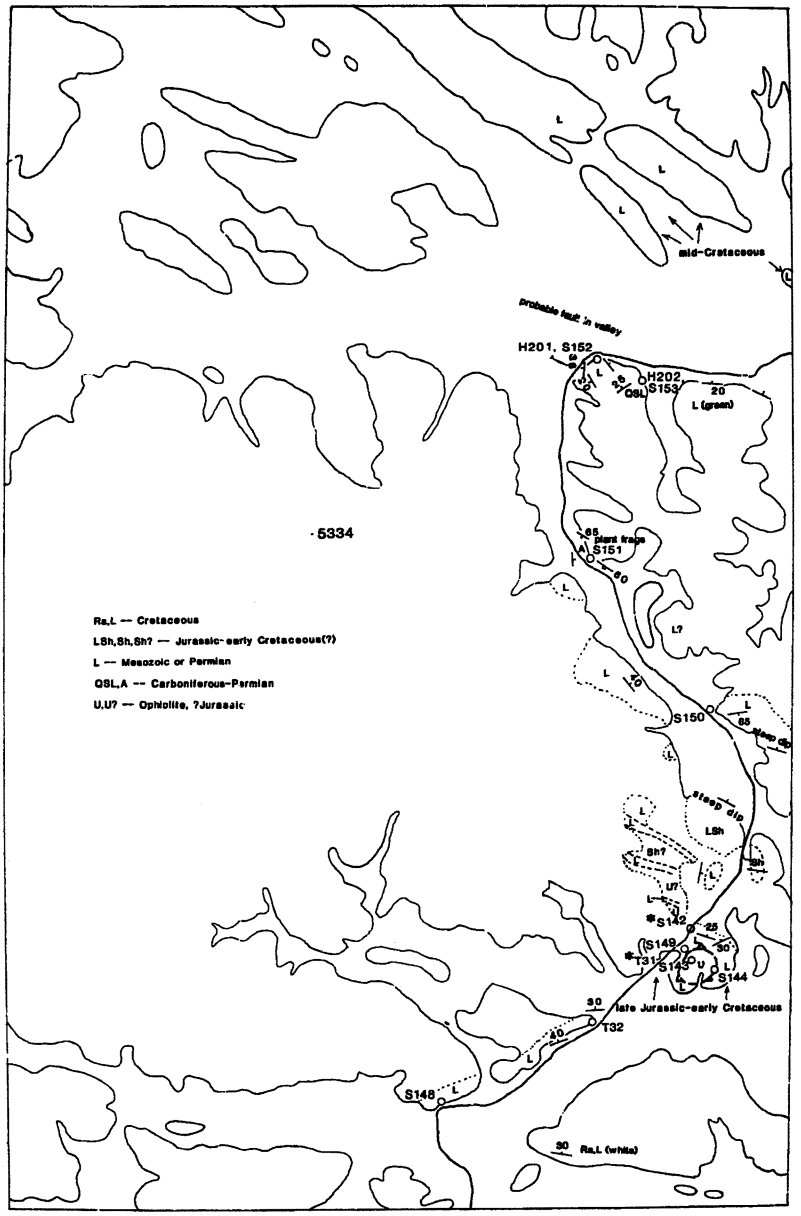
10W


M56,S90
S91
M57,S92
M58
T25
S93
Ka
M47,S94,T26
M59,S95
S96
M60
M61,S97
S98
phyllite-matrix deformed conglomerates
M62,S83
S99
green SmW
M63
S100
M46
M45
M44
incised alluvium terraces
5766
green SmW
S101
Ra (Cretaceous?)
M66
S75
S76
S74
illoid
S73
illoid
Damxung
B17
B18
B19
dropstones
4256
P6
B20
B21
calcarenite
P5
Ra
B22
Ra — late Cretaceous(?)
SJ_C — Carboniferous-early Permian
SmW,Sp,Spl. — Palaeozoic(?)
Ka — Palaeozoic(?)
5544

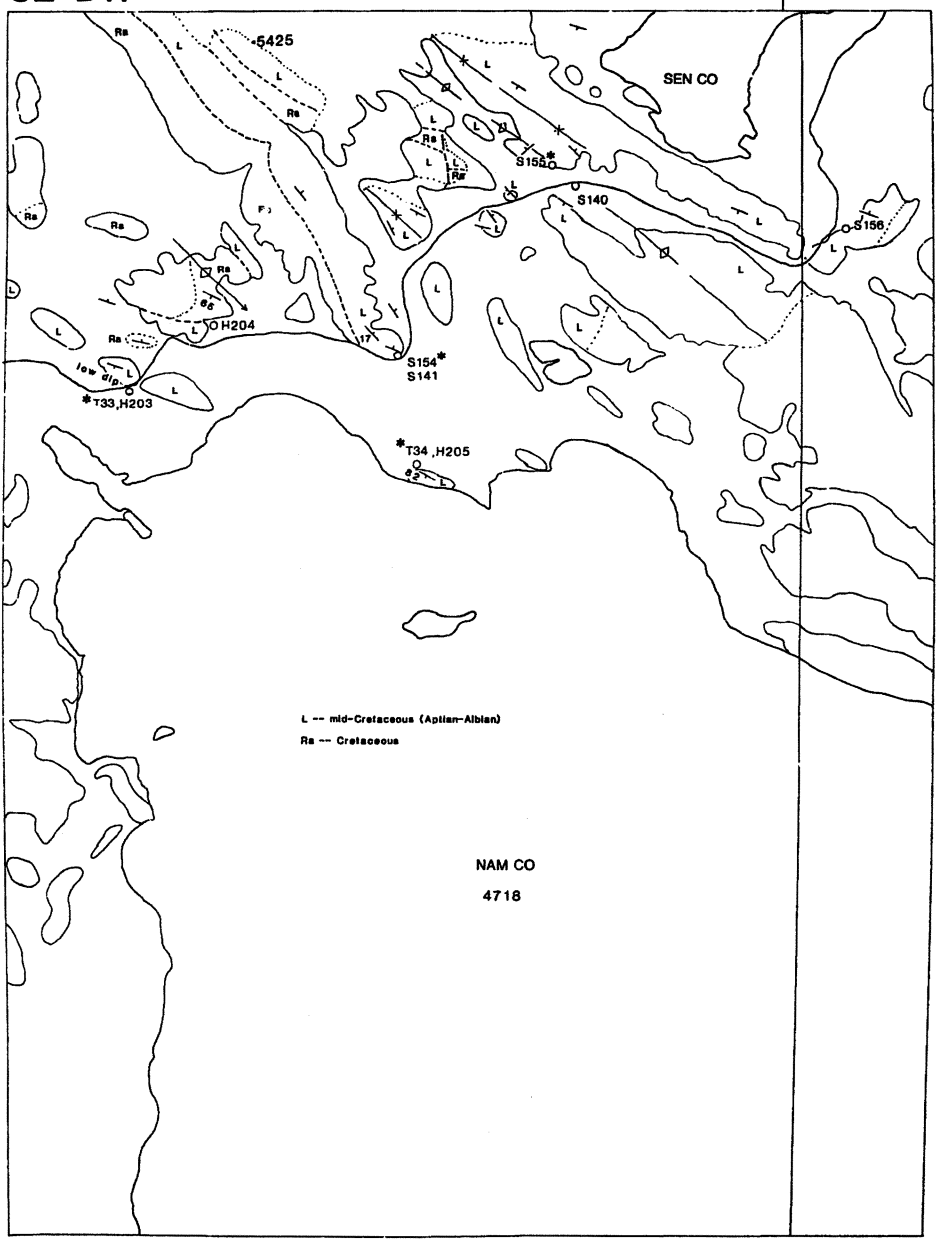
10E+9W


S102
dark grey Jurassic
S23
S82
5568
S81
?Cretaceous subvertical red strata
M70
S80
S79
conglomeratic
S78
Rm
M69
alluvium
4308
S77
Carboniferous
Rm — Neogene(?)
L — Jurassic(?)
S — Jurassic or Carboniferous
CQS — Carboniferous(?)
5626

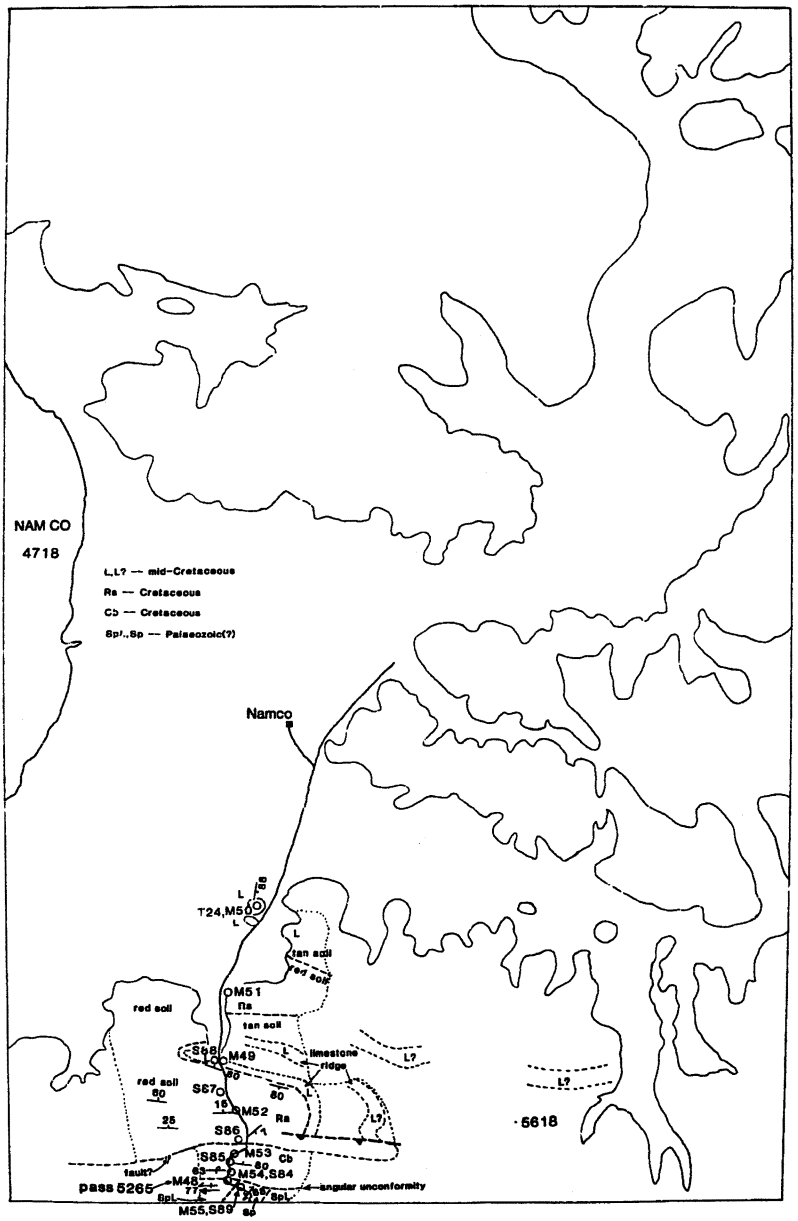
CW


Probable fault in valley
H201, S152
H202
S153
QSL
L (green)
20
·5334
65
Hard frags
S151
L
L?
40
S150
65
steep dip
LSh
Sh?
U?
S142
25
S149
30
T31
S145
S144
late Jurassic-early Cretaceous
30
T32
40
S148
30
Ra,L (white)
mid-Cretaceous
Ra,L — Cretaceous
LSh,Sh,Sh? — Jurassic-early Cretaceous(?)
L — Mesozoic or Permian
QSL,A — Carboniferous-Permian
U,U? — Ophiolite, ?Jurassic

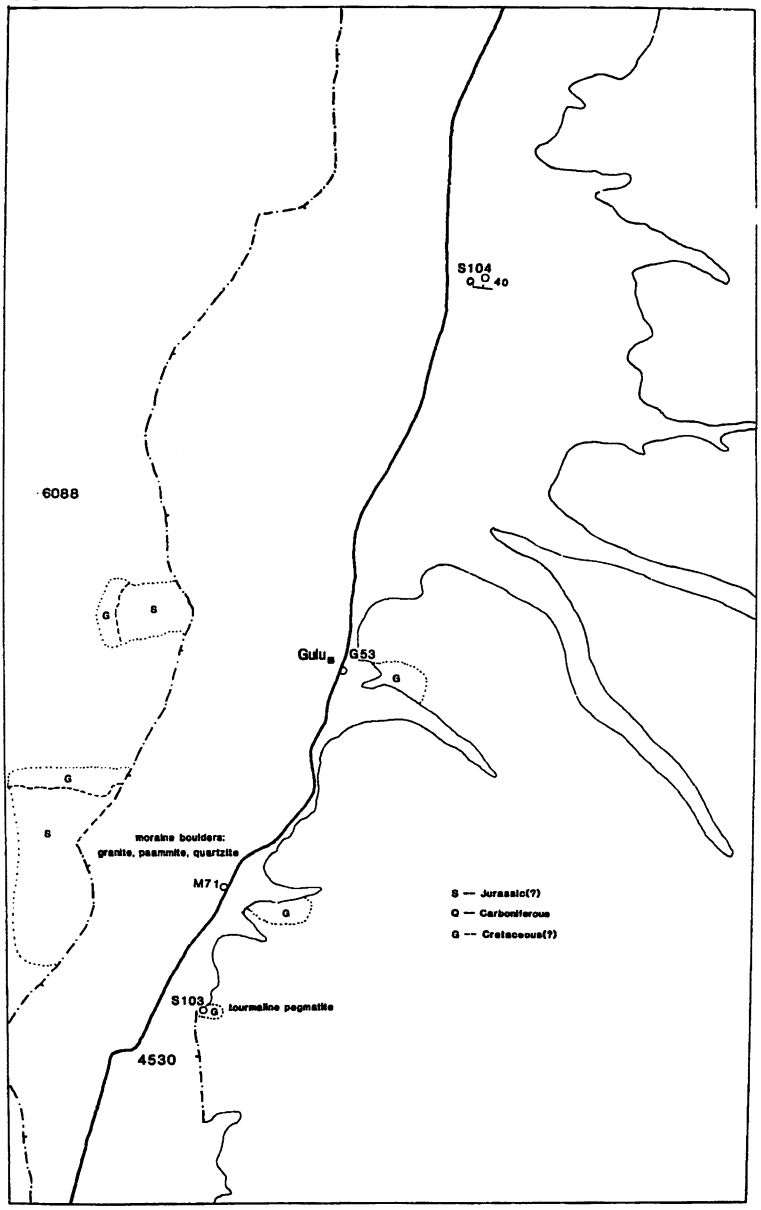
CE+DW


Ra
L
5425
SEN CO
S152
S140
S156
H204
S154
S141
T33,H203
T34 ,H205
L -- mid-Cretaceous (Aptian-Albian)
Ra -- Cretaceous
NAM CO
4718

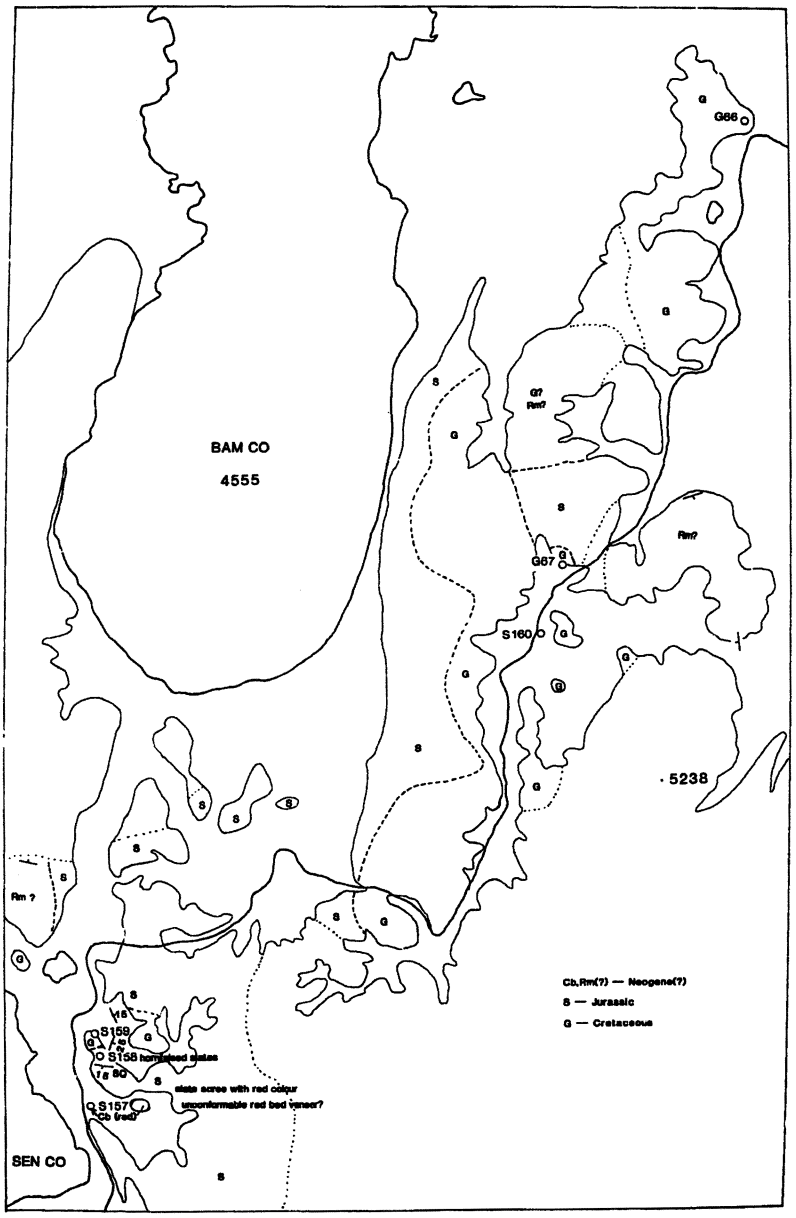
12W


NAM CO
4718
L,L? — mid-Cretaceous
Ra — Cretaceous
Cb — Cretaceous
Spl.,Sp — Palaeozoic(?)
Namco
T24,M50
tan soil
red soil
M51
Ra
red soil
tan soil
S68
M49
limestone ridge
L?
red soil
S67
M52
Ra
S66
S65
M53
Cb
fault?
M48
M54,S84
pass 5265
angular unconformity
M55,S89
5618

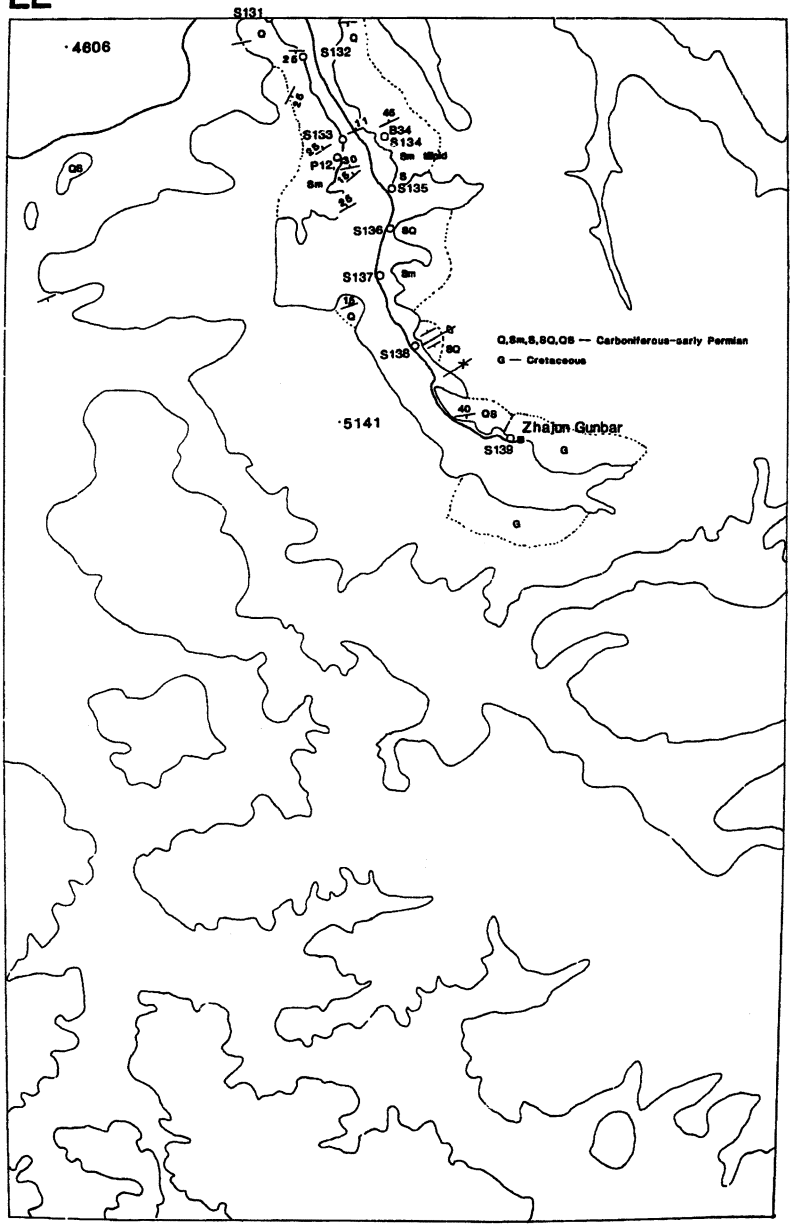
13W


S104
40
6088
S
G
Gulu
G53
G
G
S
moraine boulders:
granite, psammite, quartzite
M71
G
S103
G
tourmaline pegmatite
4530
S — Jurassic(?)
C — Carboniferous
G — Cretaceous(?)

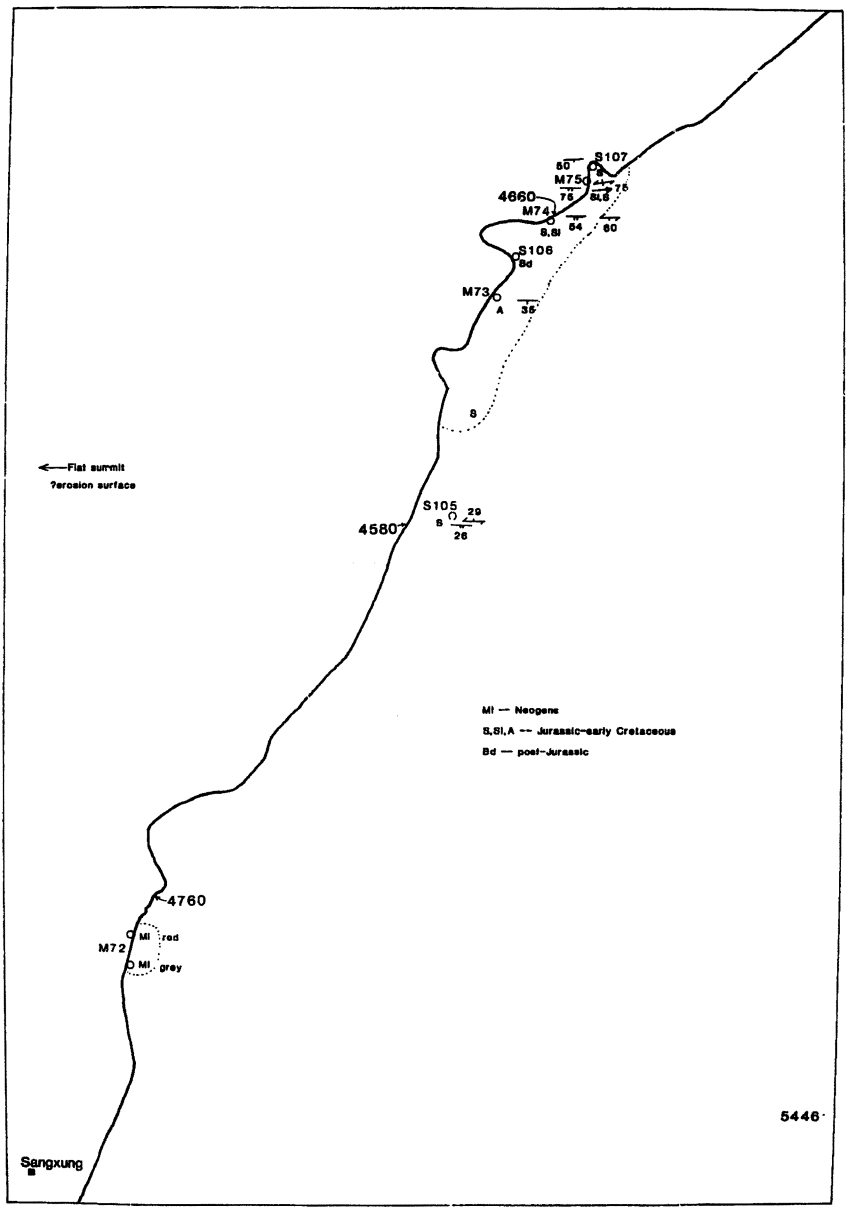
EW


G66
G7
Rm?
BAM CO
4555
G67
Rm?
S160
5238
Rm ?
S158
S158 hornfelsed slates
slate scree with red colour
unconformable red bed veneer?
S157
Cb (red)
SEN CO
Cb,Rm(?) — Neogene(?)
S — Jurassic
G — Cretaceous

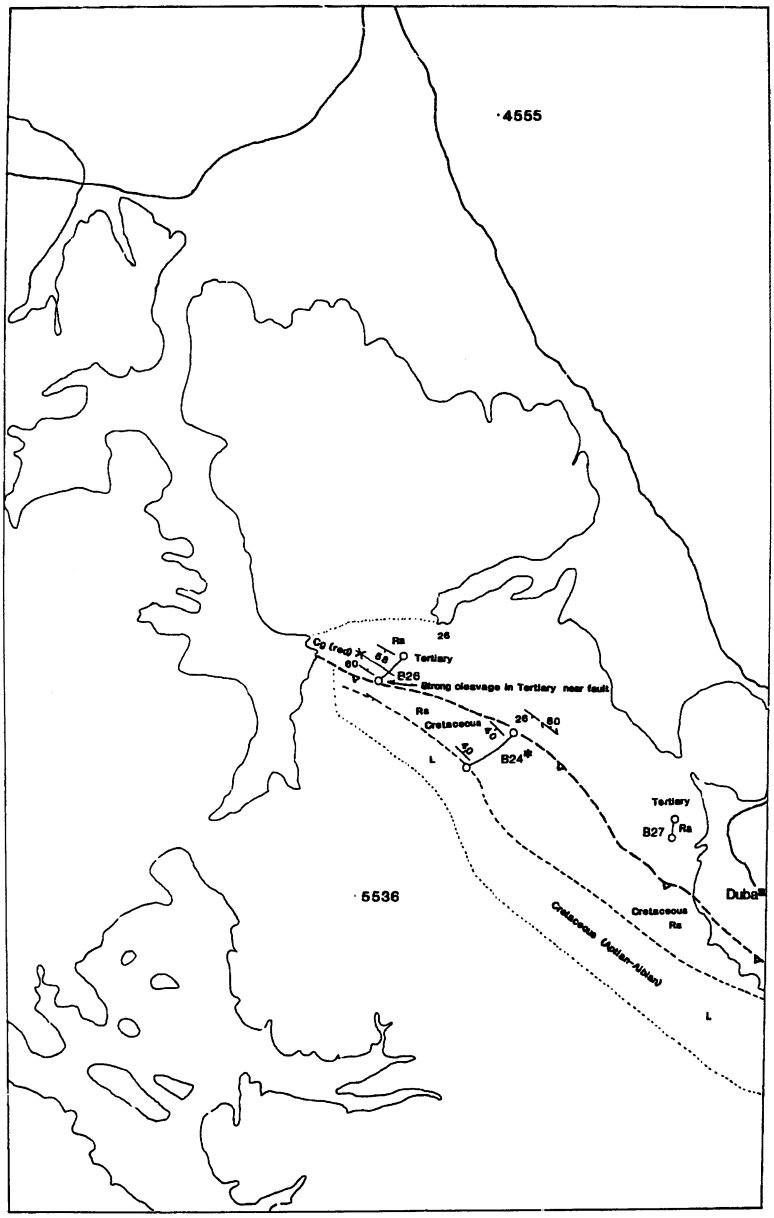
EE


S131
S132
S133
S134
S135
S136
S137
S138
S139
P12
·4806
·5141
Zhajun Gunbar
Q,Sm,S,SQ,OS — Carboniferous–early Permian
G — Cretaceous

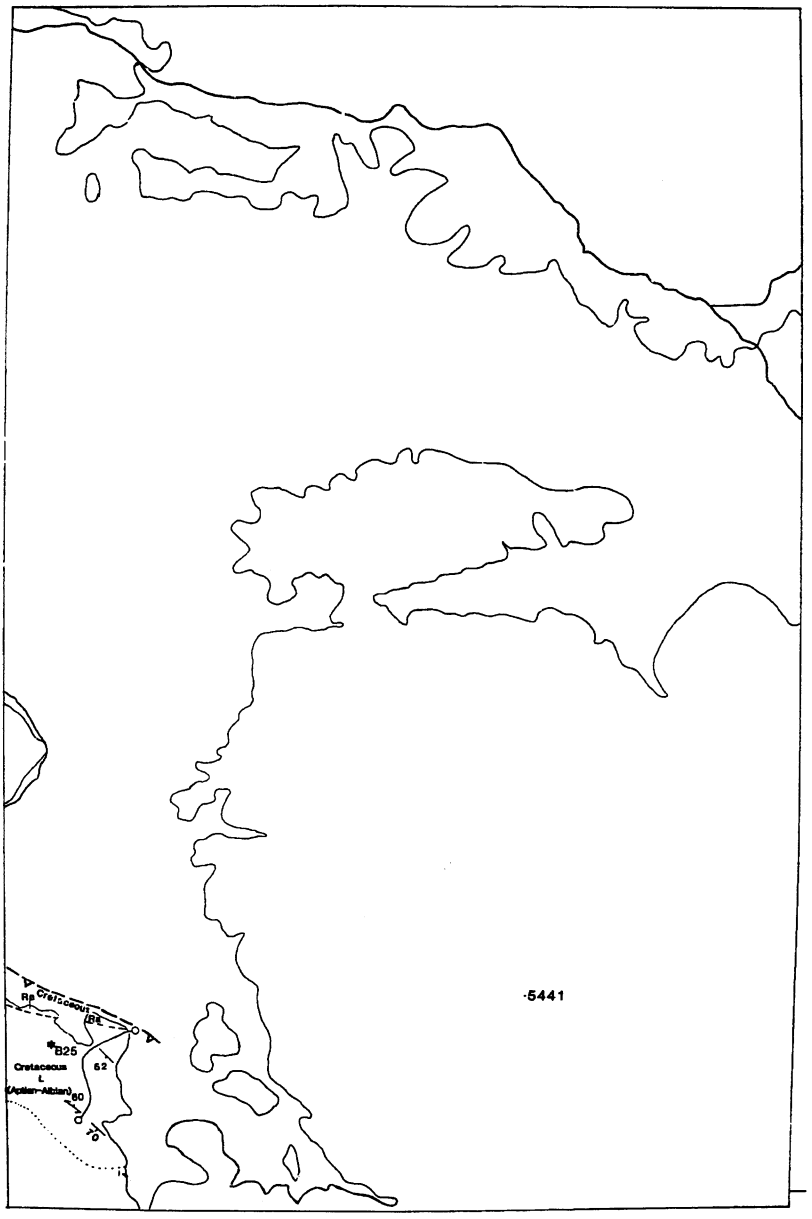
15C


S107
50
M75
75
4660
M74
S,SI
64
60
S106
Bd
M73
A
35
S
Flat summit
?erosion surface
S105
29
S
26
4580
MI — Neogene
S,SI,A — Jurassic–early Cretaceous
Bd — post–Jurassic
4760
M72
MI
red
MI
grey
5446
Sangxung

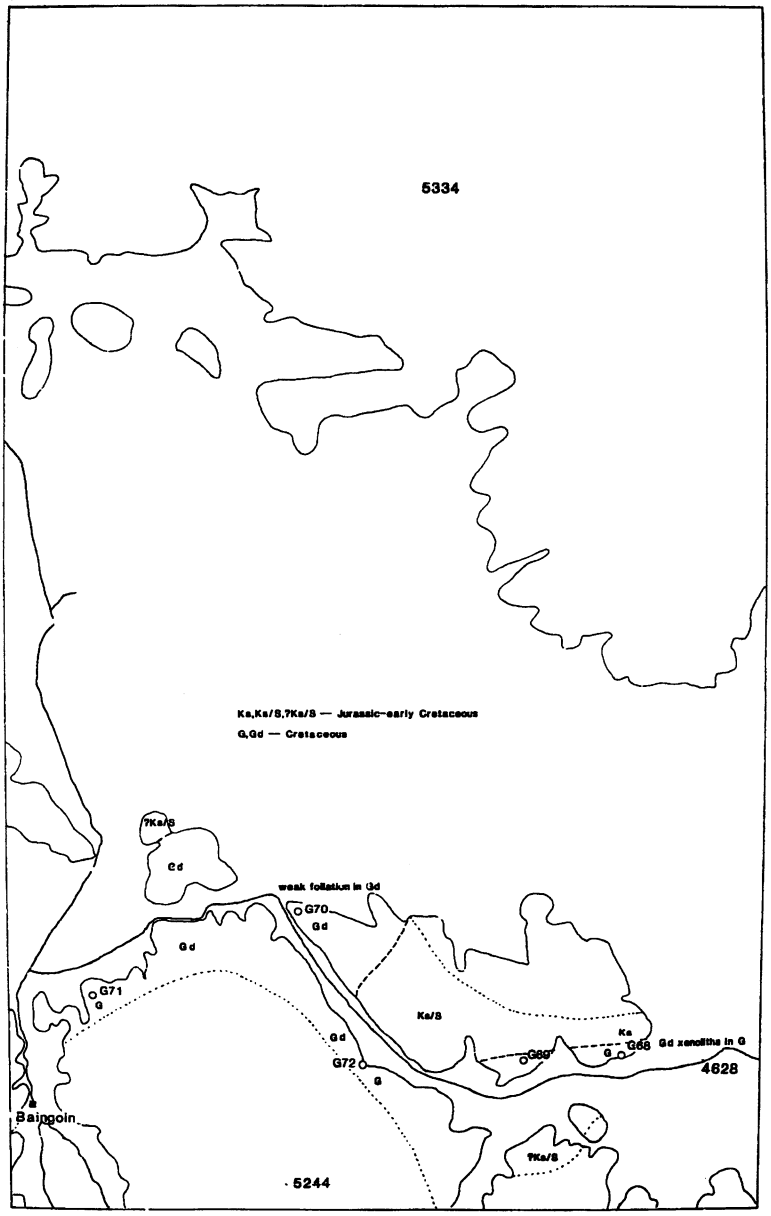
FW


4555
5536
Ra
Tertiary
B26
Strong cleavage in Tertiary near fault
Cretaceous
B24
Tertiary
B27
Ra
Dubai
Cretaceous
Ra
Cretaceous (Aptian-Albian)
L

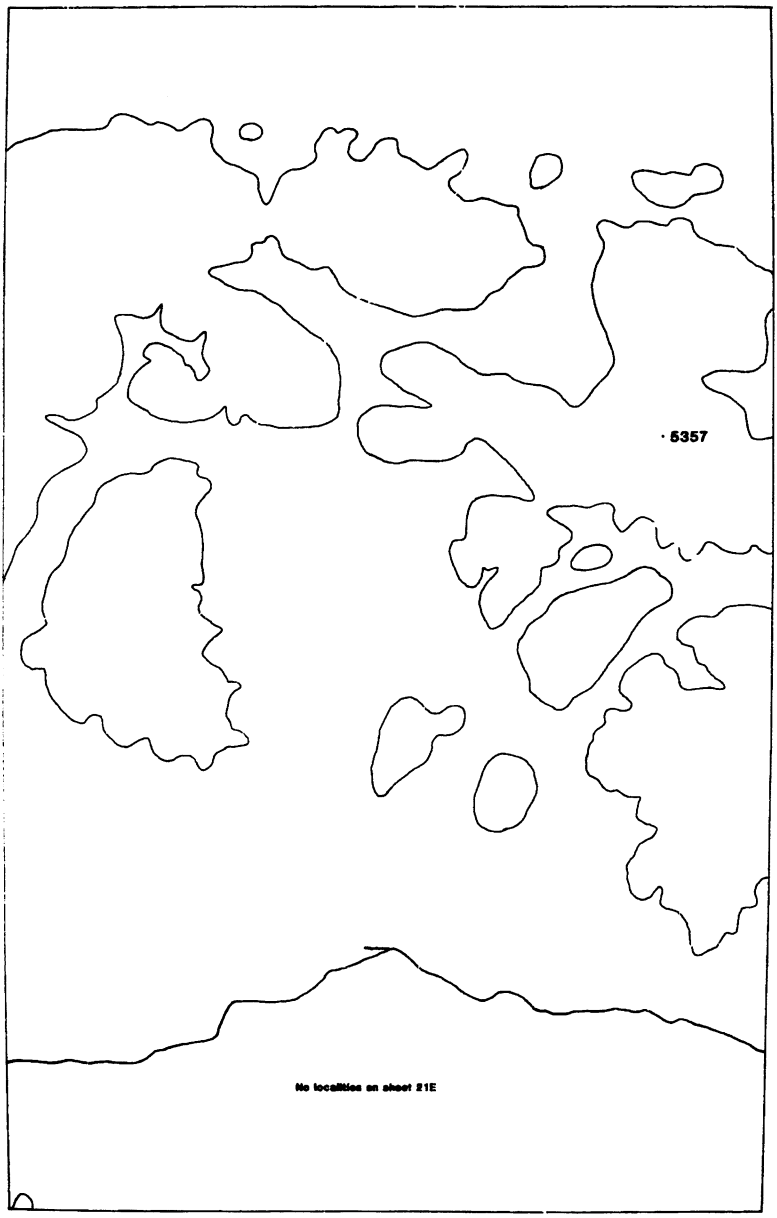
FE



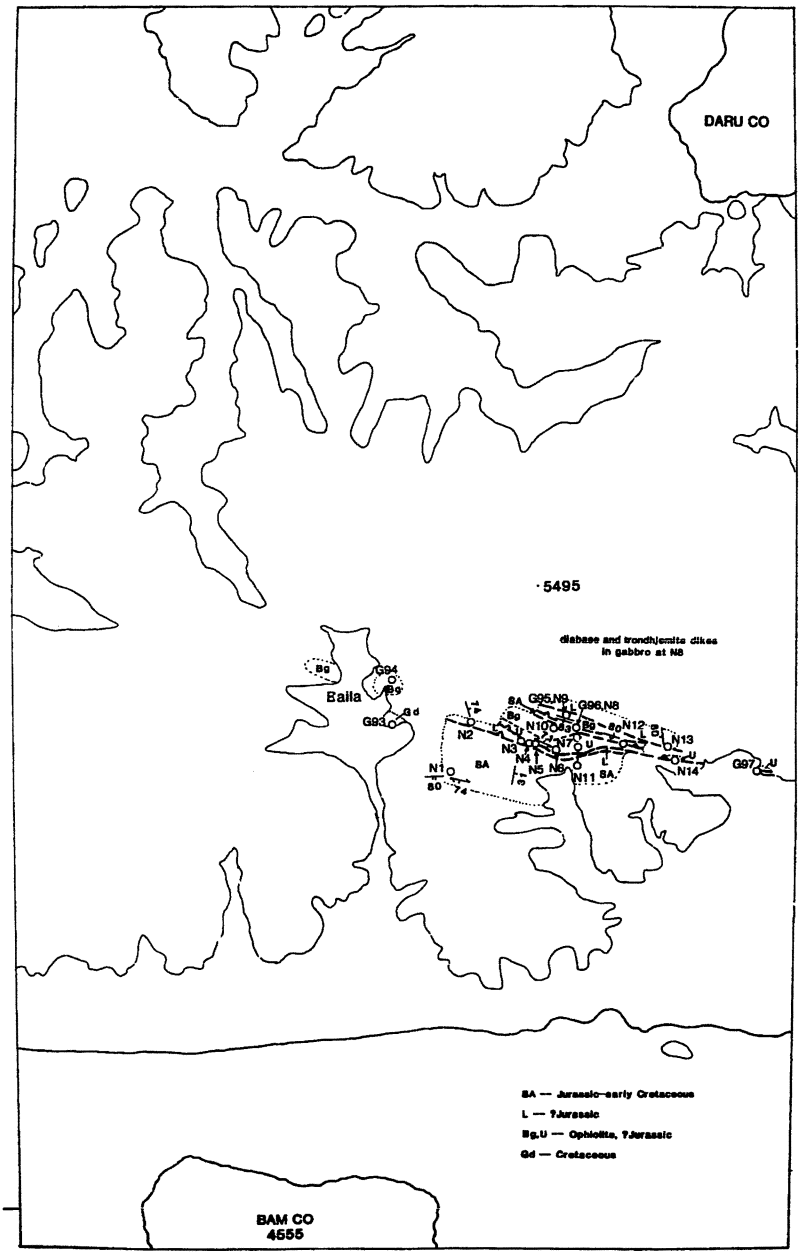
21W


5334
Ka,Ka/S,?Ka/S — Jurassic–early Cretaceous
G,Gd — Cretaceous
?Ka/S
Gd
weak foliation in Gd
G70
Gd
Gd
G71
G
Ka/S
Gd
G72
G
Ka
G68
G
Gd xenoliths in G
G69
4628
Baingoin
5244
?Ka/S

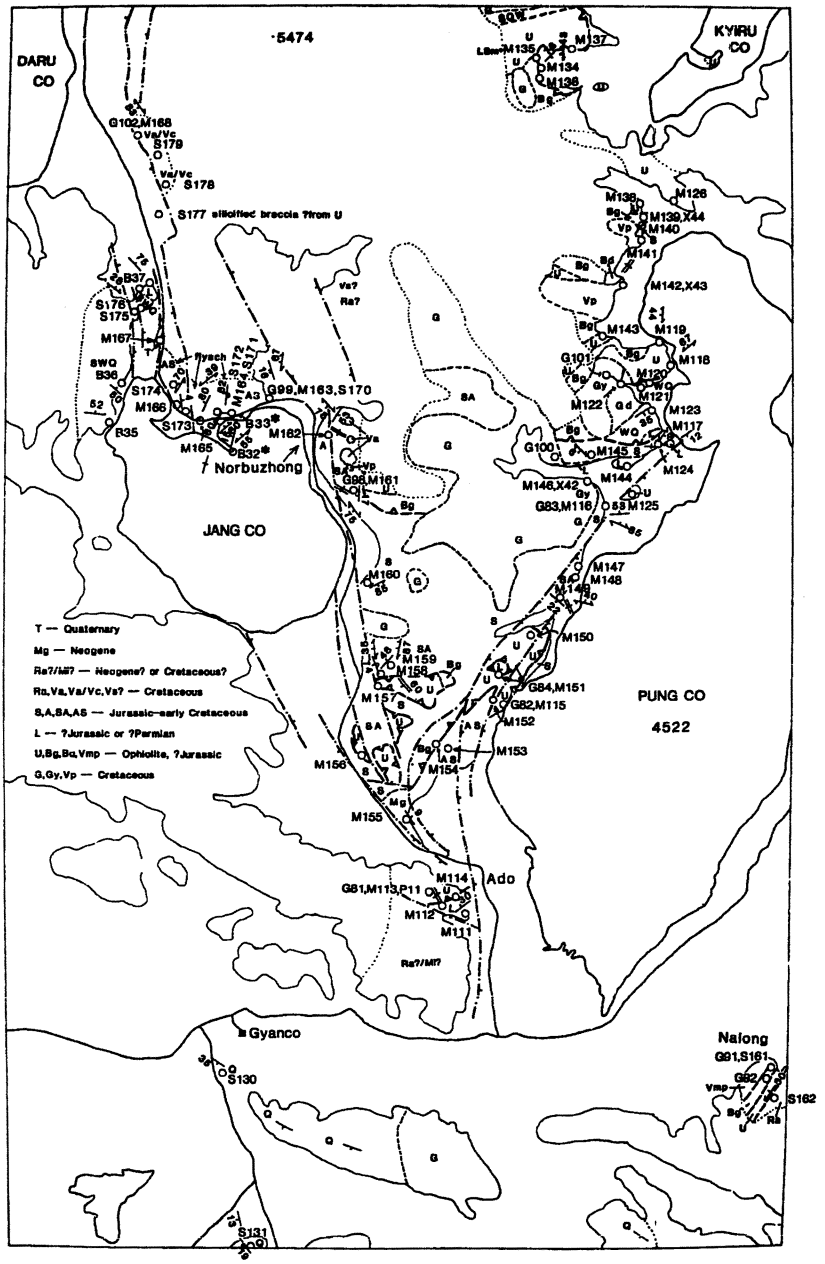
21E



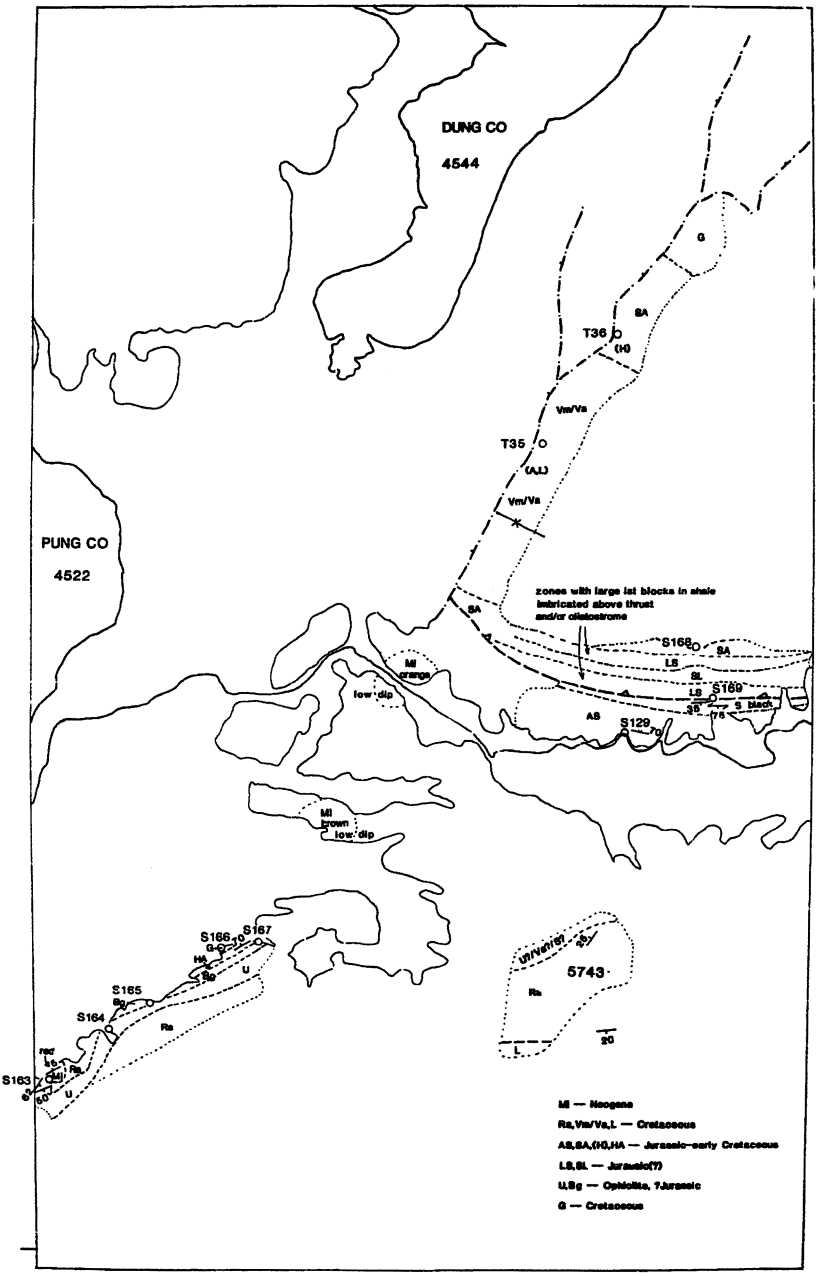
20W


DARU CO
5495
diabase and trondhjemite dikes
in gabbro at N8
Baila
Bg
G94
G93
Gd
G95,N9
G96,N8
N1
N2
N3
N4
N5
N6
N7
N8
N9
N10
N11
N12
N13
N14
G97
U
L
SA
80
74
SA — Jurassic–early Cretaceous
L — ?Jurassic
Bg,U — Ophiolite, ?Jurassic
Gd — Cretaceous
BAM CO
4555

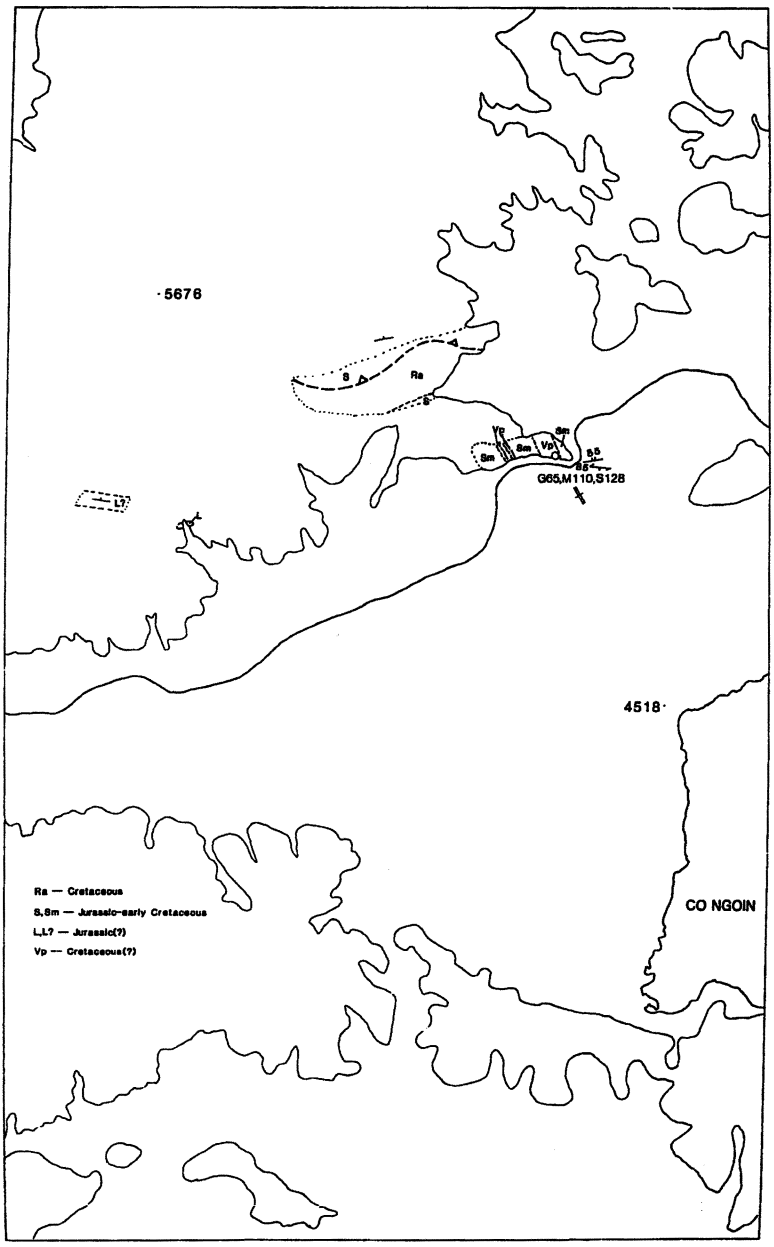
20E

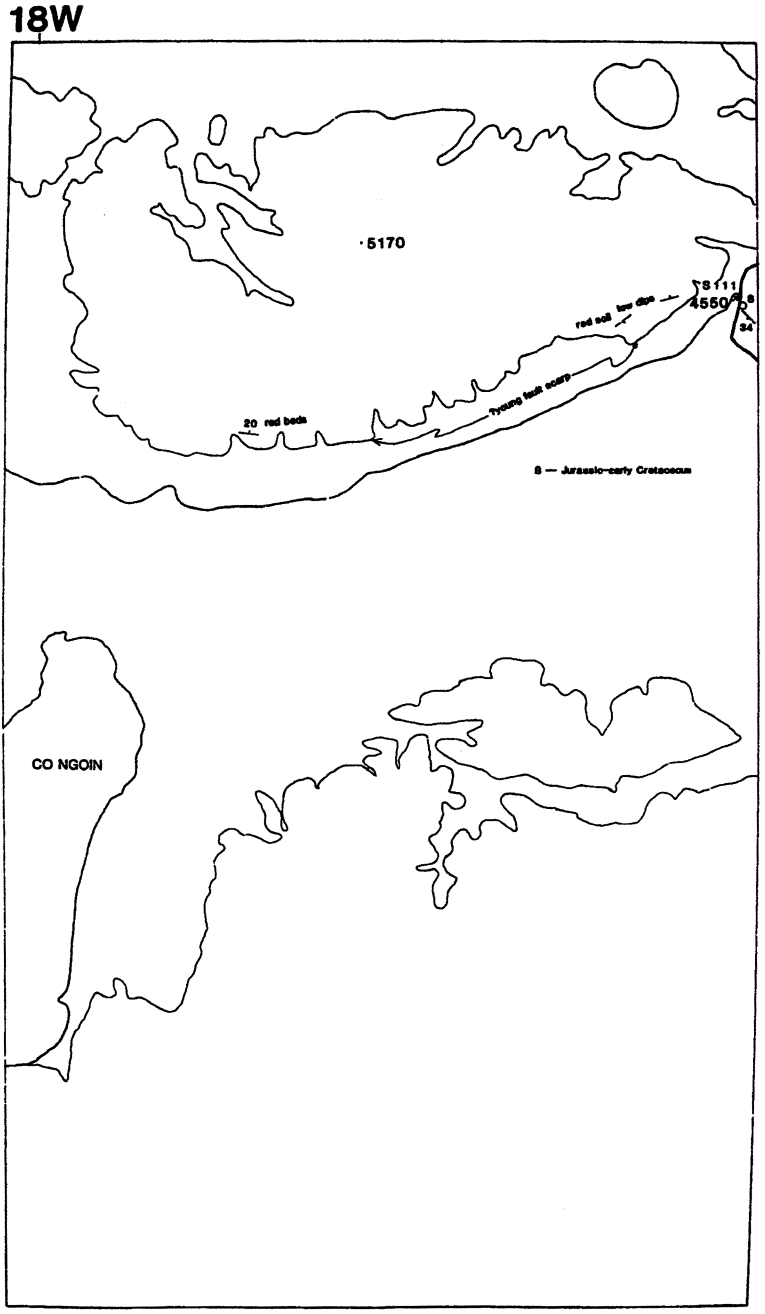

DARU CO
5474
KYIRU CO
JANG CO
Norbuzhong
PUNG CO
4522
Ado
Gyanco
Nalong
T — Quaternary
Mg — Neogene
Ra?/Mi? — Neogene? or Cretaceous?
Rn,Va,Va/Vc,Vs? — Cretaceous
S,A,SA,AS — Jurassic–early Cretaceous
L — ?Jurassic or ?Permian
U,Bg,Bq,Vmp — Ophiolite, ?Jurassic
G,Gy,Vp — Cretaceous

19W

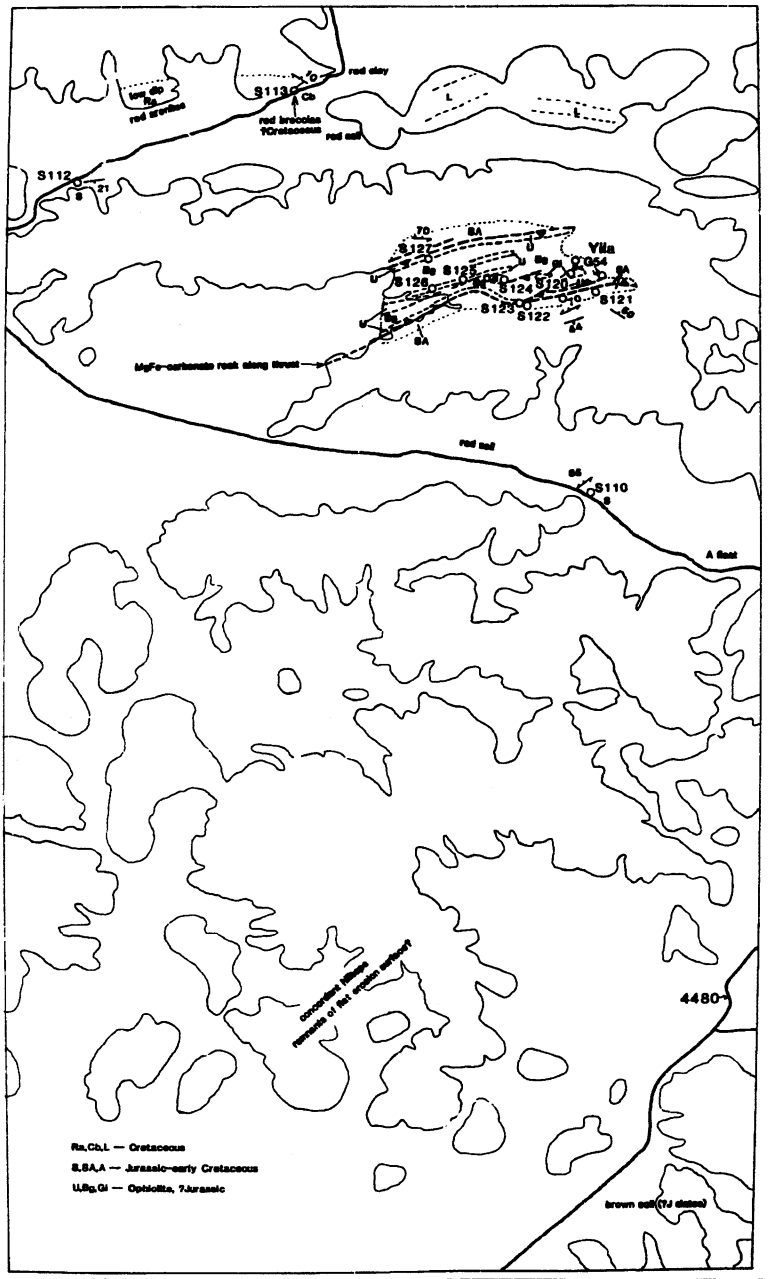

DUNG CO
4544
PUNG CO
4522
G
SA
T36
(HO
Vm/Va
T35
(A,L)
Vm/Va
zones with large lst blocks in shale
bstricated above thrust
and/or olistostrome
SA
S168
SA
LS
SL
LS
S169
S Block
AS
S129
MI
orange
low dip
MI
brown
low dip
S167
S166
G
HA
U
S165
Sg
S164
Ra
S163
Ra
U
5743
Ra
L
MI — Neogene
Ra,Vm/Va,L — Cretaceous
AS,SA,(HO,HA — Jurassic-early Cretaceous
LS,SL — Jurassic(?)
U,Sg — Ophiolite, ?Jurassic
G — Cretaceous

19E

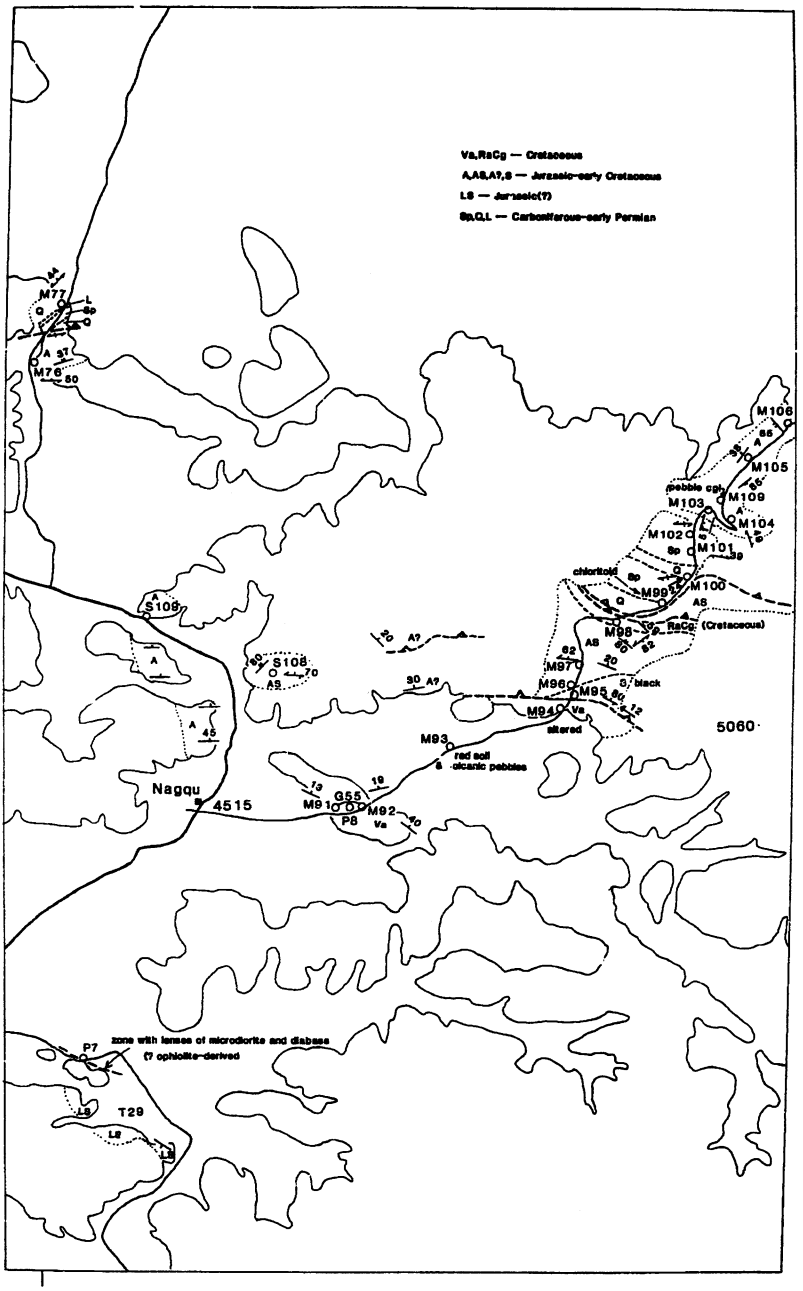

·5676
Ra
S
Vp
Sm
Vp1
G65,M110,S128
L,L?
4518·
CO NGOIN
Ra — Cretaceous
S,Sm — Jurassic-early Cretaceous
L,L? — Jurassic(?)
Vp — Cretaceous(?)


18W
·5170
4550
20 red beds
CO NGOIN

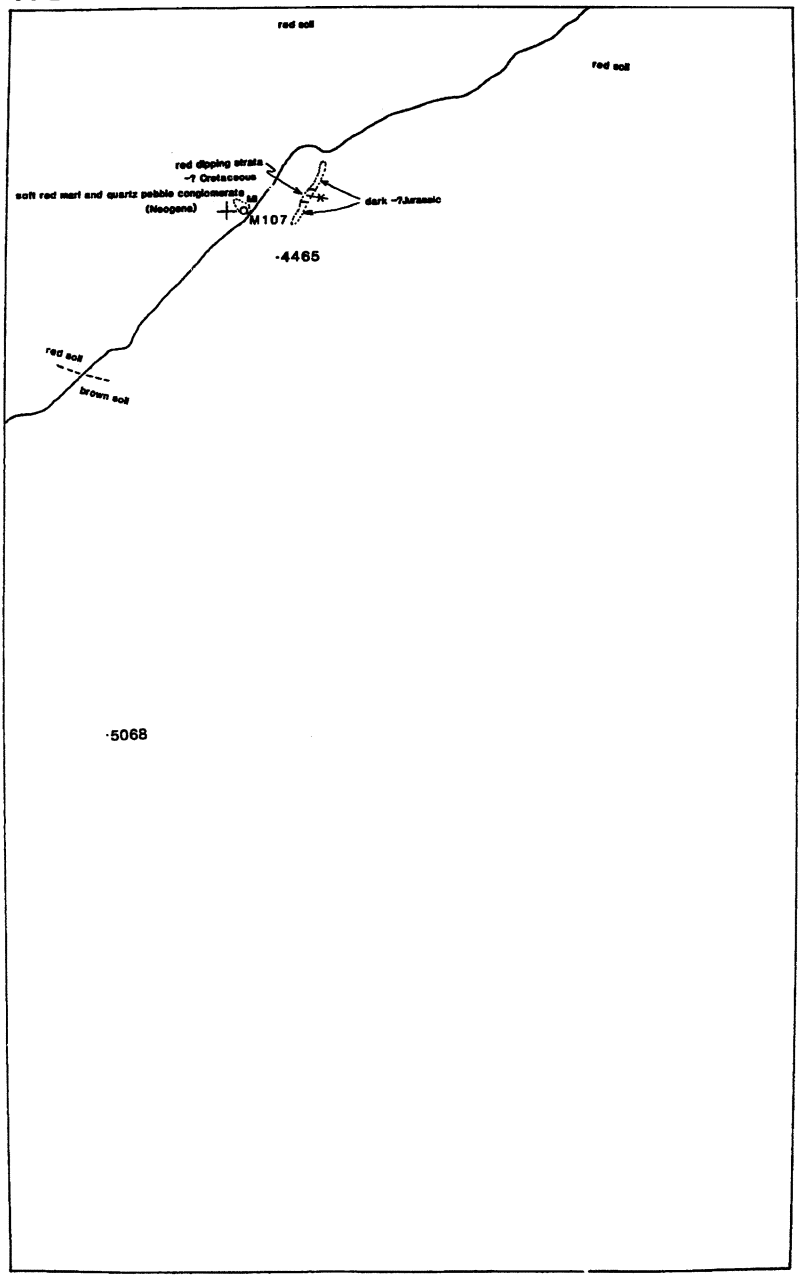
18E


S113
Cb
red clay
red breccias
?Cretaceous
red soil
S112
S127
S126
S125
S124
S120
S123
S122
S121
Y11a
O54
70
8A
Mg/Fe-carbonate rock along thrust
red soil
S110
A float
4480
concordant hilltops
remnants of flat erosion surface?
Ra,Cb,L — Cretaceous
S,SA,A — Jurassic-early Cretaceous
U,Bg,Gl — Ophiolite, ?Jurassic
brown soil (TVJ dated)

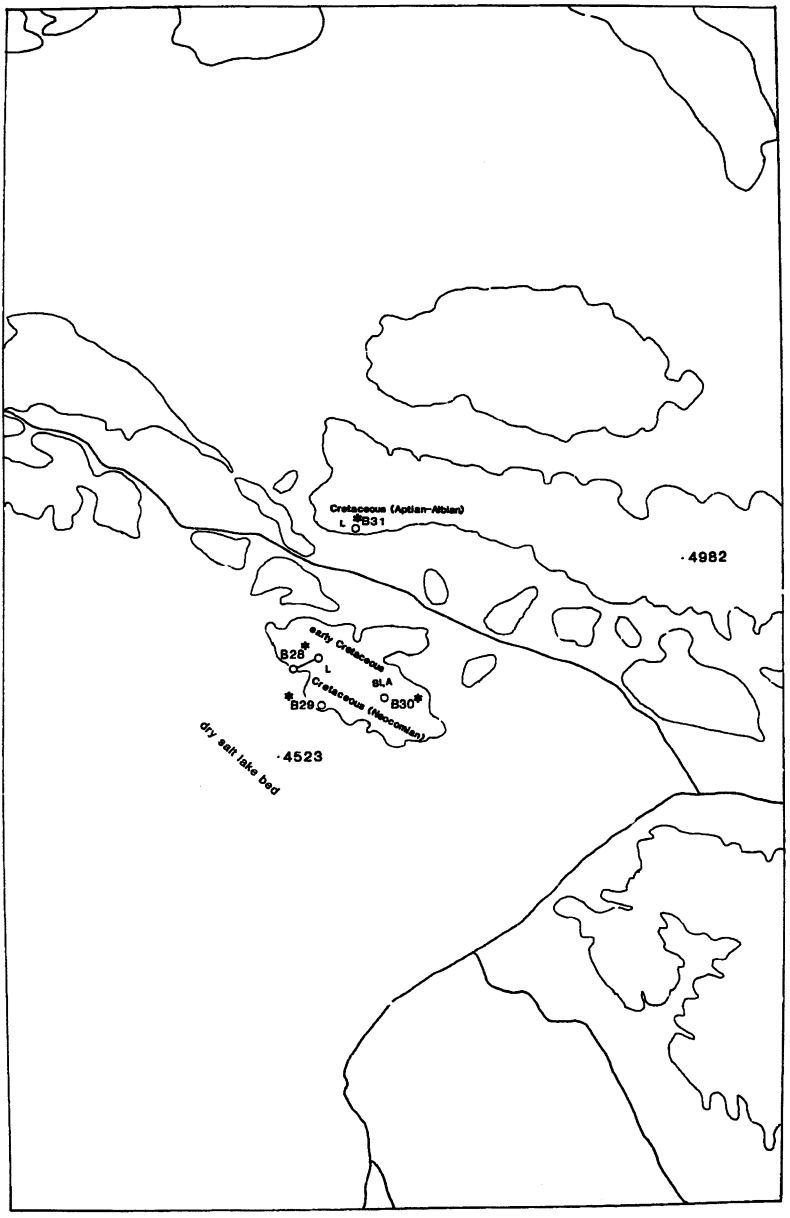
17W

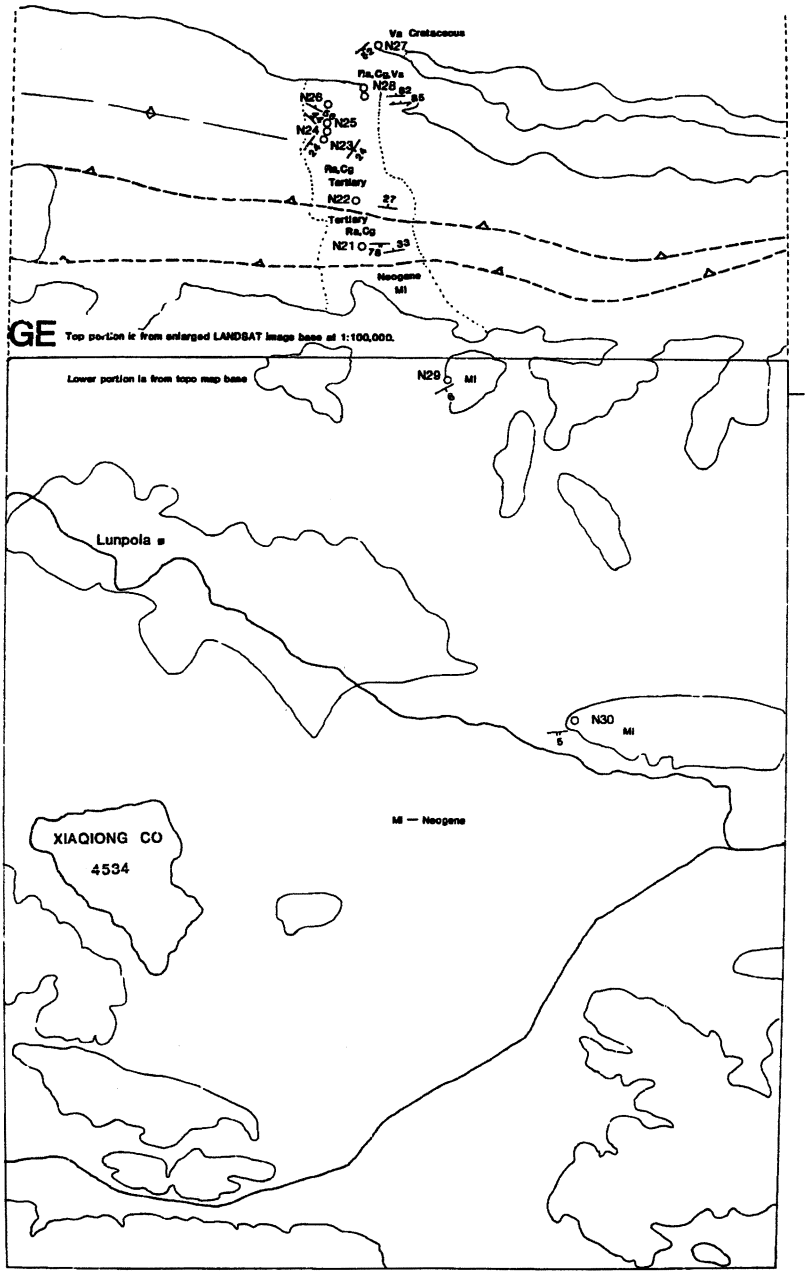

Va,RsCg — Cretaceous
A,AS,A?,S — Jurassic-early Cretaceous
LS — Jurassic(?)
Sp,C,L — Carboniferous-early Permian
M77
M76
M106
M105
M109
M103
M104
M102
M101
M100
M99
M98
M97
M96
M95
M94
M93
S108
RsCg (Cretaceous)
chloritoid
pebble cgl
red soil
& volcanic pebbles
altered
5060
Naggu
4515
G55
M91
M92
P8
P7
T29
zone with lenses of microdiorite and diabase
(? ophiolite-derived

17E

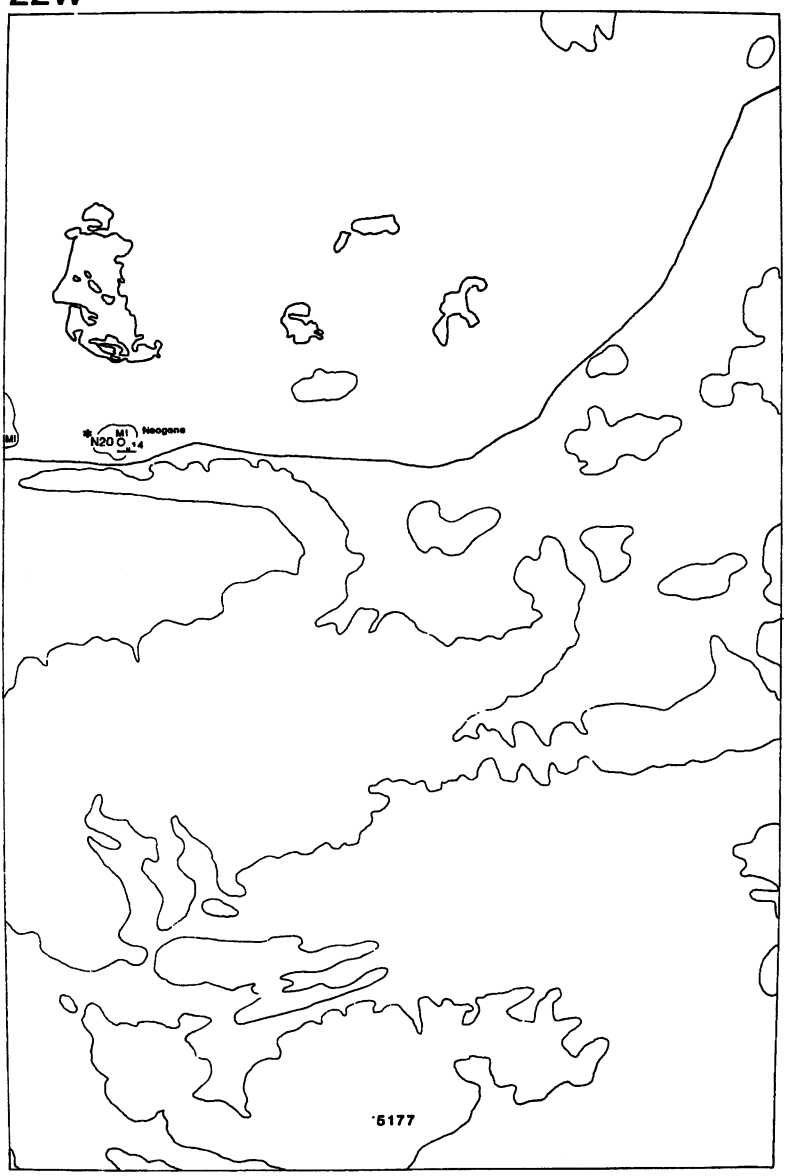

red soil
red soil
red dipping strata
~? Cretaceous
soft red marl and quartz pebble conglomerate
(Neogene)
dark ~?Jurassic
M107
·4465
red soil
brown soil
·5068

GW

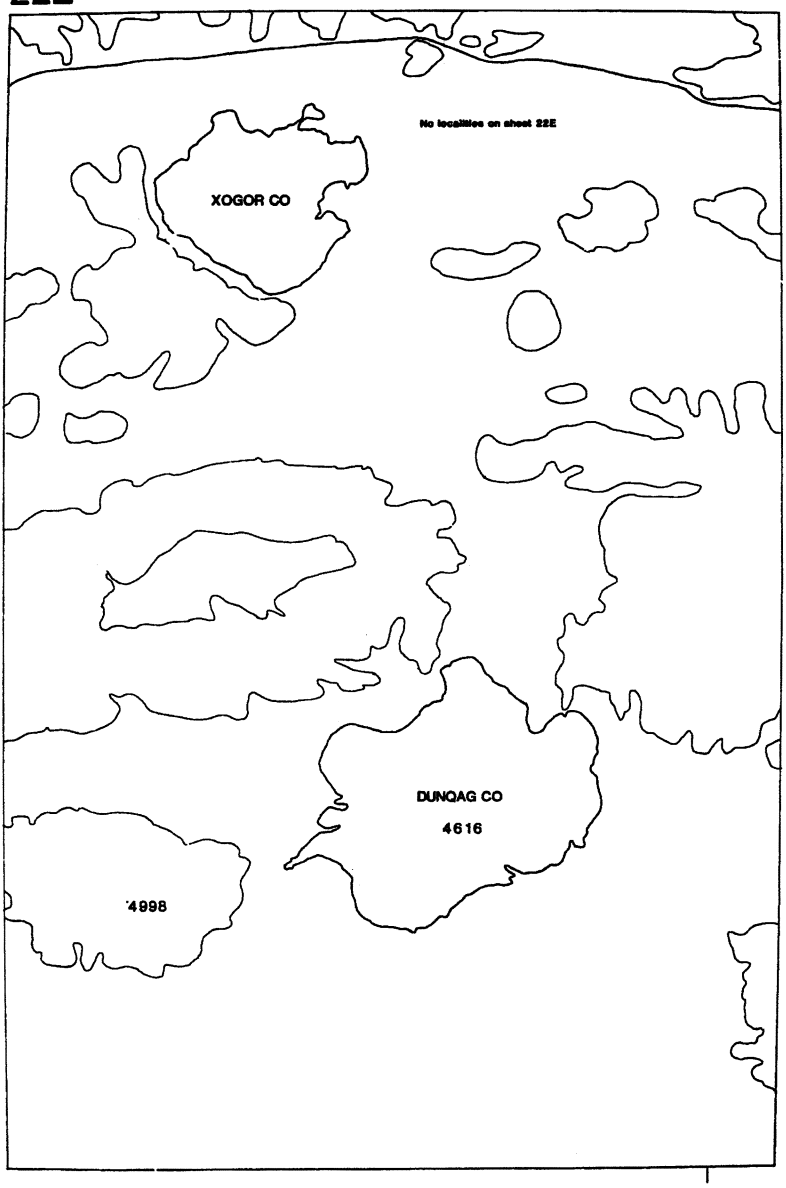

Cretaceous (Aptian–Albian)
L
B31
4982
early Cretaceous
B28
L
Cretaceous (Neocomian)
gl.A
B30
B29
4523
dry salt lake bed


Vs Cretaceous
N27
Pa,Cg,Vs
N28
82
85
N26
N25
N24
N23
Pa,Cg
Tertiary
N22
27
Tertiary
Pa,Cg
N21
33
Neogene
MI
GE
Top portion is from enlarged LANDSAT image base at 1:100,000.
Lower portion is from topo map base
N29
MI
Lunpola
N30
MI
MI — Neogene
XIAQIONG CO
4534

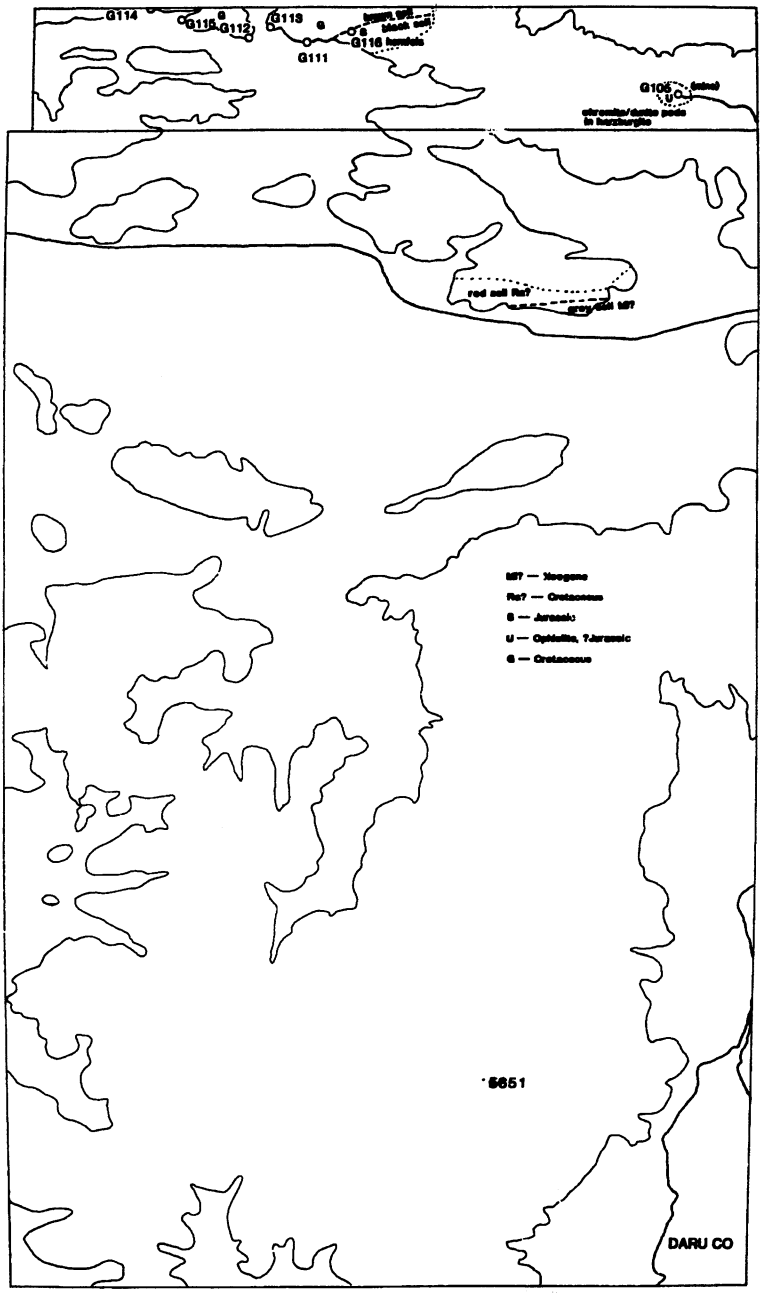
22W



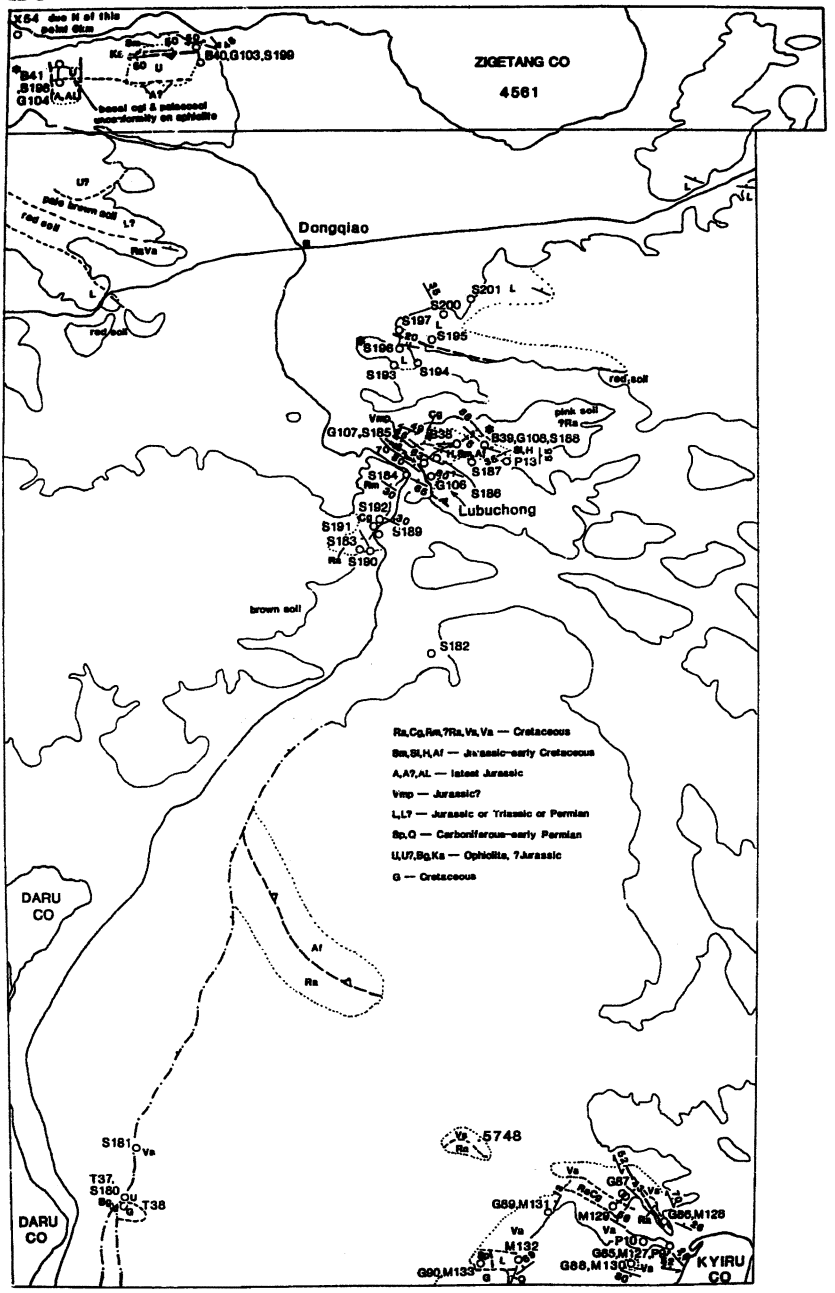
22E



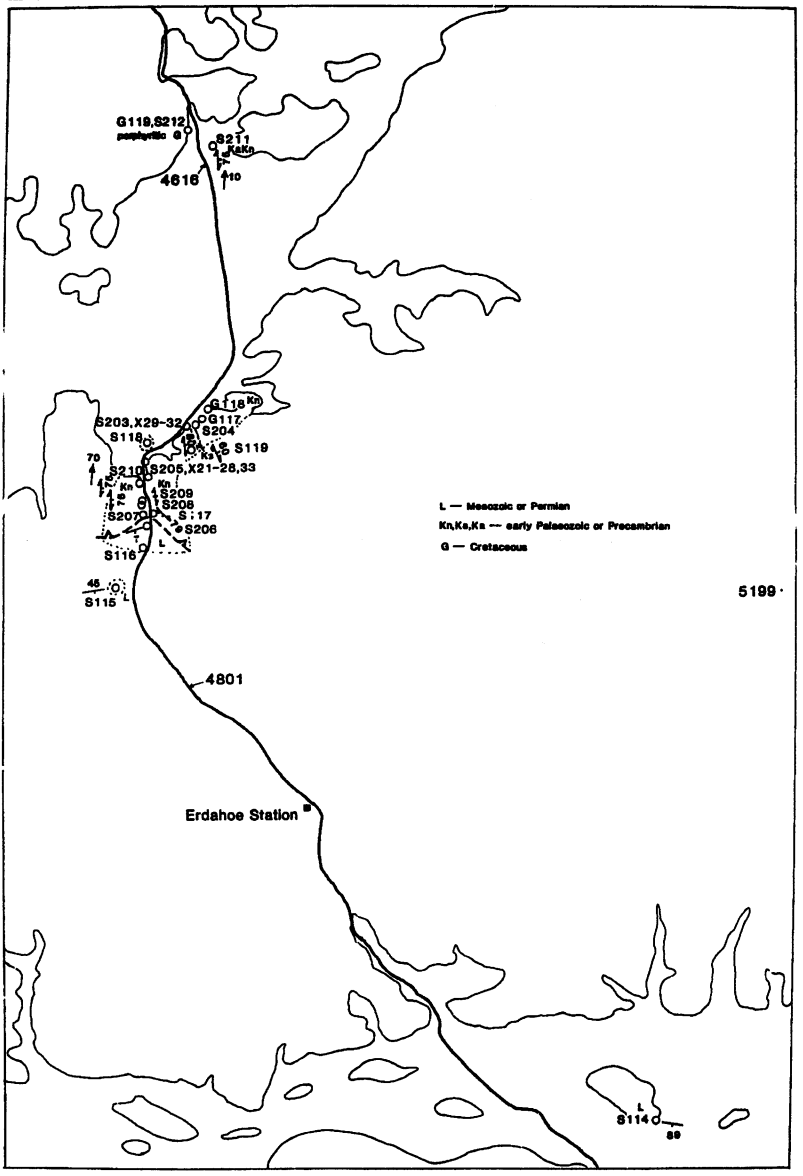
23W+30W


G114
G115
G112
G113
G116
G111
G105
(mine)
chromite/dunite pods in harzburgite
red soil Re?
grey soil M?
M? — Neogene
Re? — Cretaceous
S — Jurassic
U — Ophiolite, ?Jurassic
C — Cretaceous
5651
DARU CO

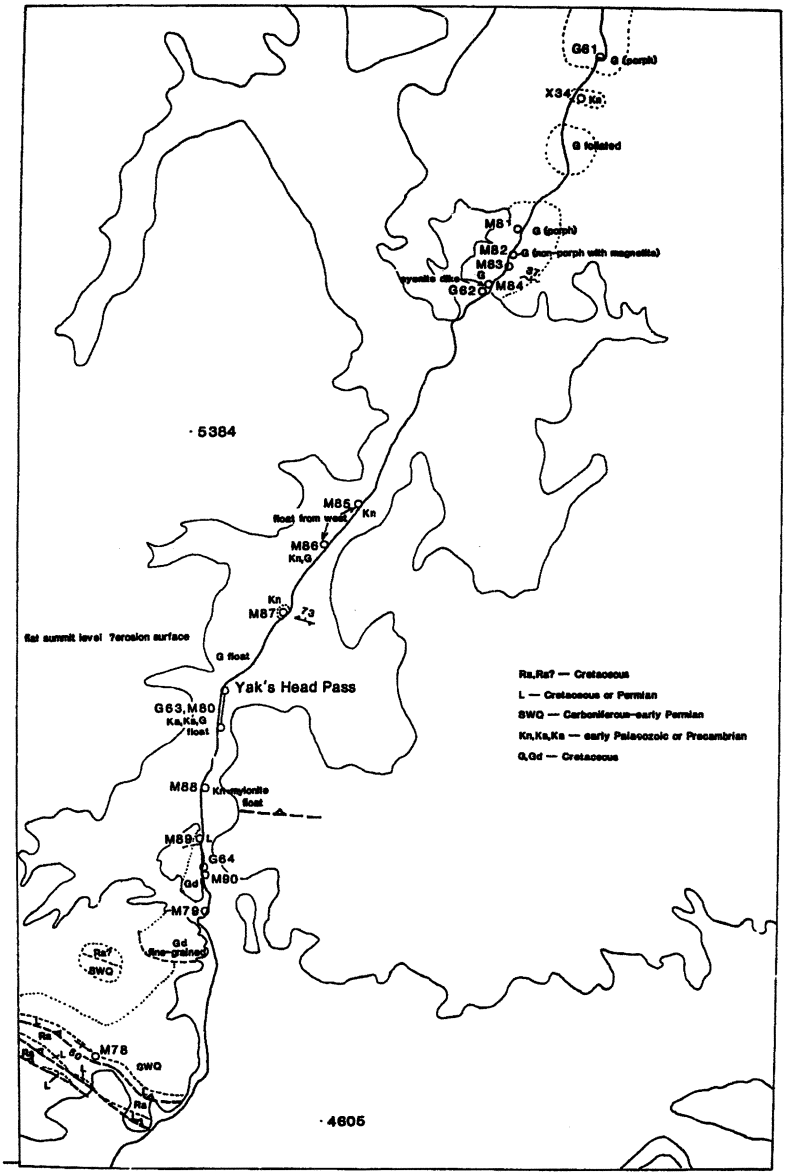
23E+30E


X54 due N of this point 6km
B40,G103,S199
B41
S198
G104
basal cgl & paleosoil unconformably on ophiolite
ZIGETANG CO
4561
Dongqiao
S201
S200
S197
S195
S196
S193
S194
red soil
pink soil
G107,S185
S188
S187
P13
S184
G106
S186
Lubuchong
S192
S191
S189
S183
S190
brown soil
S182
Ra,Cg,Rm,?Ra,Vs,Va — Cretaceous
Sm,SI,H,Af — Jurassic-early Cretaceous
A,A?,AL — latest Jurassic
Vmp — Jurassic?
L,L? — Jurassic or Triassic or Permian
Sp,C — Carboniferous-early Permian
U,U?,Bg,Ka — Ophiolite, ?Jurassic
G — Cretaceous
DARU CO
S181
T37,
S180
T38
5748
G89,M131
M129
G86,M128
M132
P10
G85,M127
G88,M130
G90,M133
KYIRU CO

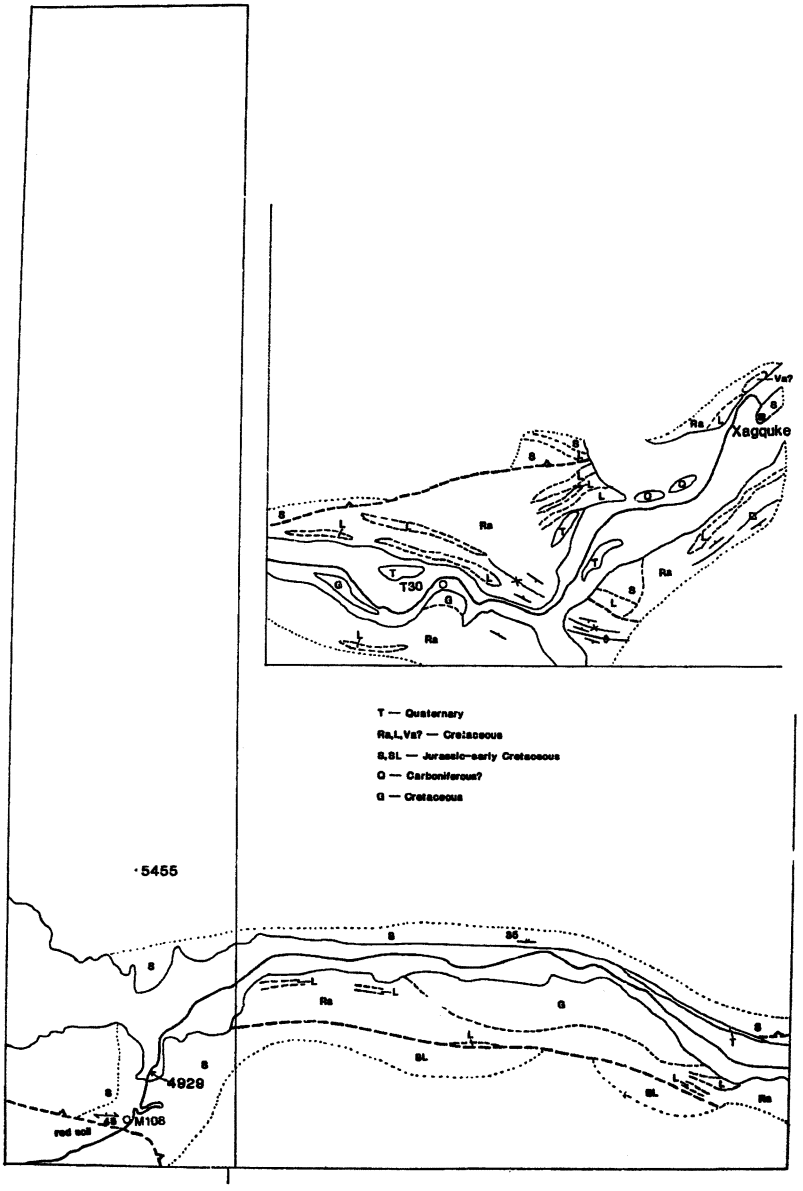
25C


G119,S212
porphyritic G
S211
KaKs
4616
10
G118
Kn
S203,X29-32
G117
S118
S204
S119
70
S210
S205,X21-28,33
Kn
S209
S208
S207
S206
S116
46
S115
L — Mesozoic or Permian
Kn,Ka,Ks — early Palaeozoic or Precambrian
G — Cretaceous
5199
4801
Erdahoe Station
S114
80

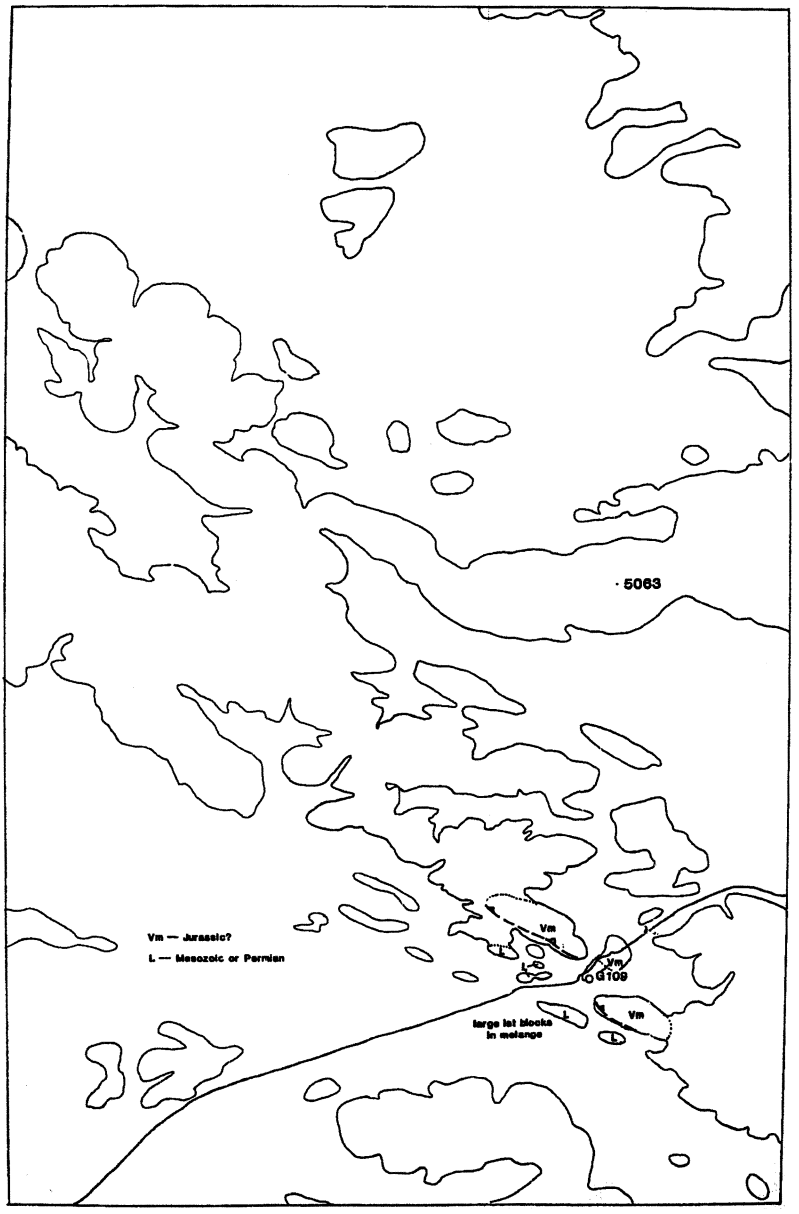
26W


G61
G (porph)
X34
Ks
G foliated
M81
G (porph)
M82
G (non-porph with magnetite)
M83
G
M84
G62
pyroxenite dike
5384
M85
float from west
Kn
M86
Kn,G
Kn
M87
73
flat summit level 7erosion surface
G float
Yak's Head Pass
G63,M80
Ka,Ks,G
float
M88
Kn-pyroxenite
float
M89
L
G64
M90
Gd
M79
Gd
fine-grained
Ra?
SWQ
M78
SWQ
Ra
Ls
4605
Ra,Ra? — Cretaceous
L — Cretaceous or Permian
SWQ — Carboniferous–early Permian
Kn,Ks,Ka — early Palaeozoic or Precambrian
G,Gd — Cretaceous

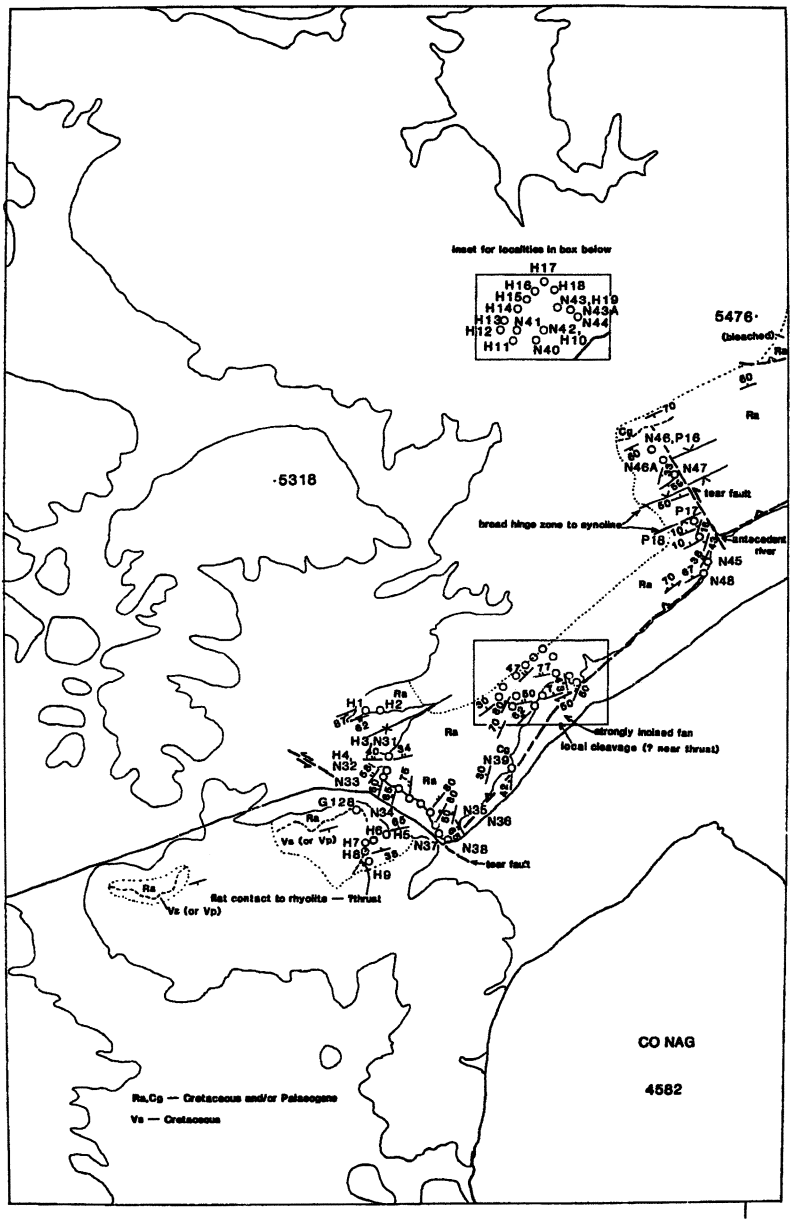
26E+JW+JE


Xagquke
T30
T — Quaternary
Ra,L,Vs? — Cretaceous
S,SL — Jurassic-early Cretaceous
C — Carboniferous?
G — Cretaceous
·5455
4929
red soil
M108

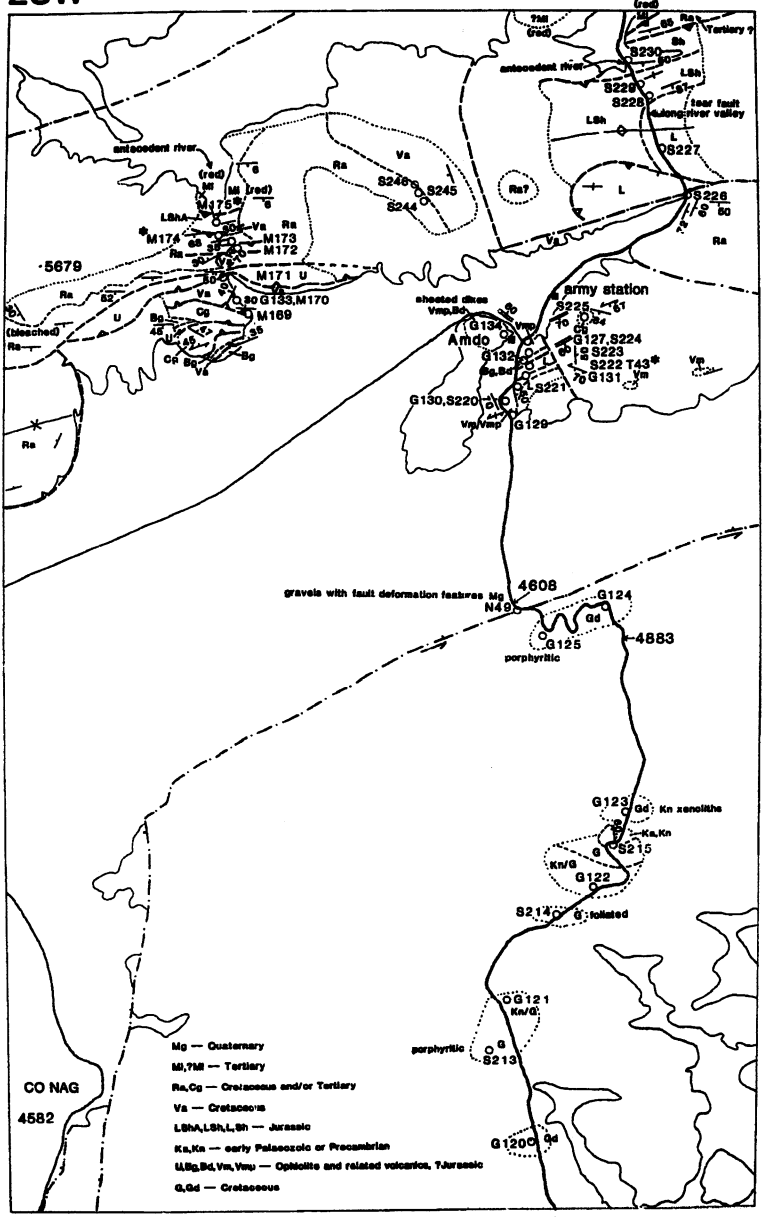
29W


5063
Vm — Jurassic?
L — Mesozoic or Permian
Vm
Vm
G109
Vm
large lat blocks
in melange

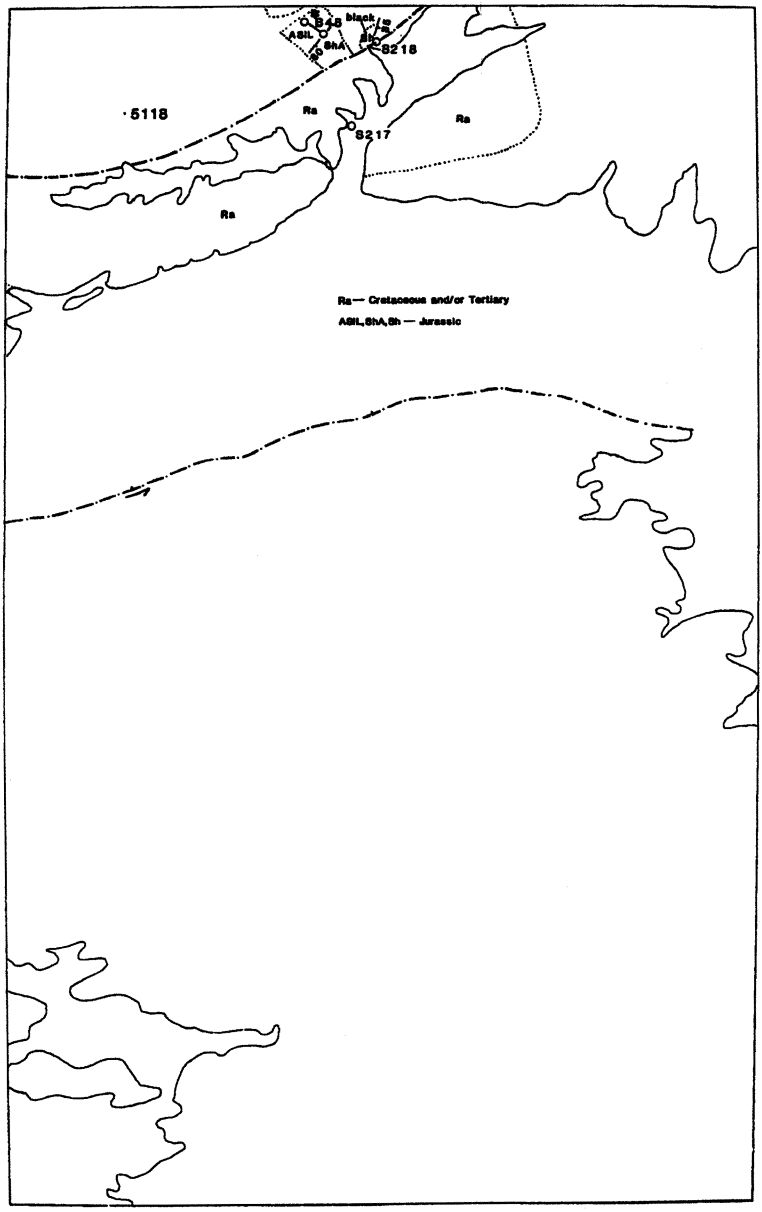
29E


Inset for localities in box below
H17
H16
H18
H15
N43,H19
H14
N43A
H13
N41
N44
H12
N42
H10
H11
N40
5476·
(bleached)
Ra
Cg
N46,P18
N46A
N47
tear fault
P17
broad hinge zone to syncline
P18
antecedent river
N45
N48
·5318
H1
H12
Ra
H3,N31
H4
N32
N33
G128
N34
H6
H5
N37
N38
tear fault
N35
N36
N39
strongly inclined fan
local cleavage (? near thrust)
Vs (or Vp)
H7
H8
H9
flat contact to rhyolite — ?thrust
CO NAG
4582
Ra,Cg — Cretaceous and/or Palaeogene
Vs — Cretaceous

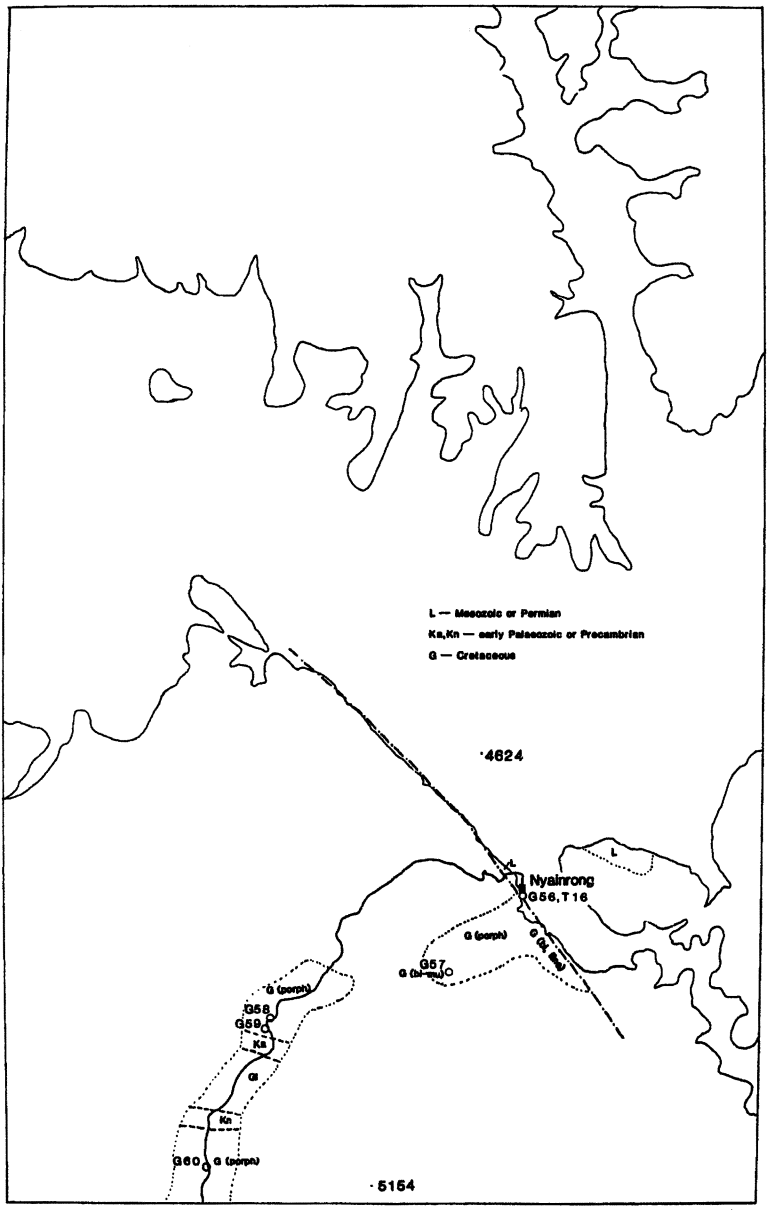
28W


army station
Amdo
gravels with fault deformation features
4608
4883
porphyritic
foliated
CO NAG
4582
Mg — Quaternary
Mi,?Mi — Tertiary
Ra,Cg — Cretaceous and/or Tertiary
Va — Cretaceous
LShA,LSh,L,Sh — Jurassic
Ka,Kn — early Palaeozoic or Precambrian
U,Bg,Bd,Vm,Vmp — Ophiolite and related volcanics, ?Jurassic
G,Gd — Cretaceous

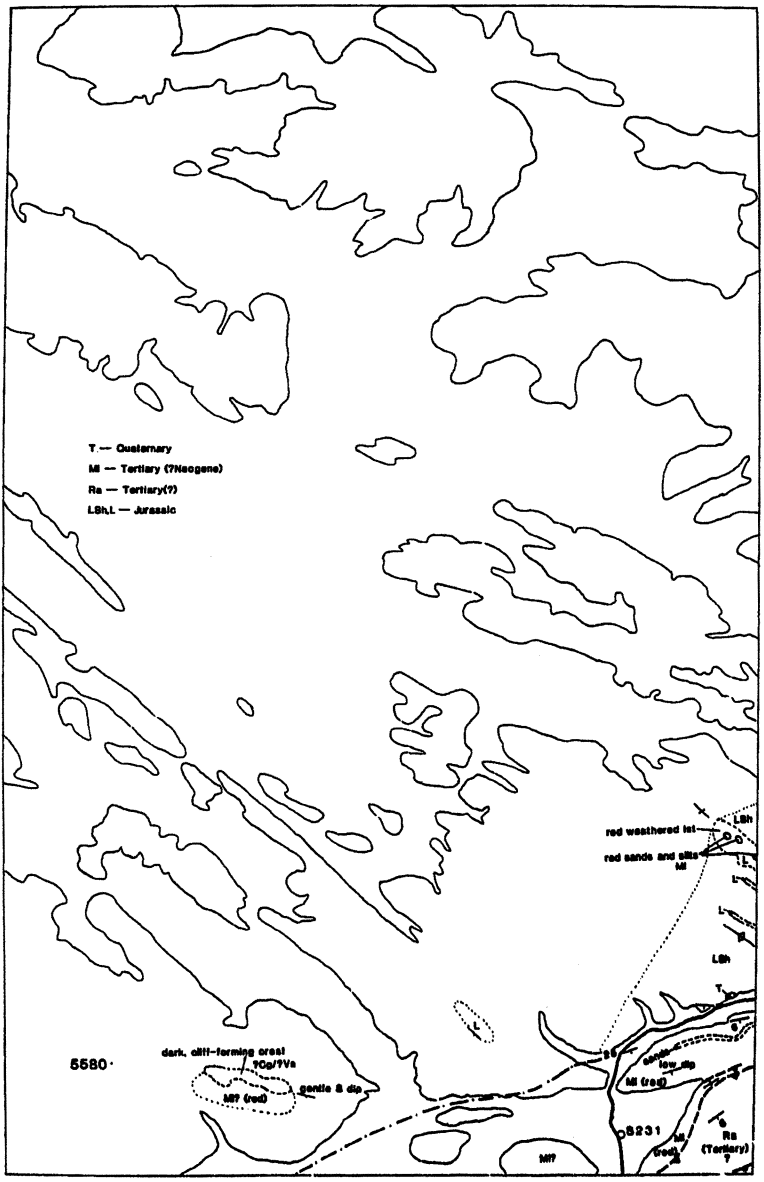
28E


S18
ASIL
ShA
black
S218
·5118
Ra
S217
Ra
Ra
Ra— Cretaceous and/or Tertiary
ASIL,ShA,Sh — Jurassic

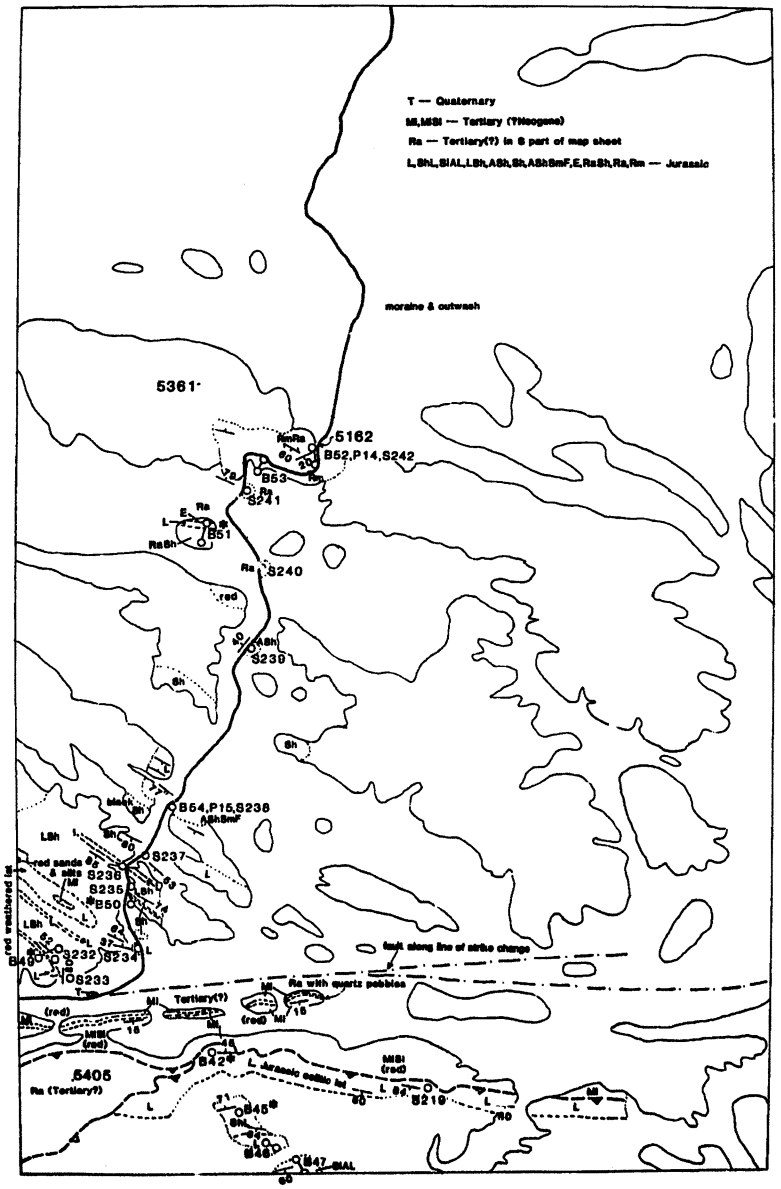
27C


L — Mesozoic or Permian
Ks,Kn — early Palaeozoic or Precambrian
G — Cretaceous
·4624
Nyainrong
G56,T16
G (porph)
G57
G (bi-mu)
G58
G59
Ks
Gl
Kn
G60
G (porph)
·5154

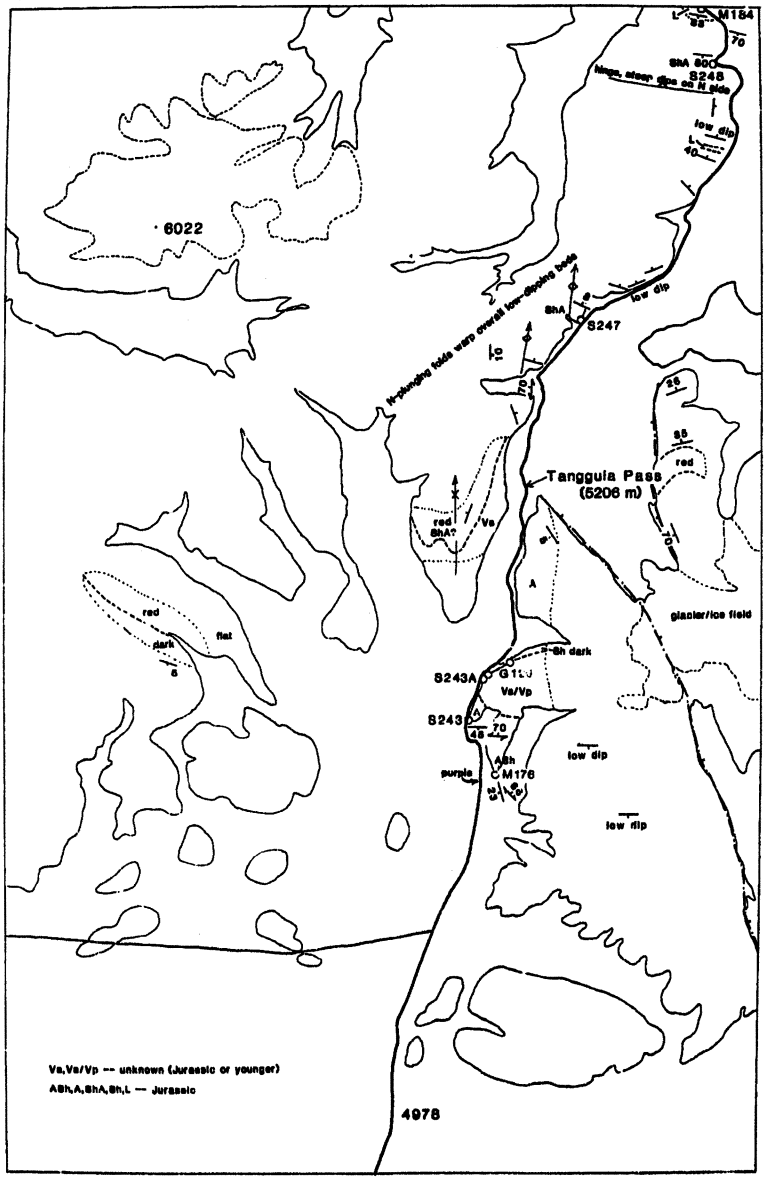
33W


T — Quaternary
Mi — Tertiary (?Neogene)
Ra — Tertiary(?)
LSh,L — Jurassic
red weathered lst
LSh
red sands and silts
Mi
LSh
5580
dark, cliff-forming crest
?Qa/?Va
Mi? (red)
gentle S dip
Mi (red)
low dip
S231
Mi
(red)
Ra
(Tertiary)
Mi?

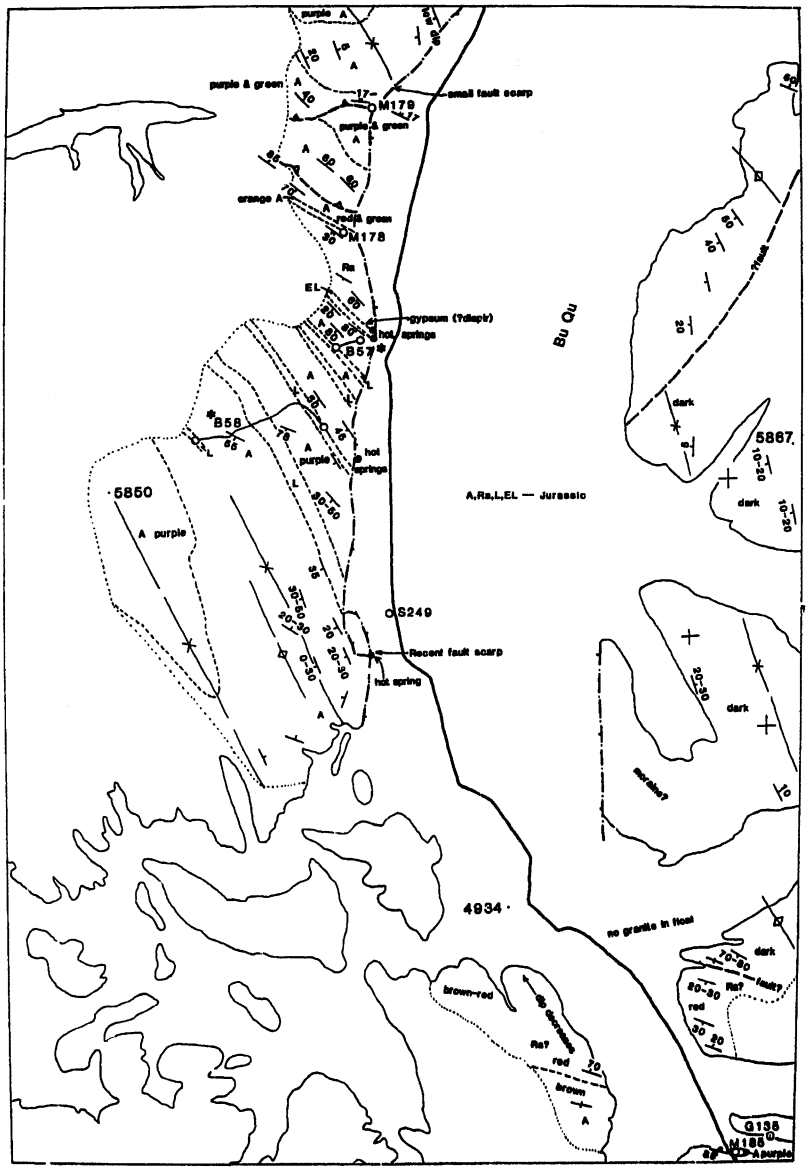
33E


T — Quaternary
M,MSl — Tertiary (?Neogene)
Ra — Tertiary(?) in S part of map sheet
L,ShL,SlAL,LBh,ASh,Sh,ASh/SmF,E,RaSh,Ra,Rm — Jurassic
moraine & outwash
5361
5162
B52,P14,S242
B53
S241
B51
S240
S239
B54,P15,S238
S237
S236
S235
B50
S232
S234
S233
B49
fault along line of strike change
Ra with quartz pebbles
Tertiary(?)
5405
Ra (Tertiary?)
B42
B45
B46
B47
SlAL
S219
B48

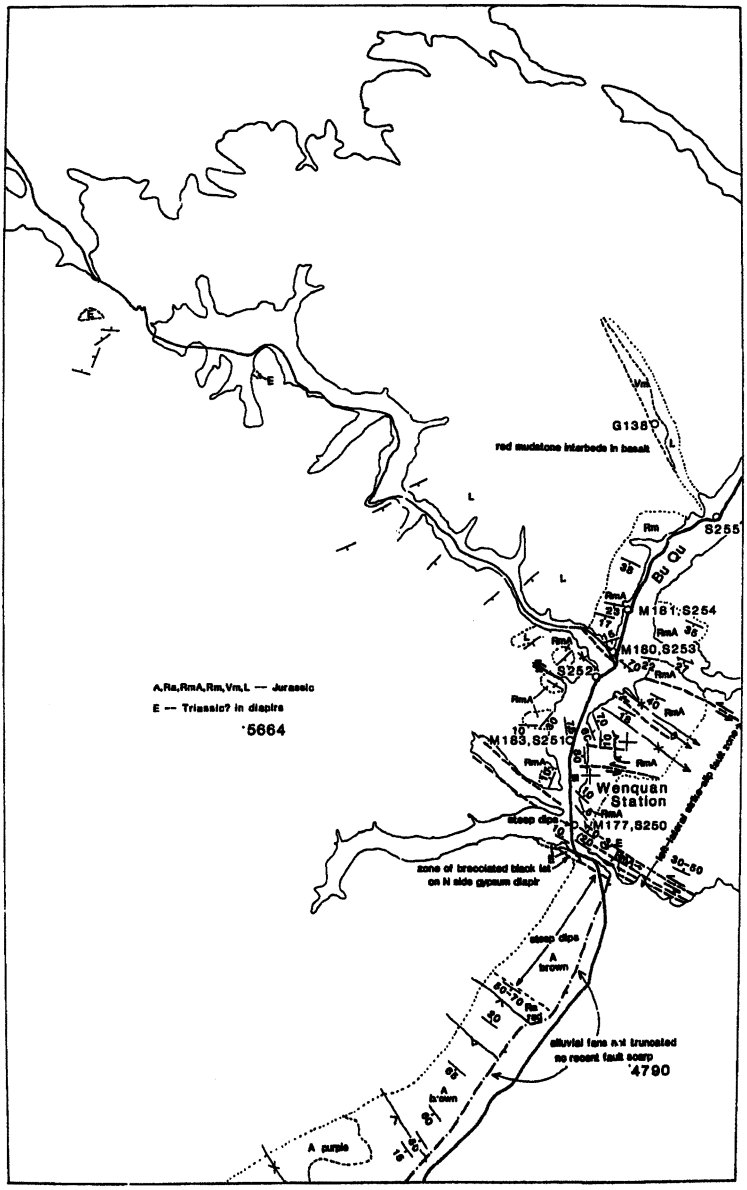
36E


M184
S248
low dip
6022
S247
Tangguia Pass
(5206 m)
red
Vs
ShA?
A
glacier/ice field
flat
dark
Sh dark
S243A
Vs/Vp
S243
70
ASh
C.M176
purple
low dip
low dip
Vs,Vs/Vp -- unknown (Jurassic or younger)
ASh,A,ShA,Sh,L — Jurassic
4978

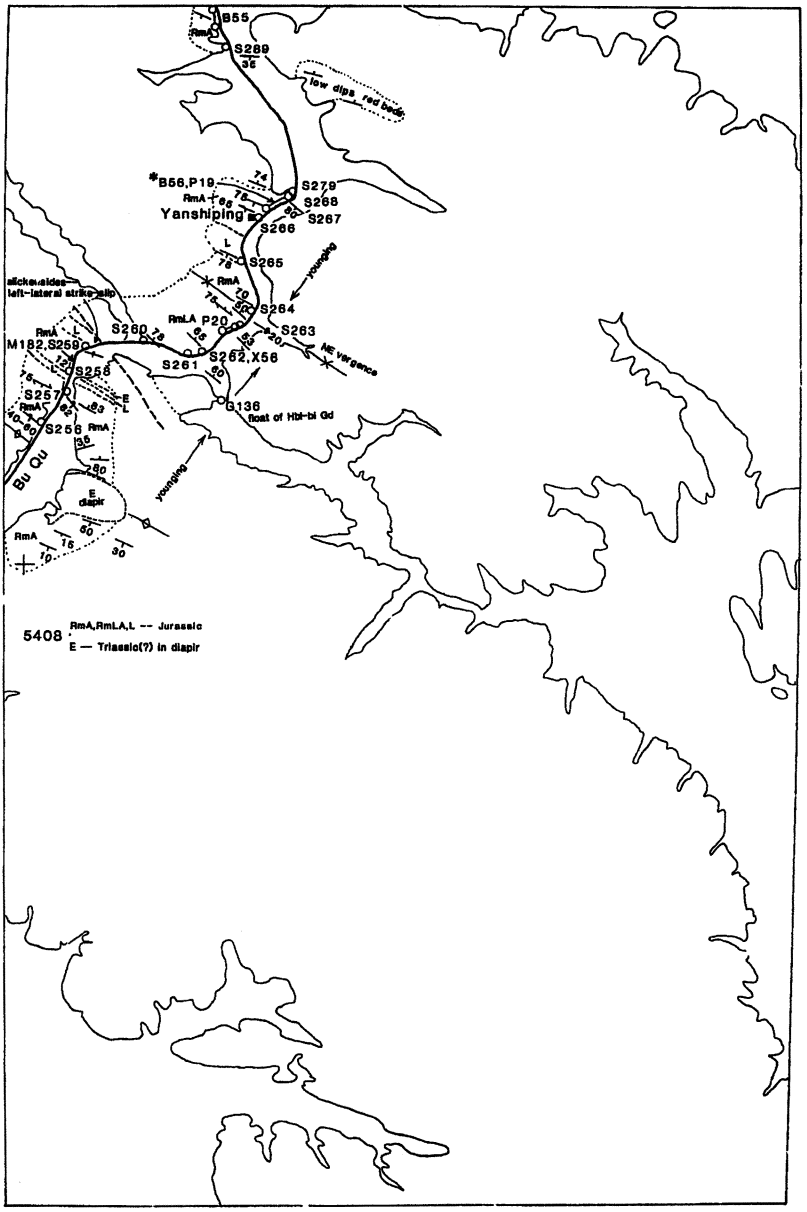
37E


purple
purple & green
small fault scarp
M179
purple & green
orange A
purple green
M178
Ra
EL
gypsum (Tridapir)
hot springs
B57
B58
hot springs
Bu Qu
A,Ra,L,EL — Jurassic
5850
A purple
5867
dark
10-20
dark
10-20
GS249
Recent fault scarp
hot spring
20-30
dark
moraine?
4934
no granite in float
dark
70-80
fault?
Ra?
red
80
brown-red
Ra?
red
brown
G136
M186
A purple

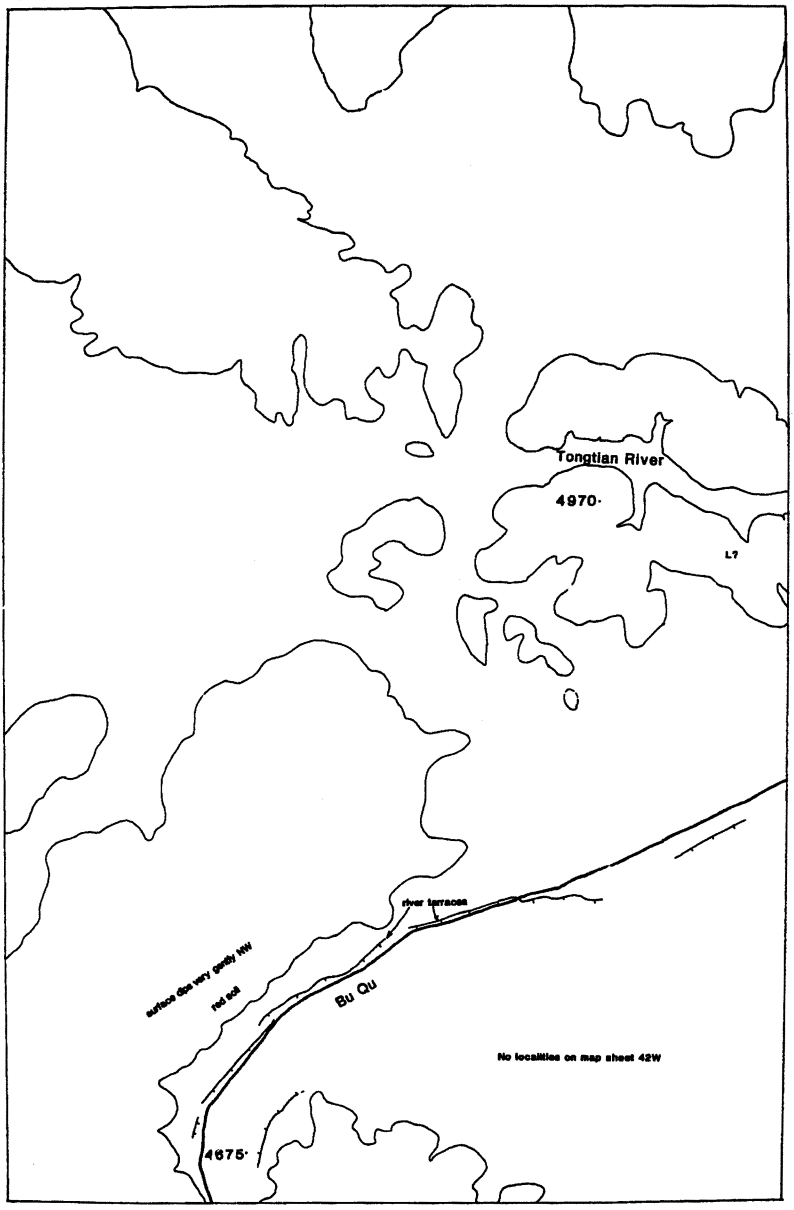
40E


A,Ra,RmA,Rm,Vm,L — Jurassic
E — Triassic? in diapirs
5664
G135
red mudstone interbeds in basalt
Vml
Rm
S255
Bu Cu
M181;S254
M180,S253
S252
M183,S251
Wenquan Station
M177,S250
steep dips
zone of brecciated black lst on N side gypsum diapir
alluvial fans not truncated
no recent fault scarp
4790
A purple
A brown
Re red

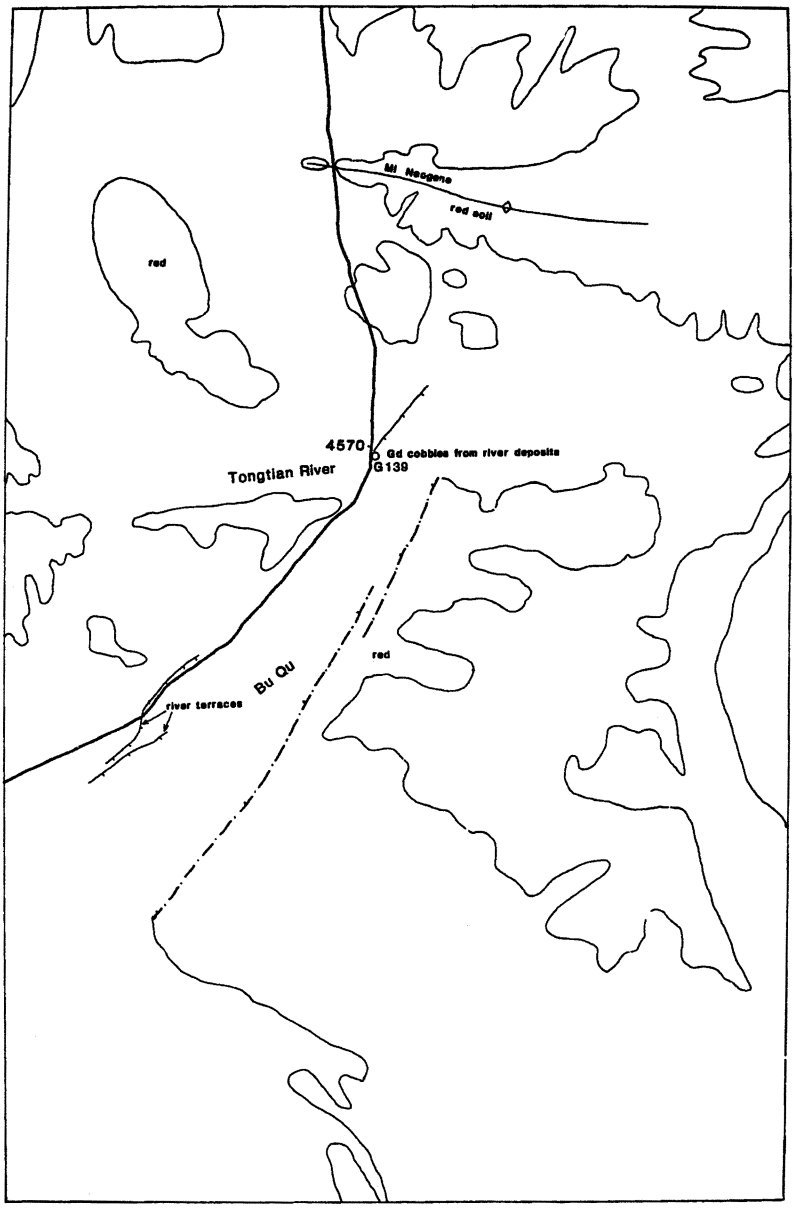
39W


B55
S289
low dips, red beds
*B56,P19
S279
S268
S267
Yanshiping
S266
S265
younging
slickenslides—
left-lateral strike-slip
S264
S263
NE vergence
M182,S259
S260
P20
S262,X56
S261
S258
S257
S256
G136
float of Hbl-bi Gd
Bu Qu
younging
E
diapir
5408
RmA,RmLA,L -- Jurassic
E — Triassic(?) in diapir

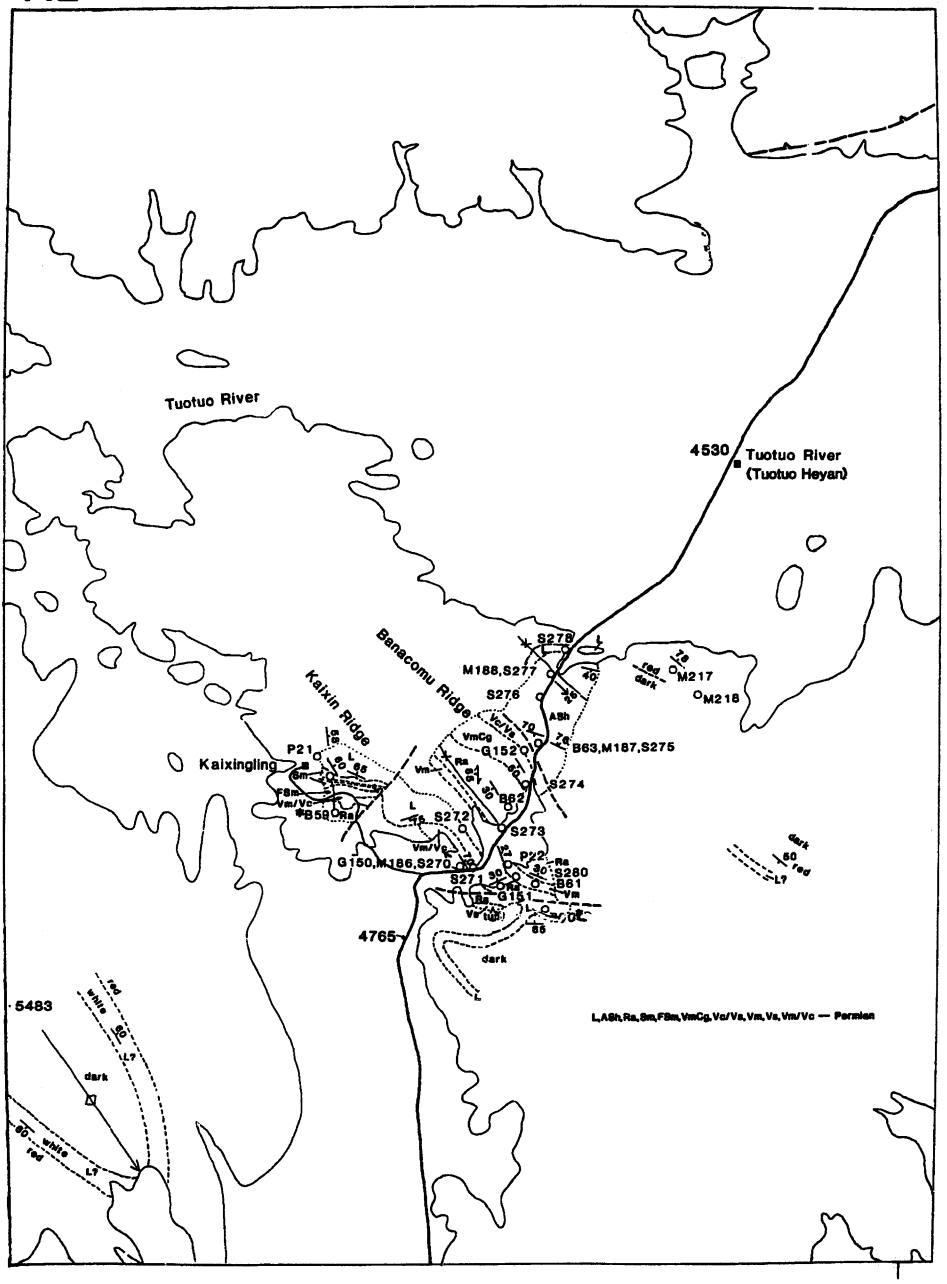
42W


Tongtian River
4970·
L7
river terraces
surface dips very gently NW
red soil
Bu Qu
No localities on map sheet 42W
4675·

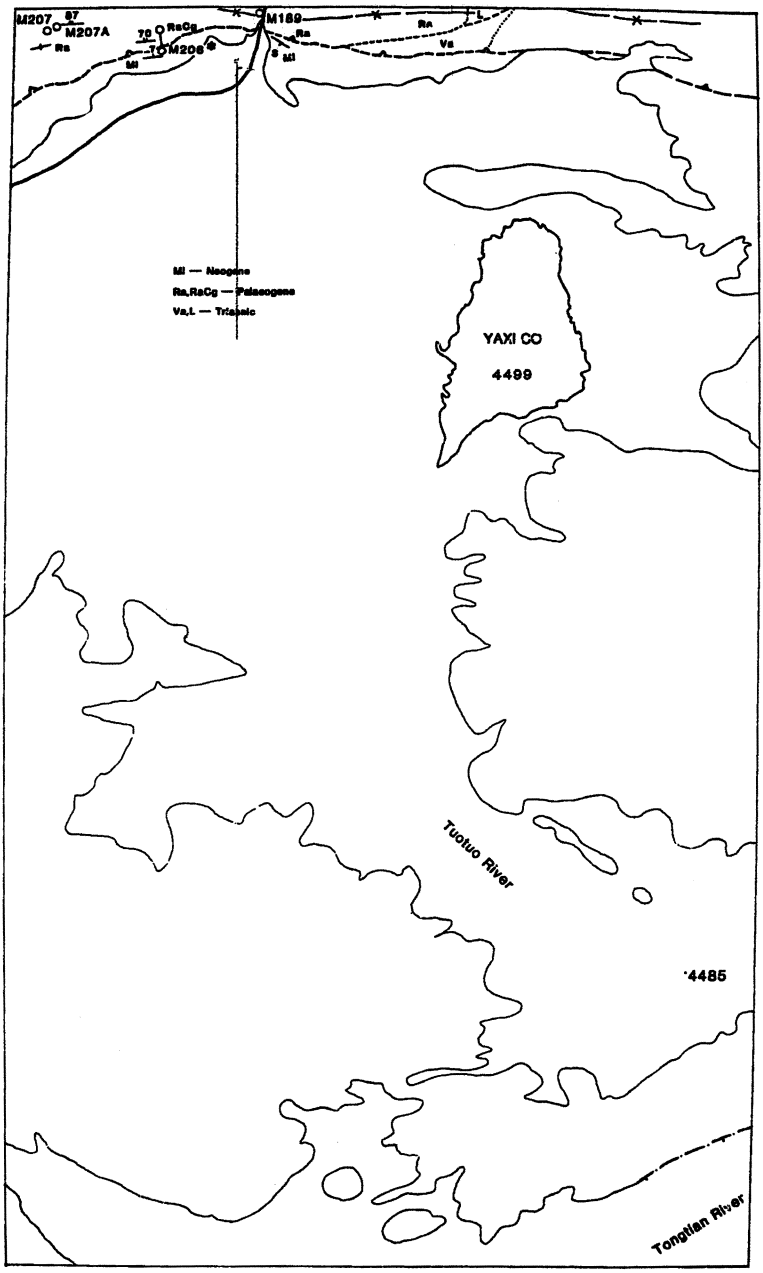
42E


Mi Neogene
red soil
red
4570
Gd cobbles from river deposits
G139
Tongtian River
red
river terraces
Bu Qu

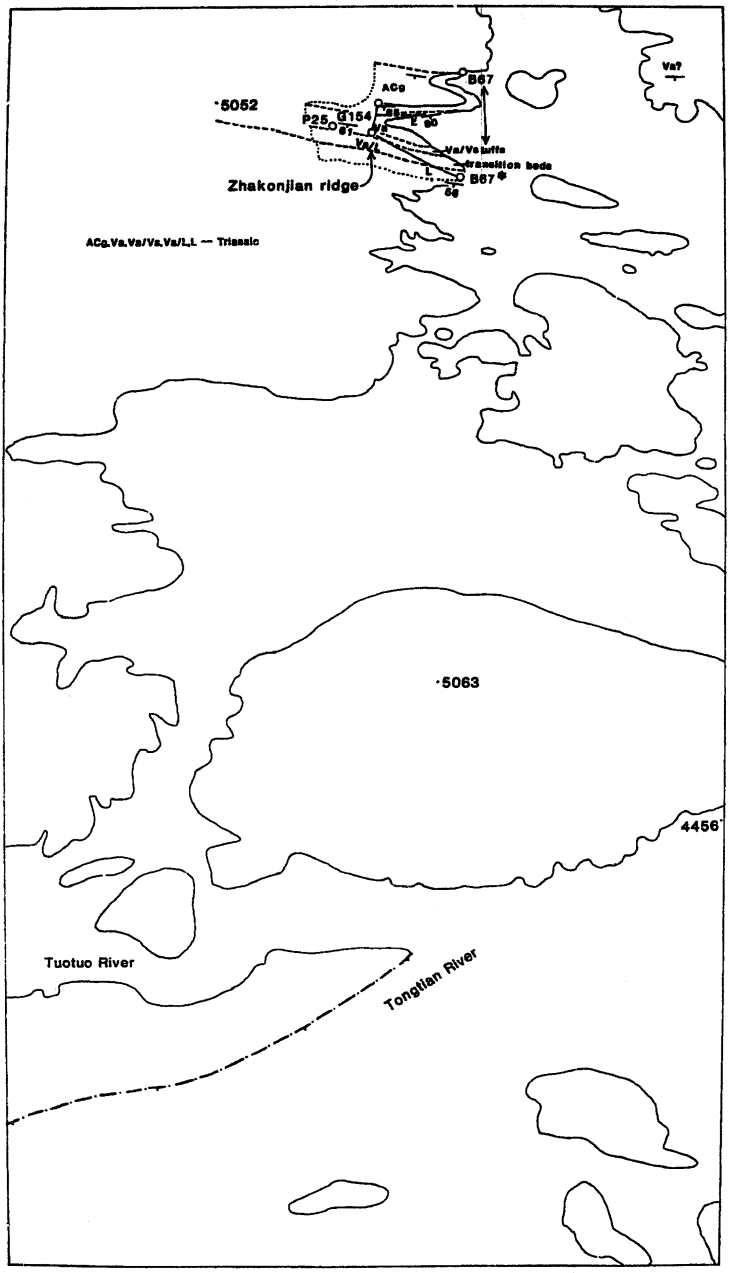
44E


Tuotuo River
4530
Tuotuo River
(Tuotuo Heyan)
Banacomu Ridge
Kaixin Ridge
Kaixingling
P21
B59
S278
M188,S277
S276
M217
M218
ASh
VmCg
Q152
B63,M187,S275
S274
B62
S272
S273
G150,M186,S270
P22
S280
S271
B61
Q151
4765
5483
dark
red
white
L7
L, ASh, Rs, Sm, FSm, VmCg, Vc/Va, Vm, Va, Vm/Vc — Permian

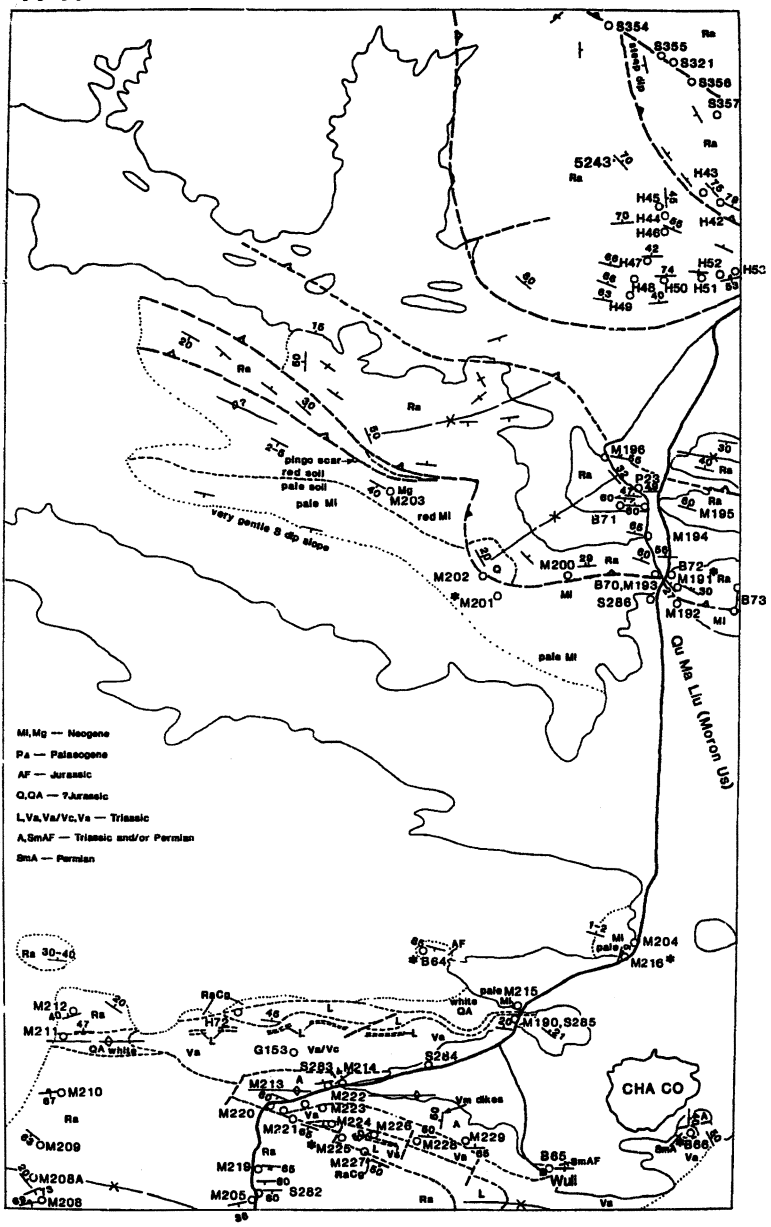
45W


M207
97
M207A
78
RsCg
M206
M189
Ra
Va
Mi
Mi — Neogene
Ra,RsCg — Paleogene
Va,L — Triassic
YAXI CO
4499
Tuotuo River
4485
Tongtian River

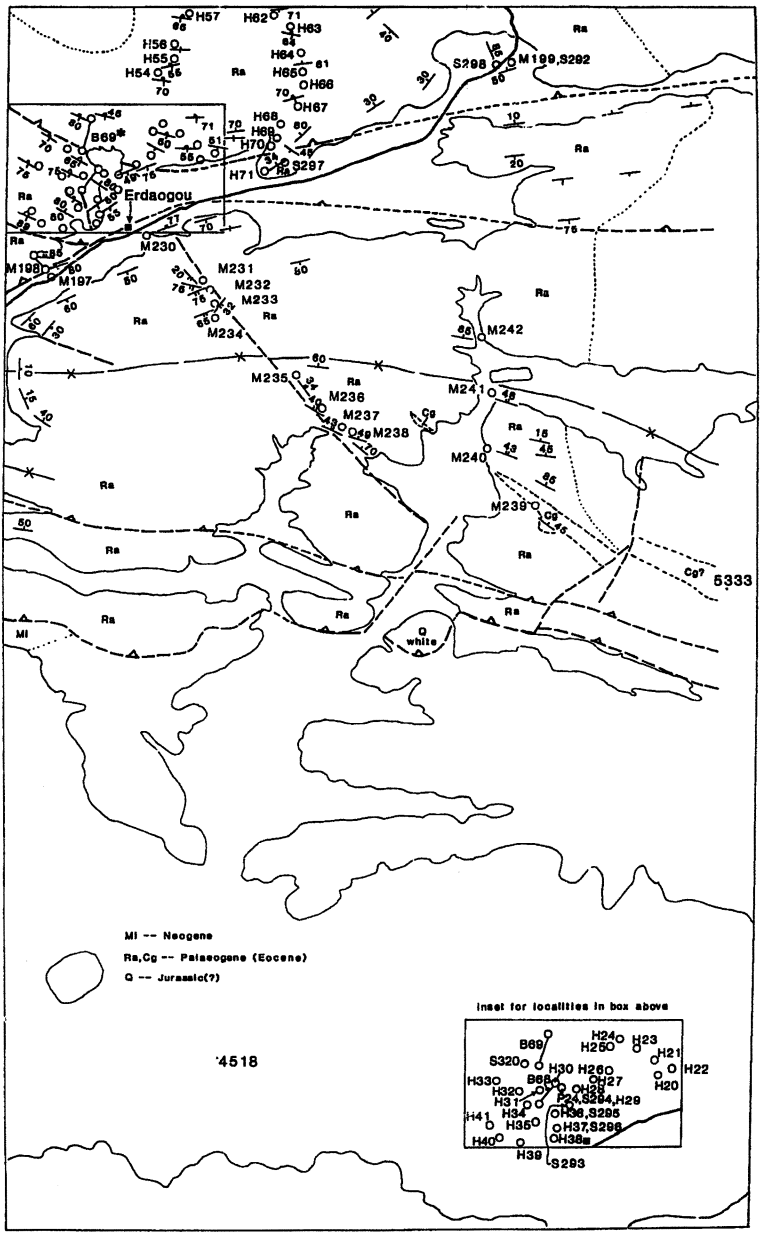
45E


·5052
P25
G154
B67
ACa
Va?
Va/Va tuffs
transition beds
Zhakonjian ridge
ACa.Va.Va/Va.Va/L.L — Triassic
·5063
4456
Tuotuo River
Tongtian River

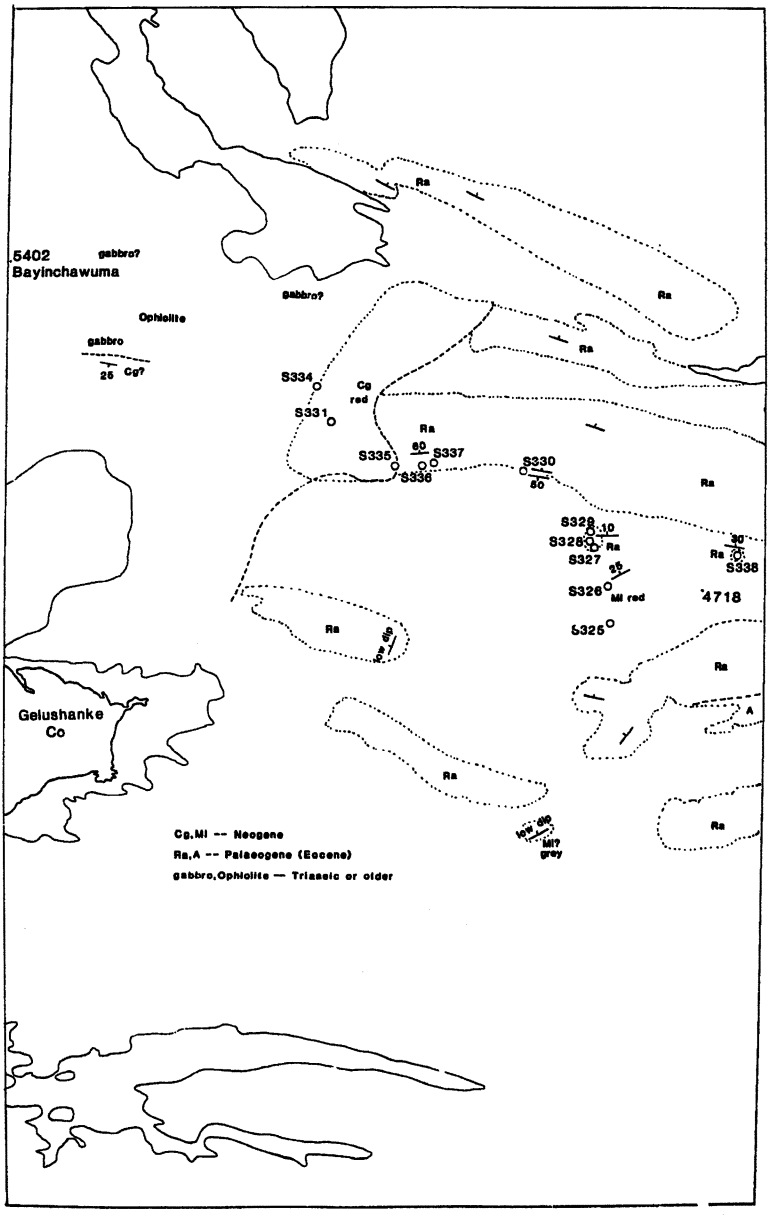
47W


S354
S355
S321
S356
S357
5243
H43
H45
H44
H46
H42
H47
H52
H53
H48
H50
H51
H49
M196
P23
M195
M194
B71
M200
B72
M191
M202
M201
B70,M193
S286
M192
B73
pale MI
Qu Ma Liu (Moron Ue)
MI,Mg — Neogene
Pa — Palaeogene
AF — Jurassic
Q,QA — ?Jurassic
L,Va,Va/Vc,Va — Triassic
A,SmAF — Triassic and/or Permian
SmA — Permian
M204
M216
B64
M215
M190,S285
M212
M211
H73
G153
Va/Vc
S283
S284
M214
M213
M210
M209
M208A
M208
M220
M222
M223
M224
M226
M221
M225
M229
M228
M227
M219
M205
S282
B65
Wuli
CHA CO
B66

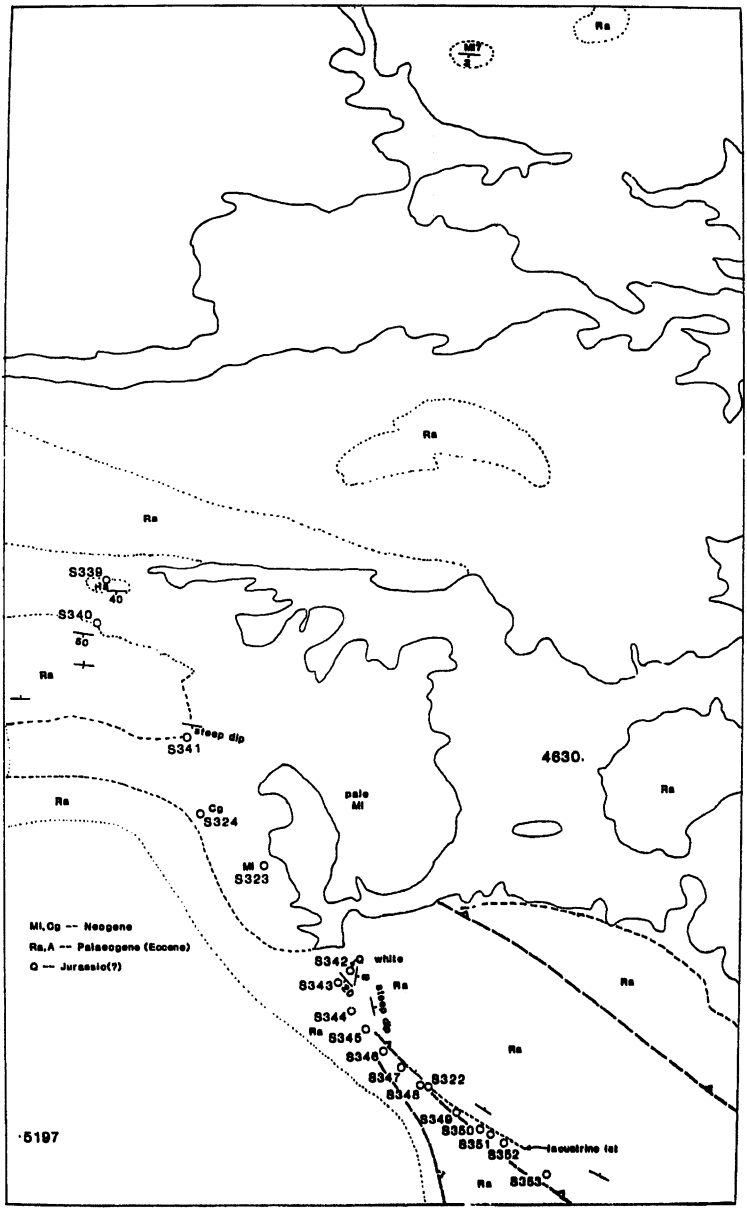
47E


Erdaogou
M230
M231
M232
M233
M234
M235
M236
M237
M238
M239
M240
M241
M242
M197
M198
H57
H62
H63
H64
H65
H66
H67
H68
H69
H70
H71
S297
S298
M199,S292
5333
4518
Ra
Cg
Cg?
Q white
MI -- Neogene
Ra,Cg -- Paleogene (Eocene)
Q -- Jurassic(?)
Inset for localities in box above
B69
H24
H25
H23
H21
H22
S320
H30
H26
H33
H27
H20
H32
H31
H34
H35
H41
H40
H39
S293
S294,H29
H36,S295
H37,S296
OH38

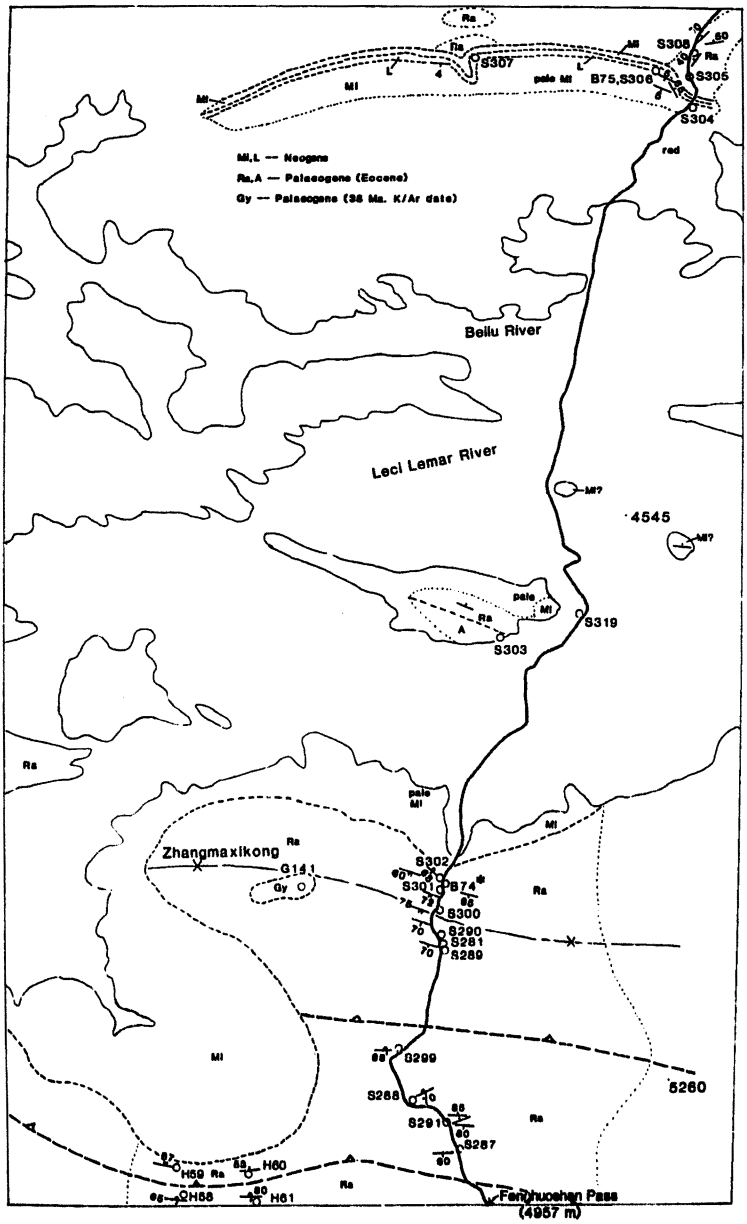
49E


5402
Bayinchawuma
gabbro?
gabbro?
Ophiolite
gabbro
25
Cg?
Ra
Ra
Ra
S334
Cg
red
S331
S335
60
S337
S336
S330
60
Ra
S328
10
S329
Ra
S327
35
S326
Ml red
4718
S325
30
Ra
S338
Ra
Ra
Ra
Ra
A
Ra
Ml?
grey
Gelushanke
Co
Cg,Ml -- Neogene
Ra,A -- Palaeogene (Eocene)
gabbro,Ophiolite — Triassic or older

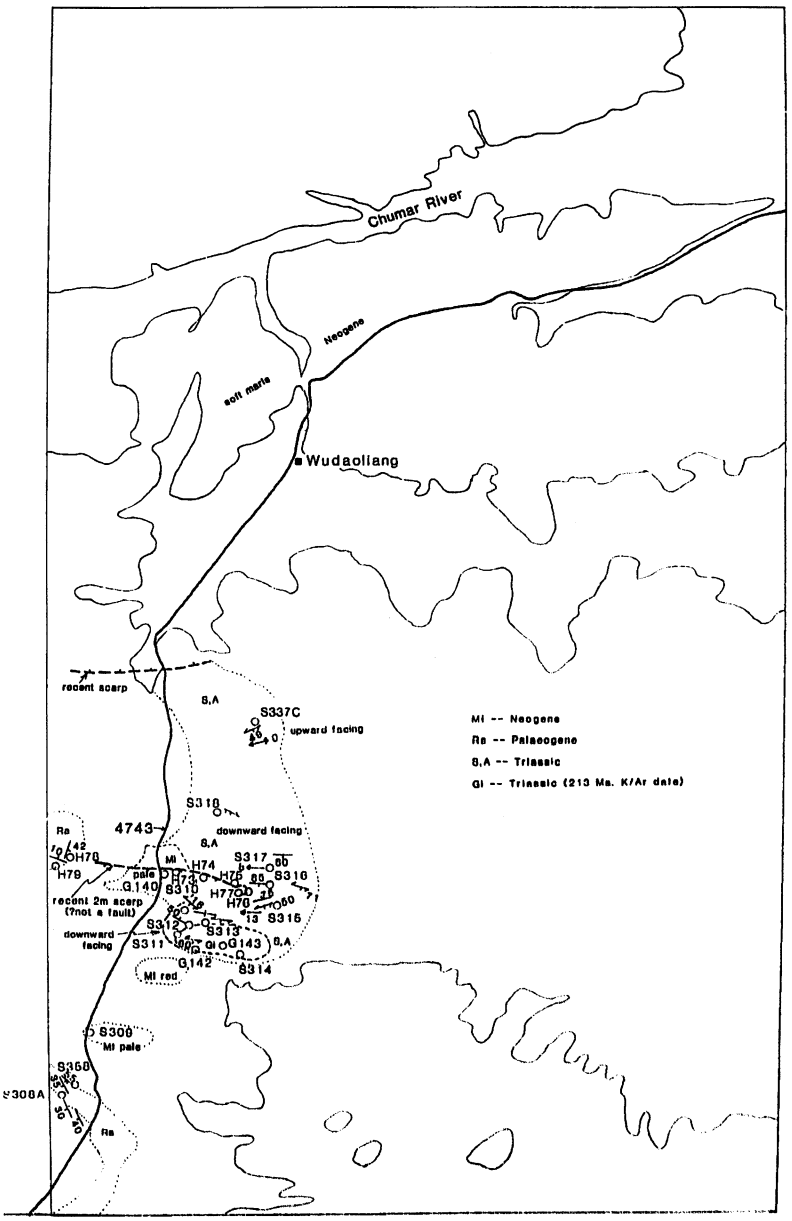
50W


Ra
Ra
Ra
S338
40
S340
60
Ra
steep dip
S341
4630.
Ra
Ra
pale
Ml
Cg
S324
Ml
S323
Ml,Cg -- Neogene
Ra,A -- Palaeogene (Eocene)
Q -- Jurassic(?)
S342
white
S343
Ra
Ra
S344
Ra
S345
S346
S347
S322
S348
S349
S350
S351
S352
lacustrine lst
Ra
S353
·5197

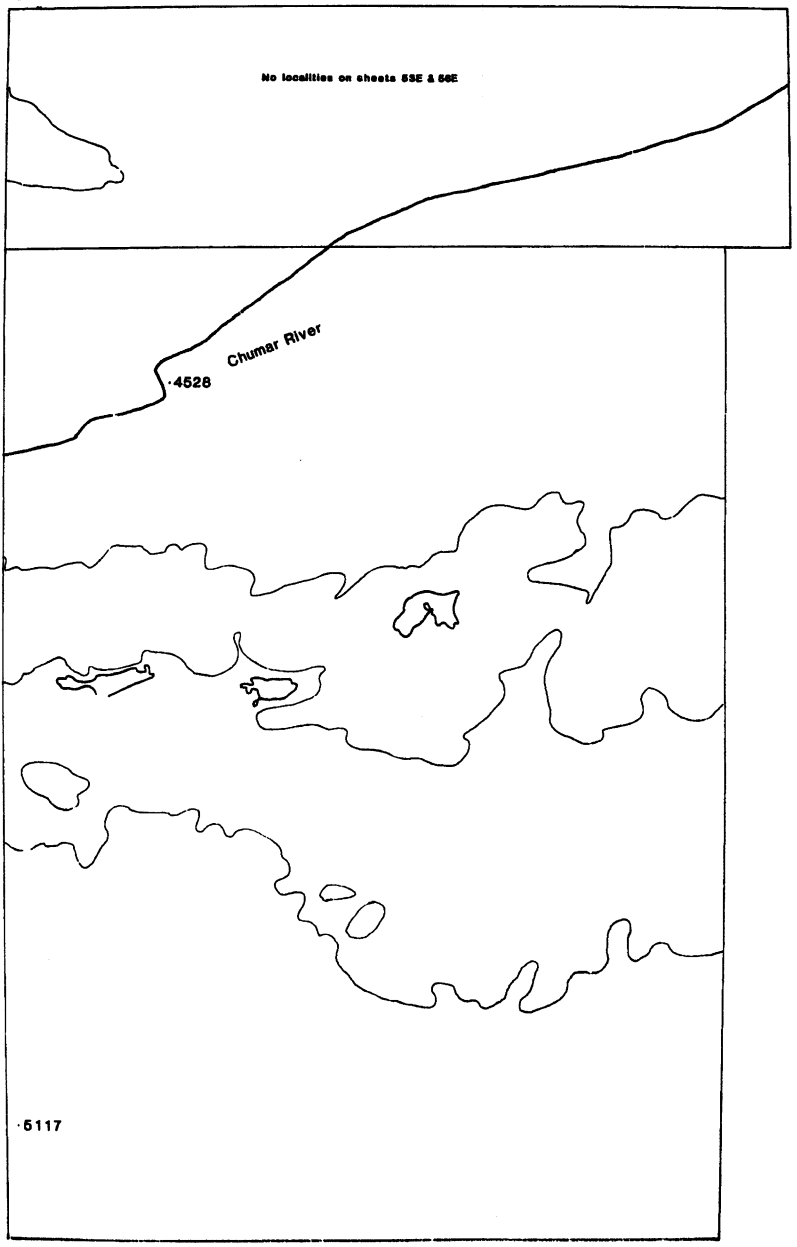
50E


Mi,L — Neogene
Ra,A — Palaeogene (Eocene)
Gy — Palaeogene (38 Ma. K/Ar date)
Beilu River
Leci Lemar River
4545
S319
S303
Zhangmaxikong
S302
S301
B74
S300
S290
S291
S289
S299
S288
S287
5260
H59
H60
H58
H61
Fenghuoshan Pass
(4957 m)

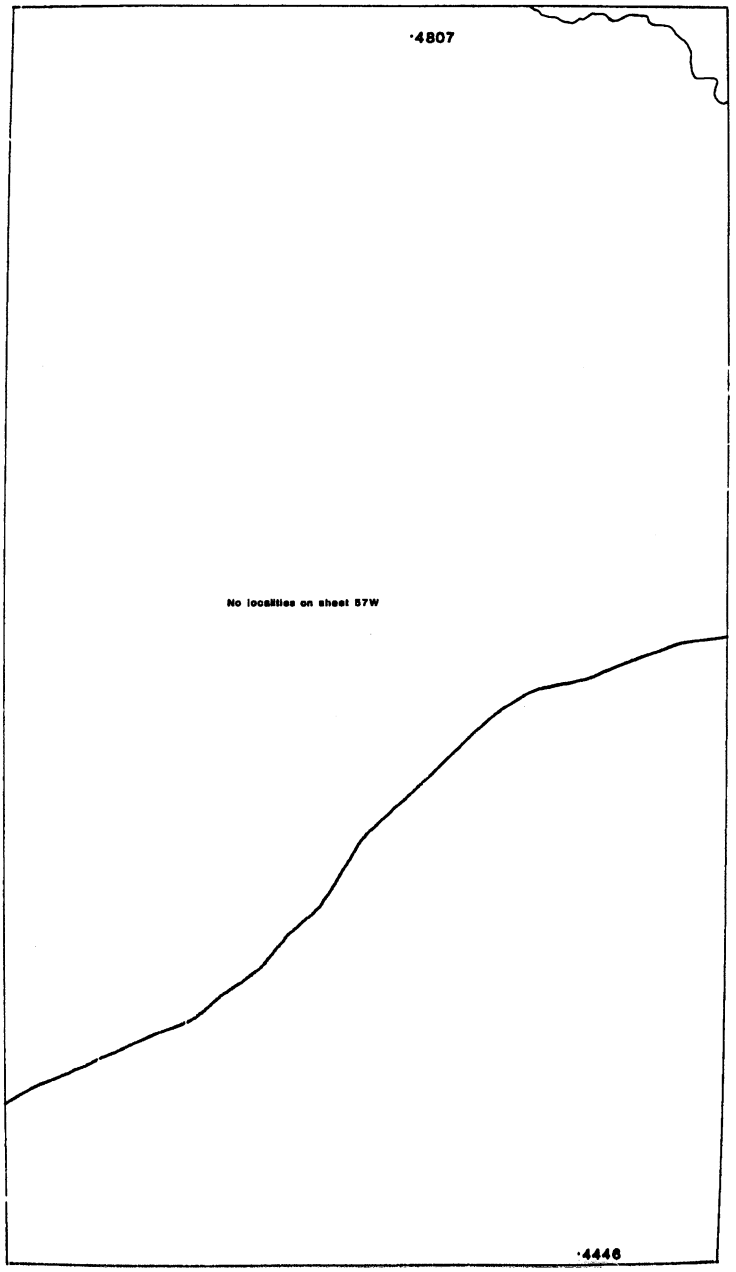
53W


Chumar River
Neogene
soft marls
Wudaoliang
recent scarp
S,A
S337C
upward facing
Mi -- Neogene
Re -- Palaeogene
S,A -- Triassic
Gl -- Triassic (213 Ma. K/Ar date)
S310
4743
downward facing
Re
S,A
Mi
H74
S317
S316
H79
pale
G140
S318
H77
H76
H75
S315
recent 2m scarp
(?not a fault)
S312
S313
downward facing
S311
Gl
G143
S,A
G142
S314
Mi red
S309
Mi pale
S308A
Re

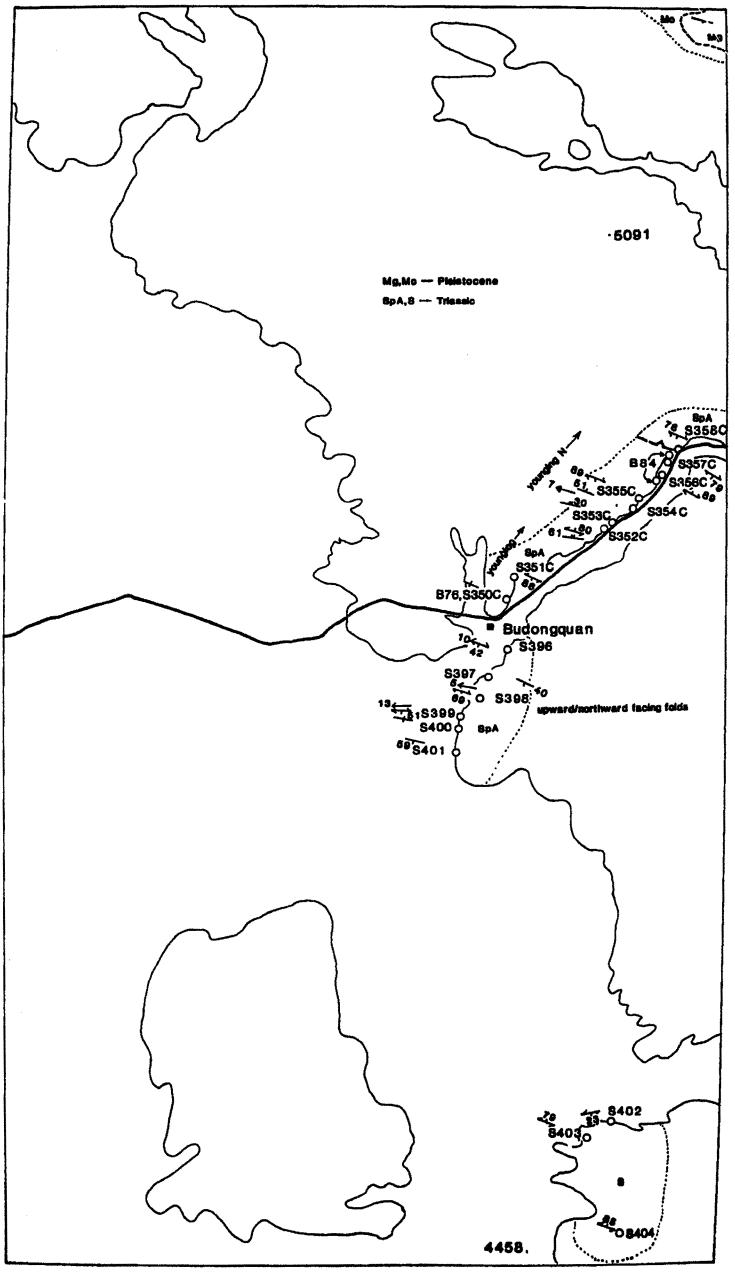
53E+56E

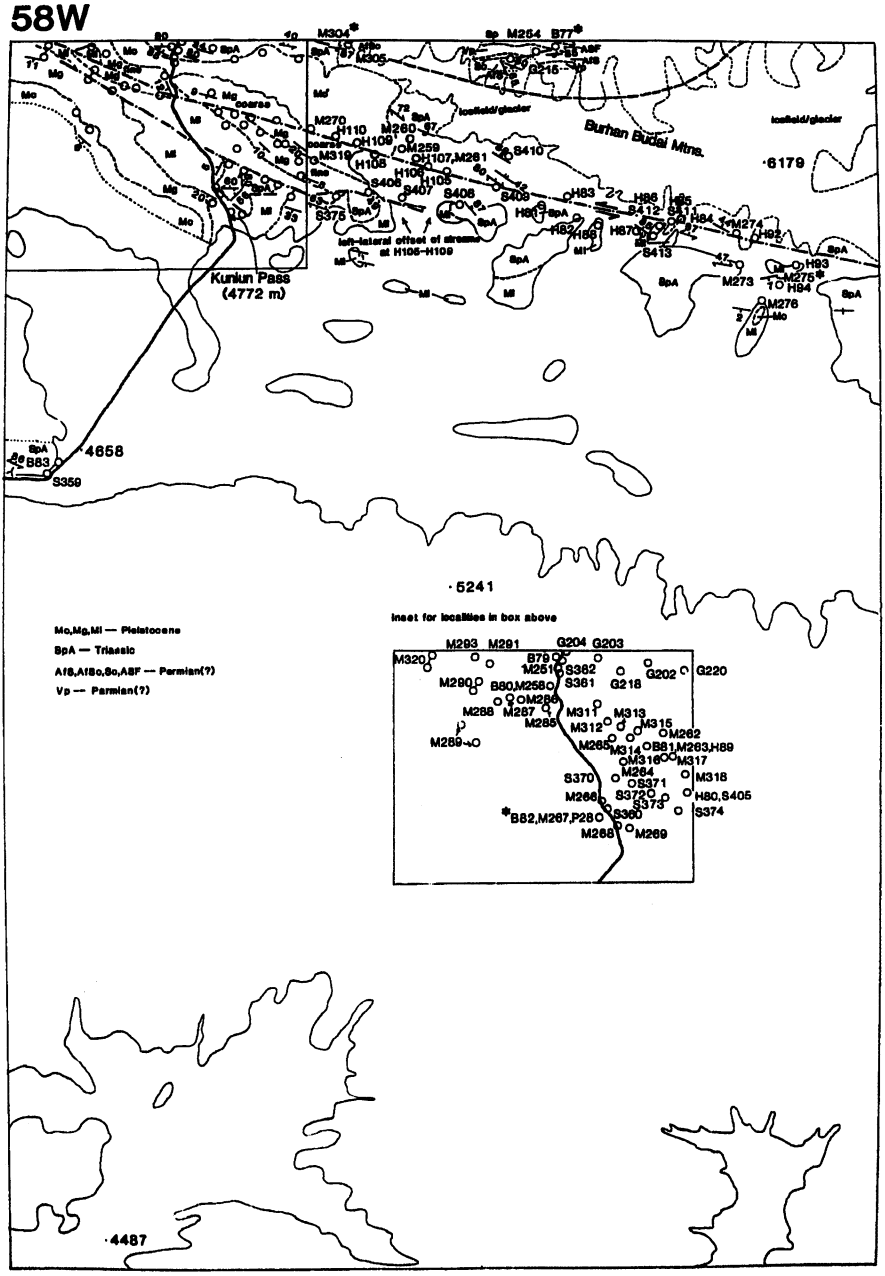


57W

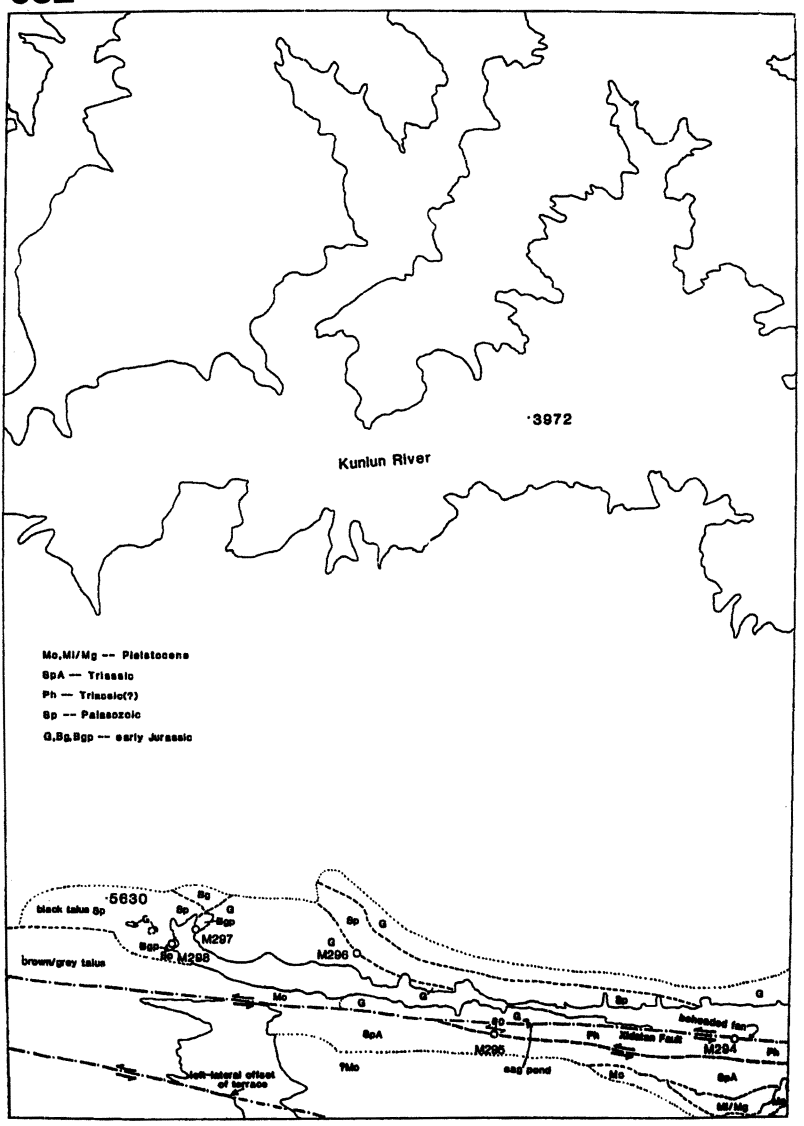


57E

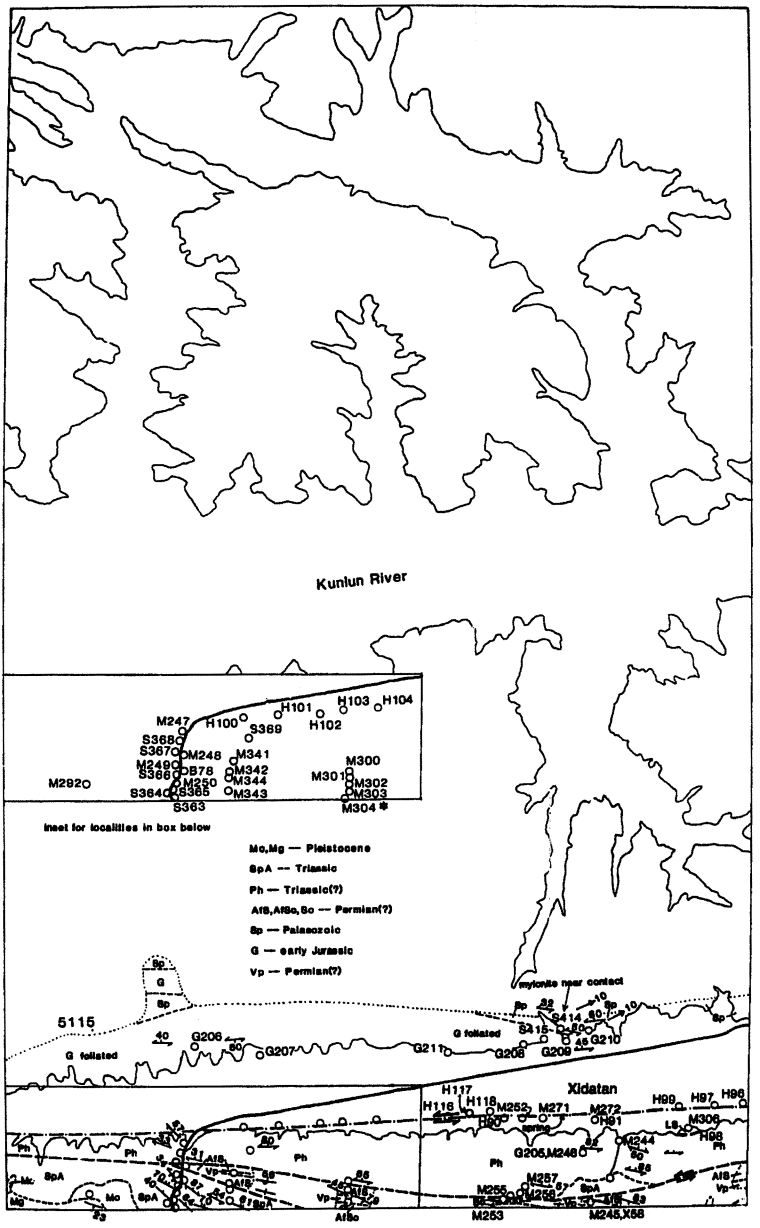

Mo
Mg
5091
Mg,Mo — Pleistocene
SpA,S — Triassic
SpA
S358C
B84
S357C
S356C
S355C
S353C
S354C
S352C
SpA
S351C
B76,S350C
Budongquan
S396
S397
S398
upward/northward facing folds
S399
S400
SpA
S401
S402
S403
S404
4458.


58W
Kunlun Pass
(4772 m)
Burhan Budai Mtns.
·6179
·4658
·5241
·4487
Mo,Mg,Ml — Pleistocene
SpA — Triassic
AfS,AfSo,So,ASF — Permian(?)
Vp — Permian(?)
Inset for localities in box above

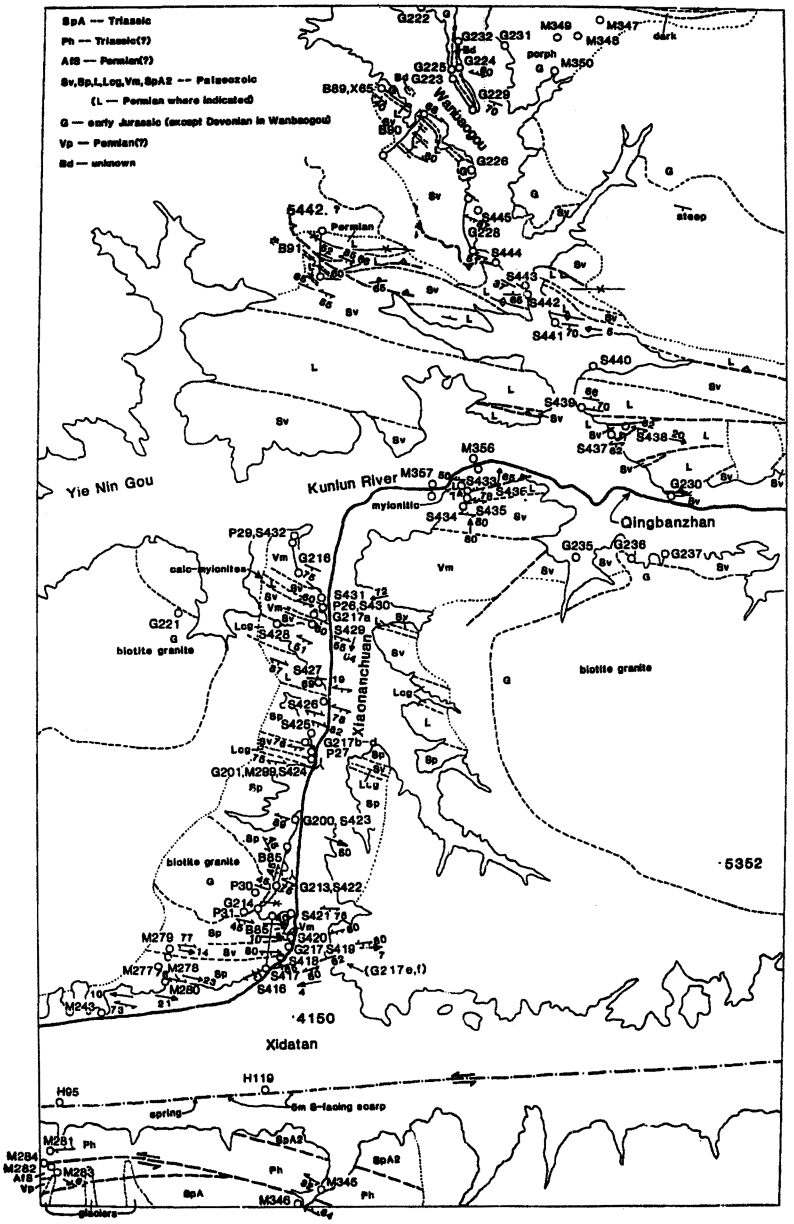
63E


·3972
Kunlun River
Mc,Ml/Mg -- Pleistocene
SpA — Triassic
Ph — Triassic(?)
Sp -- Palaeozoic
G,Bg,Bgp -- early Jurassic
·5630
black talus Sp
brown/grey talus
M297
M298
M296
M295
M294
Xidatan Fault
abandoned fan
sag pond
left-lateral offset of terrace

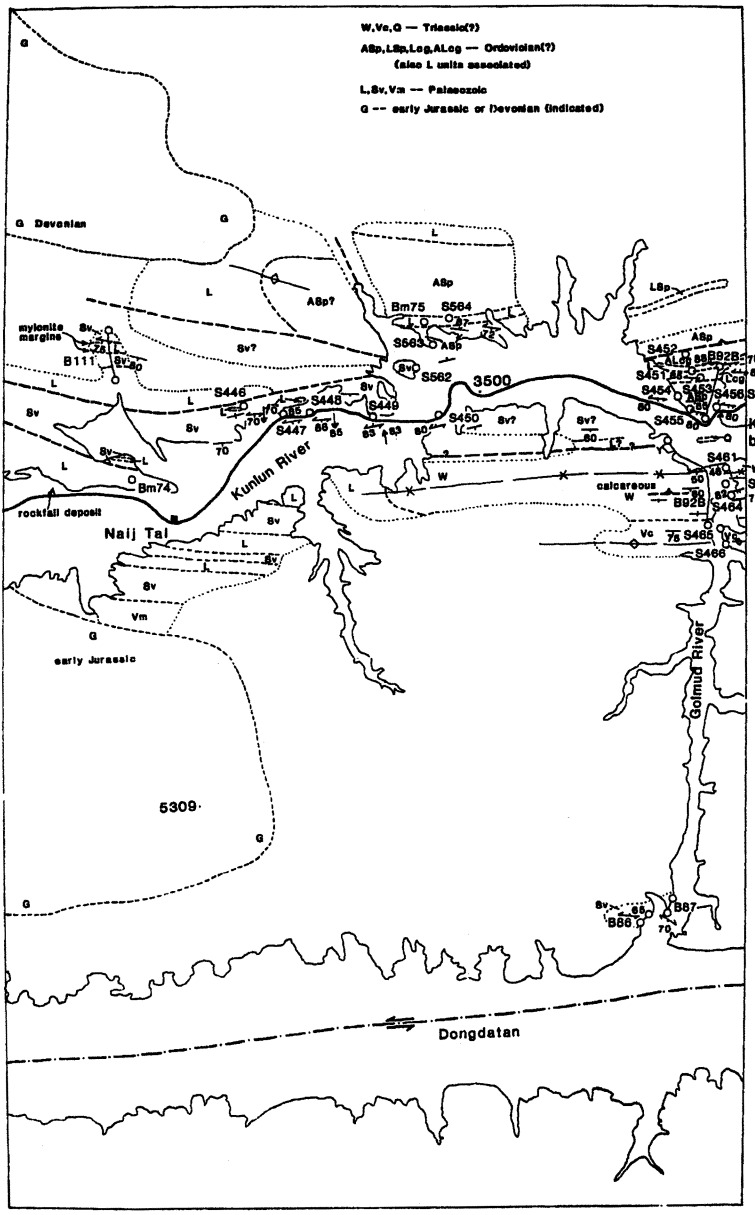
62W


Kunlun River
M247
H100
H101
H103
H104
S369
H102
S368
S367
M248
M341
M249
M342
S366
B78
M344
M250
M343
S364
S365
S363
M292
M300
M301
M302
M303
M304
Inset for localities in box below
Mc,Mg — Pleistocene
SpA — Triassic
Ph — Triassic(?)
AfS,AfSc,Sc — Permian(?)
Sp — Palaeozoic
G — early Jurassic
Vp — Permian(?)
mylonite near contact
G foliated
5115
G206
G207
G211
G208
G209
G210
S415
S414
H117
H118
M252
M271
M272
H99
H97
H96
M306
H98
Xidatan
G205,M246
M244
M257
M255
M253
M245,X58

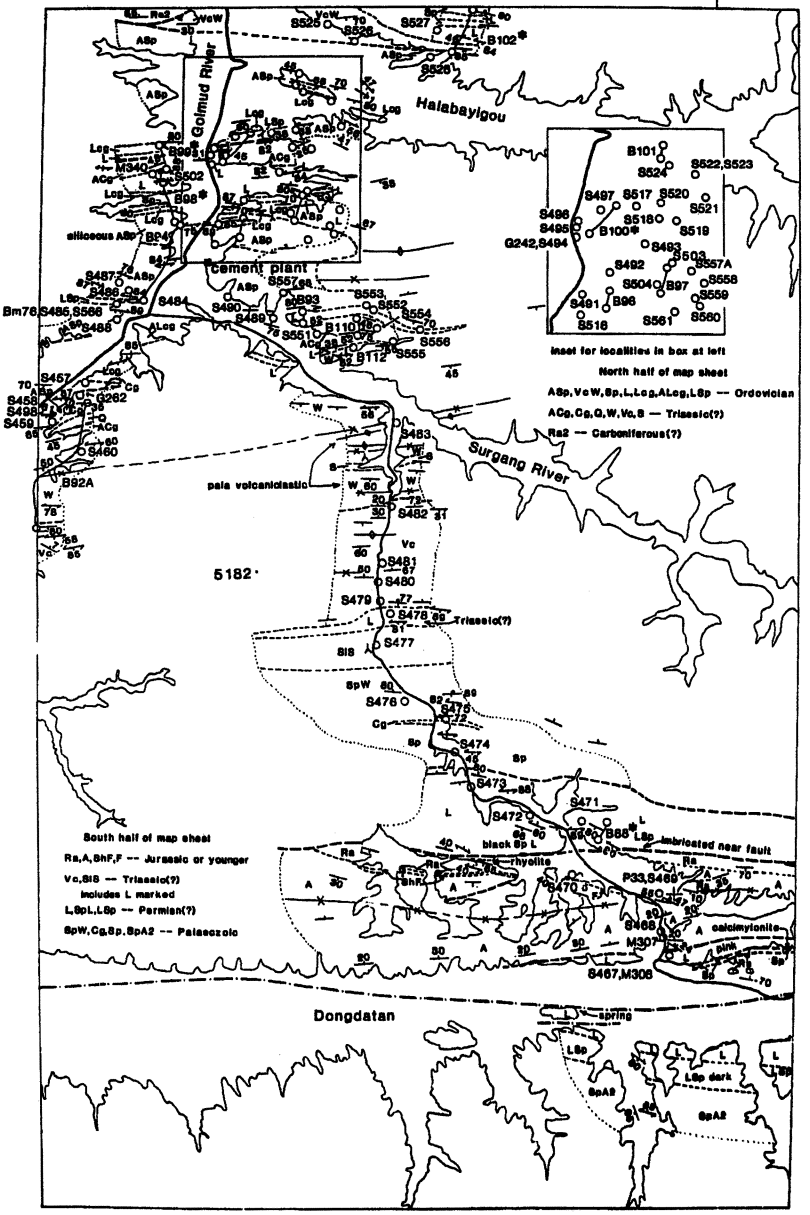
62E


SpA — Triassic
Ph — Triassic(?)
AfS — Permian(?)
Sv,Sp,L,Log,Vm,SpA2 — Palaeozoic
(L — Permian where indicated)
G — early Jurassic (except Devonian in Wanbaogou)
Vp — Permian(?)
Sd — unknown
Wanbaogou
Permian
steep
Yie Nin Gou
Kunlun River
mylonitic
Qingbanzhan
calc-mylonites
biotite granite
Xiaonanchuan
5352
4150
Xidatan
spring
6m S-facing scarp
glaciers

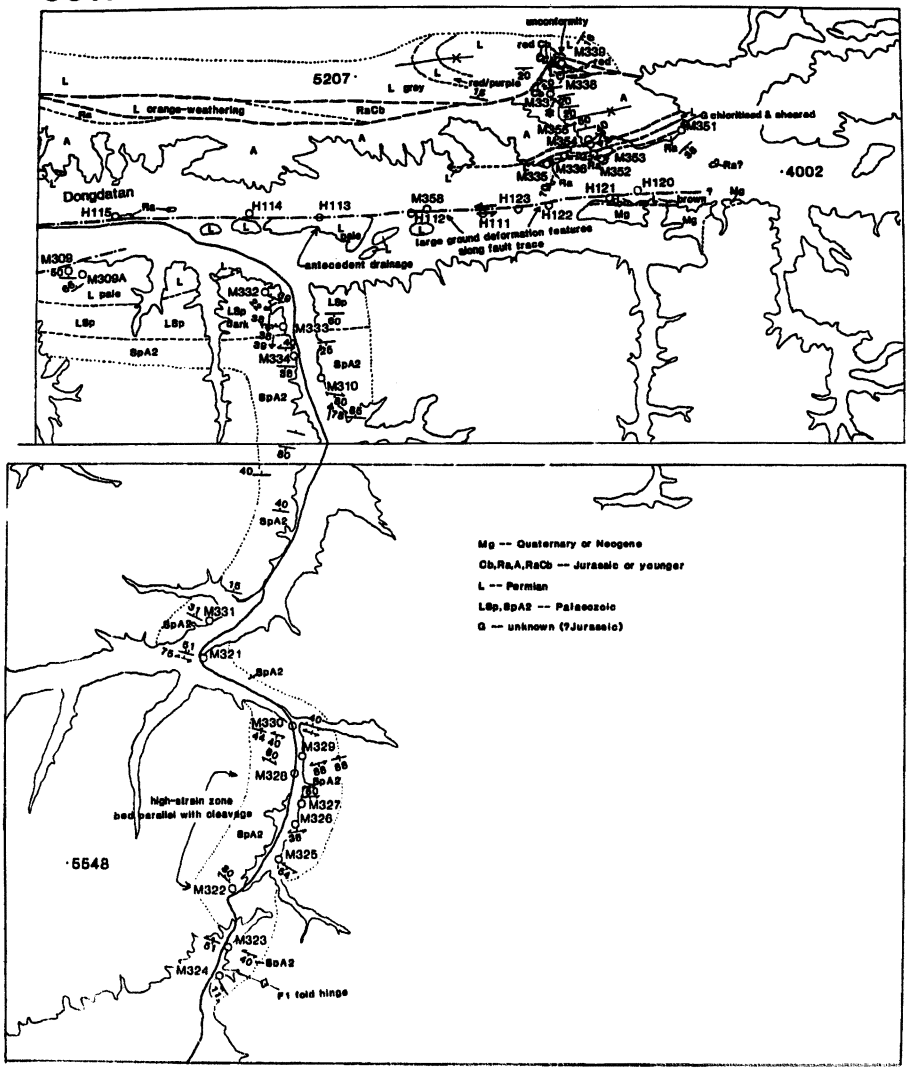
61W


W,Vc,Q — Triassic(?)
ASp,LSp,Leg,ALeg — Ordovician(?)
(also L units associated)
L,Sv,Vm — Palaeozoic
G — early Jurassic or Devonian (indicated)
G Devonian
mylonite margine
B111
Bm74
rockfall deposit
Naij Tal
Kunlun River
Bm75
S564
S563
S562
3500
S446
S447
S448
S449
S450
S452
S451
S454
S453
S456
S565
S455
Kunlun bridge
S461
S462
S464
S465
S466
calcareous
B928
B928
Golmud River
5309
B86
B87
early Jurassic
Dongdatan

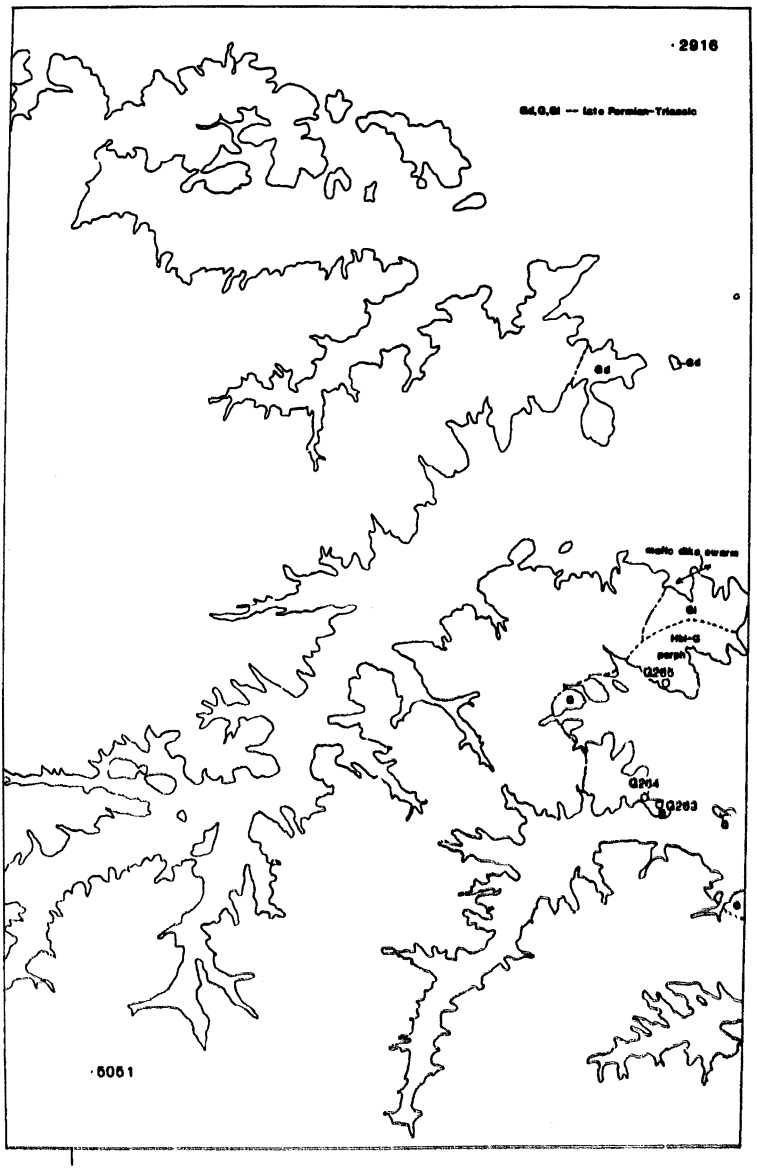
61E


Golmud River
Halabayigou
cement plant
Surgang River
Dongdatan
5182
Inset for localities in box at left
North half of map sheet
ASp,VcW,Sp,L,Lsp,ALsg,LSp — Ordovician
ACg,Cg,G,W,Vc,S — Triassic(?)
Ra2 — Carboniferous(?)
South half of map sheet
Ra,A,ShF,F — Jurassic or younger
Vc,SlS — Triassic(?)
Includes L marked
L,SpL,LSp — Permian(?)
SpW,Cg,Sp,SpA2 — Palaeozoic
pale volcaniclastic
Triassic(?)
rhyolite
black Sp L
imbricated near fault
calcimylonite
pink
spring
LSp dark
SpA2

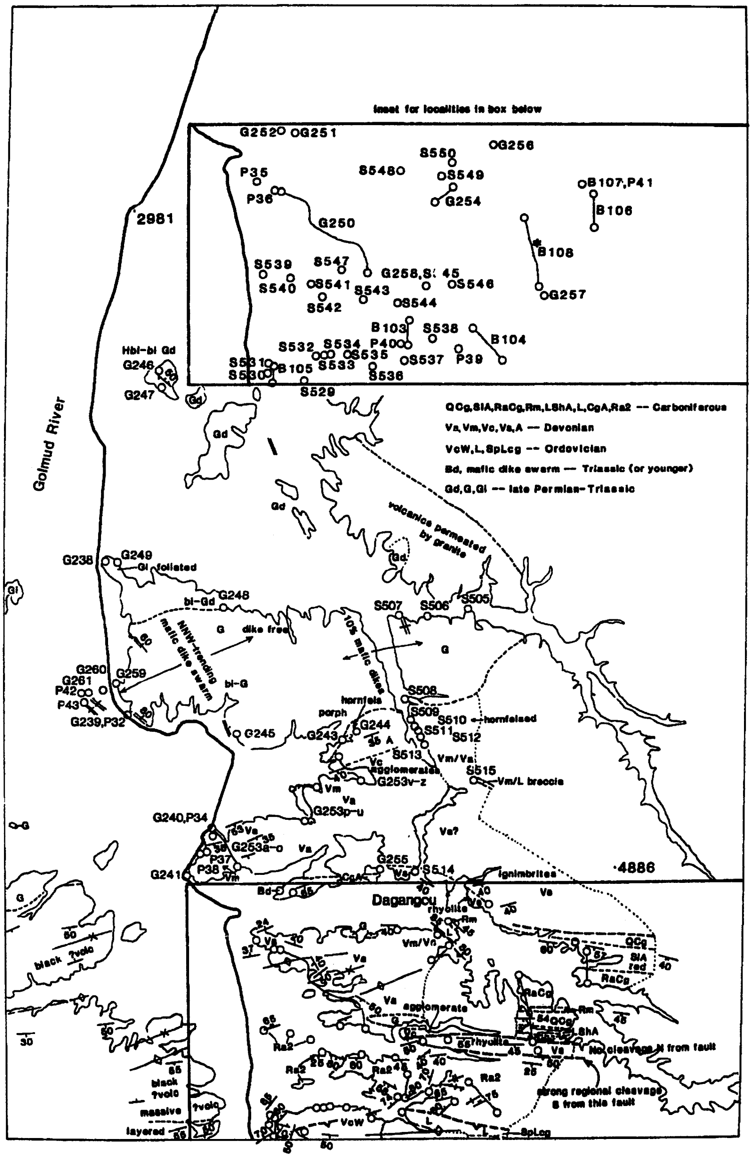
60W+HW


unconformity
5207
L orange-weathering
RaCb
L grey
red/purple
G chloritised & sheared
Dongdatan
4002
H115
H114
H113
M358
H123
H112
H111
H122
H121
H120
M309
M309A
L pale
M332
M333
M334
M310
SpA2
large ground deformation features along fault trace
antecedent drainage
Mg -- Quaternary or Neogene
Cb,Ra,A,RaCb -- Jurassic or younger
L -- Permian
LSp,SpA2 -- Palaeozoic
G -- unknown (?Jurassic)
M331
M321
M330
M329
M328
M327
M326
M325
M322
M323
M324
high-strain zone
bed parallel with cleavage
5548
F1 fold hinge

65W

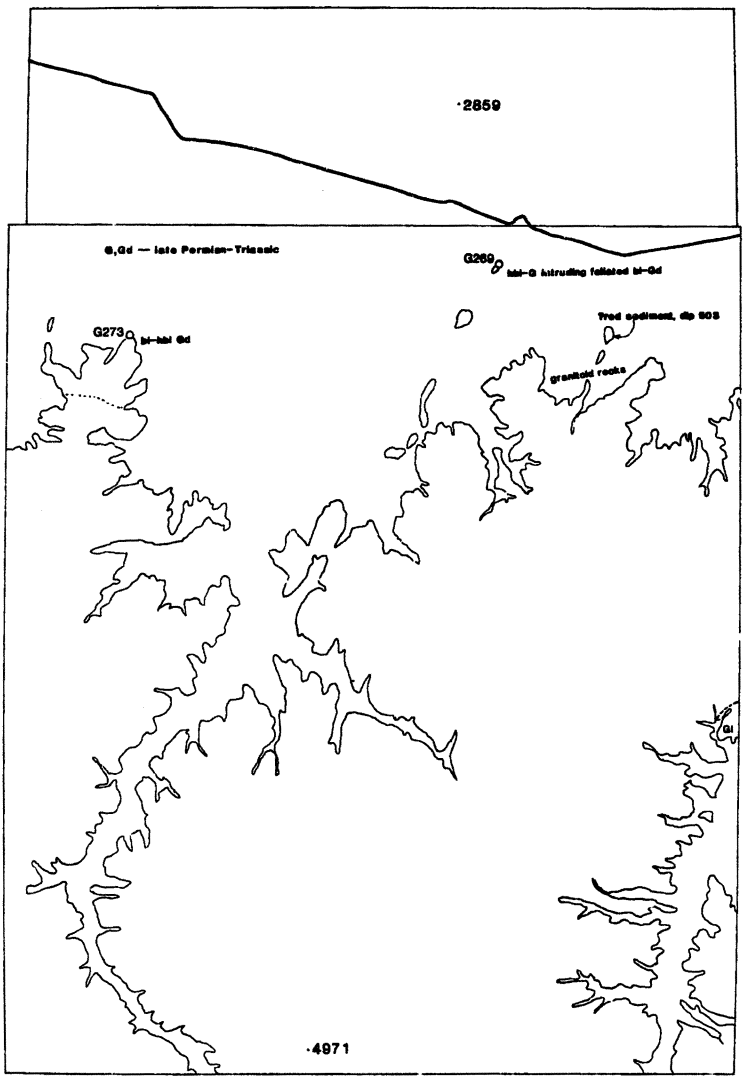

·2916
Gd,G,Gl — late Permian–Triassic
Gd
D-Gd
mafic dike swarm
Gl
Hbl-G
porph
Q265
Q264
Q263
·6051

C5E

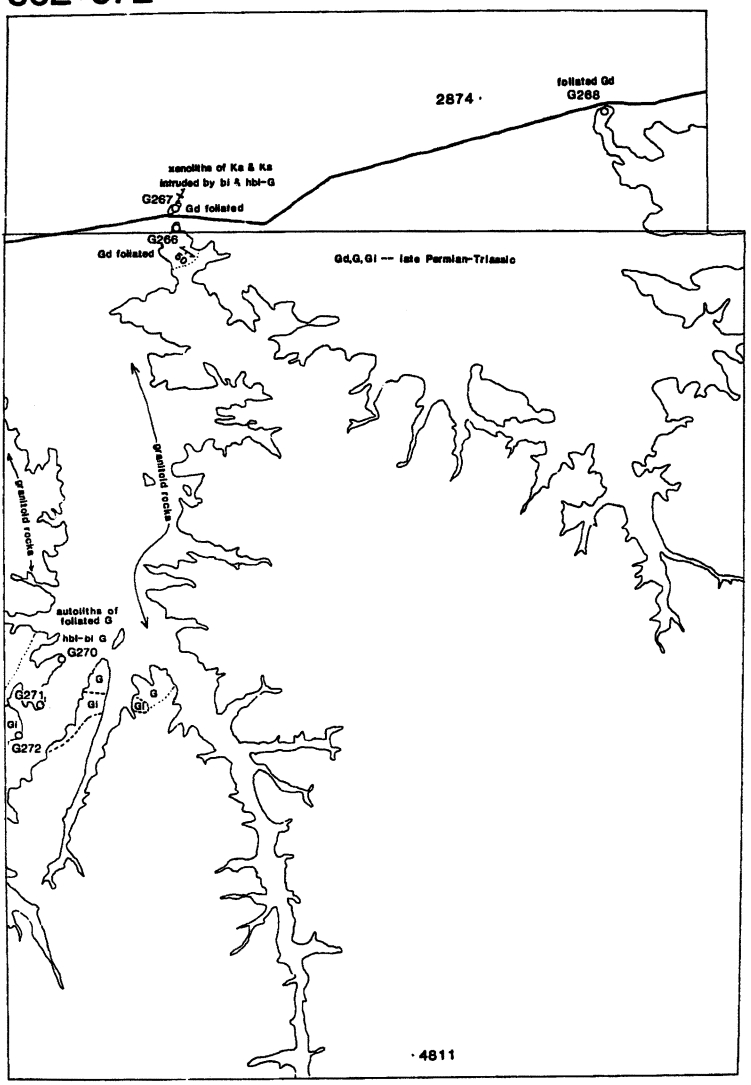


Inset for localities in box below
QCg,SlA,RaCg,Rm,LShA,L,CgA,Ra2 -- Carboniferous
Va,Vm,Vc,Vs,A -- Devonian
VcW,L,SpLcg -- Ordovician
Bd, mafic dike swarm -- Triassic (or younger)
Gd,G,Gl -- late Permian-Triassic
Golmud River
2981
4886
Dagangou
volcanics permeated by granite
NNW-trending mafic dike swarm
10% mafic dikes
dike free
hornfelsed
Vm/L breccia
agglomerate
ignimbrites
rhyolite
No cleavage N from fault
strong regional cleavage S from this fault
black ?volc
massive
layered

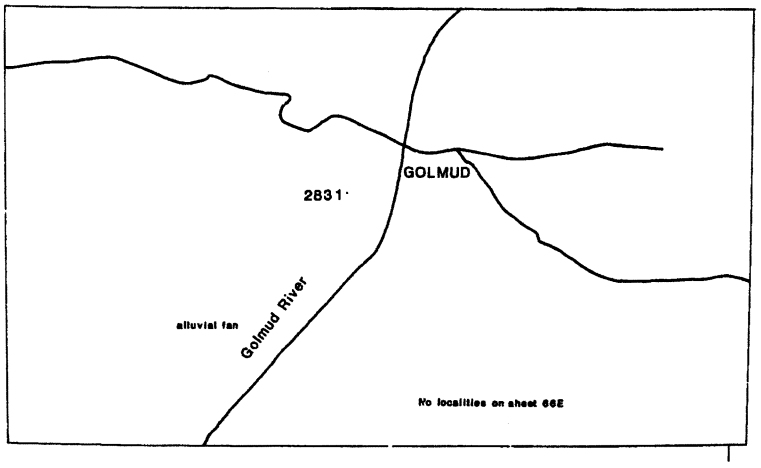
66W+67W


·2859
G,Gd — late Permian–Triassic
G269
bbt–G intruding foliated bt–Gd
G273
bt–bbt Gd
Trod sediment, dip 60S
granitoid rocks
Qa
·4971

66E+67E


2874
foliated Gd
G268
xenoliths of Ks & Ks
intruded by bi & hbl-G
G267
Gd foliated
G266
Gd foliated
Gl
Gd,G,Gl — late Permian-Triassic
granitoid rocks
granitoid rocks
autoliths of
foliated G
hbl-bi G
G270
G271
G
Gl
G
Gl
G
Gl
G272
4811

68E


GOLMUD
2831
alluvial fan
Golmud River
No localities on sheet 68E

B-localities
(Smith, Leeder)

Locality	Map Sheet	Locality	Map Sheet	Locality	Map Sheet	Locality	Map Sheet
B1	8C	B28	GW	B56	39W	B84	57E
B2	8C	B29	GW	B57	37E	B85	62E
B3	8C	B30	GW	B58	37E	B86	61W
B4	8C	B31	GW	B59	44E	B87	61W
B5	8C	B32	20E	B60	44E	B88	61E
B6	3E	B33	20E	B61	44E	B89	62E
B7	3E	B34	EE	B62	44E	B90	62E
B8	3E	B35	20E	B63	44E	B91	62E
B9	3W	B36	20E	B64	47W	B92	61W
B10	3W	B37	20E	B65	47W	B92A	61E
B10A	3W	B38	23E	B66	47W	B93	61E
B11	4E	B39	23E	B67	45E	B94	61E
B12	4E	B40	30E	B68	47E	B95	dne
B13	4E	B41	30E	B69	47E	B96	61E
B14	4W	B42	33E	B70	47W	B97	61E
B15	4W	B43	dne	B71	47W	B98	61E
B16	4W	B44	dne	B72	47W	B99	61E
B17	10W	B45	33E	B73	47W	B100	61E
B18	10W	B46	33E	B74	50E	B101	61E
B19	10W	B47	33E	B75	50E	B102	61E
B20	10W	B48	28E	B76	57E	B103	65E
B21	10W	B49	33E	B77	58W	B104	65E
B22	10W	B50	33E	B78	62W	B105	65E
B23	10E	B51	33E	B79	58W	B106	65E
B24	FW	B52	33E	B80	58W	B107	65E
B25	FE	B53	33E	B81	58W	B108	65E
B26	FW	B54	33E	B82	58W	B109	dne
B27	FW	B55	39W	B83	58W	B110	61E
						B111	61W
BM 74	61W					B112	61E
BM 75	61W						
BM 76	61E						

dne = does not exist

T-localities
(Gansser)

Locality	Map Sheet	Locality	Map Sheet
T1-6	off maps to S & SW of Quxu	T26 (M47)	10W
T7	3E	T27	np
T8	3E	T28	np
T9	3W, 8C	T29	17W
T10	3W	T30	JE
T11	3W	T31	GW
T12	3W	T32	GW
T13	3W	T33	GE
T14	3W	T34	GE
T15	3W	T35	19W
T16	7W	T36	19W
T17	7W	T37	23E
T18	7W	T38	23E
T19	7W	T39	np
T20	np	T40	np
T21	np	T41	np
T22	np	T42	np
T23	np	T43 (S222)	28W
T24 (M50)	12W	T44 and beyond	np
T25 (S93)	10W		

np = not provided

G-localities
(Pearce, Harris)

Locality	Map Sheet	Locality	Map Sheet	Locality	Map Sheet	Locality	Map Sheet
G1	near	G63	26W	G125	28W	G222	62E
G2	Zangbo	G64	26W	G126	36E	G223	62E
G3	bridge	G65	19E	G127	28W	G224	62E
G4	2E	G66	EW	G128	29E	G225	62E
G5	2E	G67	EW	G129	28W	G226	62E
G6	2E	G68	21W	G130	28W	G227	dne
G7	2E	G69	21W	G131	28W	G228	62E
G8	2E	G70	21W	G132	28W	G229	62E
G9	2E	G71	21W	G133	28W	G230	62E
G10	2E	G72	21W	G134	28W	G231	62E
G11	1W	G73	dne	G135	37E	G232	62E
G12	1W	G74	dne	G136	39W	G233	dne
G13	1W	G75	dne	G137	dne	G234	dne
G14	1W	G76	dne	G138	40E	G235	62E
G15	1E	G77	dne	G139	42E	G236	62E
G16	1E	G78	dne	G140	53W	G237	62E
G17	1E	G79	dne	G141	50E	G238	65E
G18	1E	G80	dne	G142	53W	G239	65E
G19	1E	G81	20E	G143	53W	G240	65E
G20	7W	G82	20E	G144	dne	G241	65E
G21	7W	G83	20E	G145	dne	G242	61E
G22	7W	G84	20E	G146	dne	G243	65E
G23	7W	G85	23E	G147	dne	G244	65E
G24	7W	G86	23E	G148	dne	G245	65E
G25	7W	G87	23E	G149	dne	G246	65E
G26	7W	G88	23E	G150	44E	G247	65E
G27	7W	G89	23E	G151	44E	G248	65E
G28	7W	G90	23E	G152	44E	G249	65E
G29	4W	G91	20E	G153	47W	G250	65E
G30	4W	G92	20E	G154	45E	G251	65E
G31	4E	G93	20W	G155	dne	G252	65E
G32	4W	G94	20W	G156	dne	G253	65E
G33	4E	G95	20W	G157	dne	G254	65E
G34	4E	G96	20W	G158	dne	G255	65E
G35	4E	G97	20W	G159	dne	G256	65E
G36	4E	G98	20E	G160	dne	G257	65E
G37	5W	G99	20E	G161	dne	G258	65E
G38	5W	G100	20E	G162	dne	G259	65E
G39	5W	G101	20E	to	dne	G260	65E
G40	6E	G102	20E	G199	dne	G261	65E
G41	7W	G103	30E	G200	62E	G262	61E
G42	7W	G104	30E	G201	62E	G263	65W
G43	11E	G105	30W	G202	58W	G264	65W
G44	11E	G106	23E	G203	58W	G265	65W
G45	7W	G107	23E	G204	58W	G266	66E
G46	7W	G108	23E	G205	62W	G267	67E
G47	dne	G109	29W	G206	62W	G268	67E
G48	dne	G110	dne	G207	62W	G269	66W
G49	dne	G111	30W	G208	62W	G270	66E
G50	11E	G112	30W	G209	62W	G271	66E
G51	11E	G113	30W	G210	62W	G272	66E
G52	11E	G114	30W	G211	62W	G273	66W
G53	13W	G115	30W	G212	dne		
G54	18E	G116	30W	G213	62E		
G55	17W	G117	25W	G214	62E		
G56	27C	G118	25W	G215	58W		
G57	27C	G119	25W	G216	62E		
G58	27C	G120	28W	G217	62E		
G59	27C	G121	28W	G218	58W		
G60	27C	G122	28W	G219	dne		
G61	26W	G123	28W	G220	58W		
G62	26W	G124	28W	G221	62E		

dne = does not exist

N-localities
(Kidd, Molnar)

Locality	Map Sheet	Locality	Map Sheet	Locality	Map Sheet	Locality	Map Sheet
N1	20W	N14	20W	N27	GE	N40	29E
N2	20W	N15	dne	N28	GE+	N41	29E
N3	20W	N16	dne	N29	GE	N42	29E
N4	20W	N17	dne	N30	GE	N43	29E
N5	20W	N18	dne	N31	29E	N43A	29E
N6	20W	N19	dne	N32	29E	N44	29E
N7	20W	N20	22W	N33	29E	N45	29E
N8	20W	N21	GE+	N34	29E	N46	29E
N9	20W	N22	GE+	N35	29E	N46A	29E
N10	20W	N23	GE+	N36	29E	N47	29E
N11	20W	N24	GE+	N37	29E	N48	29E
N12	20W	N25	GE+	N38	29E	N49	28W
N13	20W	N26	GE+	N39	29E		

dne = does not exist

P-localities
(Lin, Watts)

Locality	Map Sheet	Locality	Map Sheet	Locality	Map Sheet	Locality	Map Sheet
P1	3W	P12	EE	P23	47W	P34	65E
P2	3W	P13	23E	P24	47E	P35	65E
P3	4W	P14	33E	P25	45E	P36	65E
P4	4E	P15	33E	P26	62E	P37	65E
P5	10W	P16	29E	P27	62E	P38	65E
P6	10W	P17	29E	P28	58W	P39	65E
P7	17W	P18	29E	P29	62E	P40	65E
P8	17W	P19	39W	P30	62E	P41	65E
P9	23E	P20	39W	P31	62E	P42	65E
P10	23E	P21	44E	P32	65E	P43	65E
P11	20E	P22	44E	P33	61E		

H-localities
(Holnar)

Locality	Map Sheet	Locality	Map Sheet	Locality	Map Sheet	Locality	Map Sheet
H1	29E	H32	47E	H63	47E	H94 (M275)	58W
H2	29E	H33	47E	H64	47E	H95	62E
H3 (N31)	29E	H34	47E	H65	47E	H96	62W
H4 (N32)	29E	H35	47E	H66	47E	H97	62W
H5	29E	H36	47E	H67	47E	H98 (M306)	62W
H6	29E	H37	47E	H68	47E	H99	62W
H7	29E	H38	47E	H69	47E	H100	62W
H8	29E	H39	47E	H70	47E	H101	62W
H9	29E	H40	47E	H71	47E	H102	62W
H10 (N42)	29E	H41	47E	H72	47W	H103	62W
H11	29E	H42	47W	H73	53W	H104	62W
H12	29E	H43	47W	H74	53W	H105	58W
H13	29E	H44	47W	H75	53W	H106	58W
H14	29E	H45	47W	H76	53W	H107 (M261)	58W
H15	29E	H46	47W	H77	53W	H108	58W
H16	29E	H47	47W	H78	53W	H109	58W
H17	29E	H48	47W	H79	53W	H110	58W
H18	29E	H49	47W	H80 (S405)	58W	H111	60W
H19 (N43)	29E	H50	47W	H81	58W	H112	60W
H20	47E	H51	47W	H82	58W	H113	60W
H21	47E	H52	47W	H83	58W	H114	60W
H22	47E	H53	47W	H84	58W	H115	60W
H23	47E	H54	47E	H85 (S411)	58W	H116	52W
H24	47E	H55	47E	H86 (S412)	58W	H117	62W
H25	47E	H56	47E	H87	58W	H118	62W
H26	47E	H57	47E	H88	58W	H119	62E
H27	47E	H58	50E	H89 (M203)	58W	H120	60W
H28	47E	H59	50E	H90	62W	H121	60W
H29	47E	H60	50E	H91 (M272)	62W	H122	60W
H30	47E	H61	50E	H92	58W	H123	60W
H31	47E	H62	47E	H93	58W		

H201	CW
H202	CW
H203	CE
H204	CE
H205	CE

M-localities
(Kidd, Dewey)

Locality	Map Sheet	Locality	Map Sheet	Locality	Map Sheet	Locality	Map Sheet
M1	1W	M96	17W	M191	47W	M284	62E
M2	1W	M97	17W	M192	47W	M285	58W
M3	S of Zangbo	M98	17W	M193	47W	M286	58W
M4	to Kamba-la	M99	17W	M194	47W	M287	58W
M5	"	M100	17W	M195	47W	M288	58W
M6	"	M101	17W	M196	47W	M289	58W
M7	"	M102	17W	M197	47E	M290	58W
M8	1W	M103	17W	M198	47E	M291	58W
M9	1W	M104	17W	M199	47E	M292	62W
M10	1W	M105	17W	M200	47W	M293	58W
M11	1E	M106	17W	M201	47W	M294	63E
M12	1W	M107	17E	M202	47W	M295	63E
M13	1E	M108	26E	M203	47W	M296	63E
M14	1E	M109	17W	M204	47W	M297	63E
M15	1E	M110	19E	M205	47W	M298	63E
M16	1E	M111	20E	M206	45W	M299	62E
M17	AW	M112	20E	M207	45W	M300	62W
M18	AW	M113	20E	M207A	45W	M301	62W
M19	AW	M114	20E	M208	47W	M302	62W
M20	AW	M115	20E	M208A	47W	M303	62W
M21	AW	M116	20E	M209	47W	M304	62W & 58W
M22	AW	M117	20E	M210	47W	M305	62W
M23	AW	M118	20E	M211	47W	M306	62W
M24	AW	M119	30E	M212	47W	M307	61E
M25	AW	M120	20E	M213	47W	M308	61E
M24	AW	M121	20E	M214	47W	M309	60W
M27	3E	M122	20E	M215	47W	M309A	60W
M28	3E	M123	20E	M216	47W	M310	60W
M29	3E	M124	20E	M217	44E	M311	58W
M30	3E	M125	20E	M218	44E	M312	58W
M31	3E	M126	20E	M219	47W	M313	58W
M32	1E	M127	23E	M220	47W	M314	58W
M33	1E	M128	23E	M221	47W	M315	58W
M34	3E	M129	23E	M222	47W	M316	58W
M35	3E	M130	23E	M223	47W	M317	58W
M36	3E	M131	23E	M224	47W	M318	58W
M37	3E	M132	23E	M225	47W	M319	58W
M38	3E	M133	23E	M226	47W	M320	58W
M39	3E	M134	20E	M227	47W	M321	60W
M40	3E	M135	20E	M228	47W	M322	60W
M41	3E	M136	20E	M229	47W	M323	60W
M42	3E	M137	20E	M230	47E	M324	60W
M43	5W	M138	20E	M231	47E	M325	60W
M44	10W	M139	20E	M232	47E	M326	60W
M45	10W	M140	20E	M233	47E	M327	60W
M46	10W	M141	20E	M234	47E	M328	60W
M47	10W	M142	20E	M235	47E	M329	60W
M48	12W	M143	20E	M236	47E	M330	60W
M49	12W	M144	20E	M237	47E	M331	60W
M50	12W	M145	20E	M238	47E	M332	60W
M51	12W	M146	20E	M239	47E	M333	60W
M52	12W	M147	20E	M240	47E	M334	60W
M53	12W	M148	20E	M241	47E	M335	60W
M54	12W	M149	20E	M242	47E	M336	60W
M55	12W	M150	20E	M243	62E	M337	60W
M56	10W	M151	20E	M244	62W	M338	60W
M57	10W	M152	20E	M245	62W	M339	60W
M58	10W	M153	20E	M246	62W	M340	61E
M59	10W	M154	20E	M247	62W	M341	62W
M60	10W	M155	20E	M248	62W	M342	62W
M61	10W	M156	20E	M249	62W	M343	62W
M62	10W	M157	20E	M250	62W	M344	62W
M63	10W	M158	20E	M251	58W	M345	62E
M64	11E	M159	20E	M252	62W	M346	62E
M65	11E	M160	20E	M253	62W	M347	62E
M66	11E	M161	20E	M254	58W	M348	62E
M67	11E	M162	20E	M255	62W	M349	62E
M68	10W	M163	20E	M256	62W	M350	62E
M69	10E	M164	20E	M257	62W	M351	60W
M70	10E	M165	20E	M258	58W	M352	60W
M71	13W	M166	20E	M259	58W	M353	60W
M72	15C	M167	20E	M260	58W	M354	60W
M73	15C	M168	20E	M261	58W	M355	60W
M74	15C	M169	28W	M262	58W	M356	62E
M75	15C	M170	28W	M263	58W	M357	62E
M76	17W	M171	28W	M264	58W	M358	60W
M77	17W	M172	28W	M265	58W	M359	dne
M78	26W	M173	28W	M266	58W	M360	3E
M79	26W	M174	28W	M267	58W	M361	3E
M80	26W	M175	28W	M268	58W	M362	1E
M81	26W	M176	36E	M269	58W	M363	3W
M82	26W	M177	40E	M270	58W	M364	3W
M83	26W	M178	37E	M271	62W	M365	3W
M84	26W	M179	37E	M272	62W	M366	3W
M85	26W	M180	40E	M273	58W	M367	3W
M86	26W	M181	40E	M274	58W	M368	3W
M87	26W	M182	39W	M275	58W	M369	1W
M88	26W	M183	40E	M276	58W	M370	1W
M89	26W	M184	36E	M277	62E	M371	1W
M90	26W	M185	37E	M278	62E	M372	1W
M91	17W	M186	44E	M279	62E	M373	1W
M92	17W	M187	44E	M280	62E		
M93	17W	M188	44E	M281	62E		
M94	17W	M189	45W	M282	62E		
M95	17W	M190	47W	M283	62E		

dne = does not exist

S-localities
(Shackleton, Coward)

Locality	Map Sheet	Locality	Map Sheet	Locality	Map Sheet	Locality	Map Sheet
S1	1W	S87	12W	S173	20E	S258	39W
S2	1W	S88	12W	S174	20E	S259	39W
S3	off maps	S89	12W	S175	20E	S260	39W
S4	Kamba-la	S90	10W	S176	20E	S261	39W
S5	to Zangbo	S91	10W	S177	20E	S262	39W
S6	"	S92	10W	S178	20E	S263	39W
S7	"	S93	10W	S179	20E	S264	39W
S8	"	S94	10W	S180	23E	S265	39W
S9	"	S95	10W	S181	23E	S266	39W
S10	"	S96	10W	S182	23E	S267	39W
S11	"	S97	10W	S183	23E	S268	39W
S12	"	S98	10W	S184	23E	S269	39W
S13	"	S99	10W	S185	23E	S270	44E
S14	"	S100	10W	S186	23E	S271	44E
S15	2E	S101	10W	S187	23E	S272	44E
S16	2E	S102	10E	S188	23E	S273	44E
S17	2E	S103	13W	S189	23E	S274	44E
S18	2E	S104	13W	S190	23E	S275	44E
S19	2E	S105	15C	S191	23E	S276	44E
S20	2E	S106	15C	S192	23E	S277	44E
S21	2E	S107	15C	S193	23E	S278	44E
S22	2E	S108	17W	S194	23E	S279	39W
S23	2E	S109	17W	S195	23E	S280	44E
S24	2E	S110	18E	S196	23E	S281	50E
S25	2E	S111	18W	S197	23E	S282	47W
S26	2E	S112	18E	S198	30E	S283	47W
S27	2E	S113	18E	S199	30E	S284	47W
S28	2E	S114	25C	S200	30E	S285	47W
S29	2E	S115	25C	S201	23E	S286	47W
S30	3E	S116	25C	S202	dne	S287	50E
S31	3E	S117	25C	S203	25C	S288	50E
S32	3E	S118	25C	S204	25C	S289	50E
S33	3W	S119	25C	S205	25C	S290	50E
S34	3W	S120	18E	S206	25C	S291	50E
S35	3E	S121	18E	S207	25C	S292	47E
S36	3E	S122	18E	S208	25C	S293	47E
S37	8C	S123	18E	S209	25C	S294	47E
S38	3E	S124	18E	S210	25C	S295	47E
S39	3E	S125	18E	S211	25C	S296	47E
S40	3E	S126	18E	S212	25C	S297	47E
S41	3E	S127	18E	S213	28W	S298	47E
S42	3E	S128	19E	S214	28W	S299	50E
S43	3E	S129	19W	S215	28W	S300	50E
S44	3W	S130	20E	S216	dne	S301	50E
S45	dne	S131	20E	S217	28E	S302	50E
S46	3W	S132	EE	S218	28E	S303	50E
S47	4W	S133	EE	S219	33E	S304	50E
S48	4W	S134	EE	S220	28W	S305	50E
S49	4W	S135	EE	S221	28W	S306	50E
S50	4W	S136	EE	S222	28W	S307	50E
S51	4W	S137	EE	S223	28W	S308	50E
S52	4W	S138	EE	S224	28W	S308A	53W
S53	4W	S139	EE	S225	28W	S309	53W
S54	4W	S140	CE	S226	28W	S310	53W
S55	4W	S141	CE	S227	28W	S311	53W
S56	4W	S142	CW	S228	28W	S312	53W
S57	4W	S143	CW	S229	28W	S313	53W
S58	4W	S144	CW	S230	28W	S314	53W
S59	4W	S145	BW	S231	33W	S315	53W
S60	4W	S146	BW	S232	33E	S316	53W
S61	4W	S147	BW	S233	33E	S317	53W
S62	4W	S148	CW	S234	33E	S318	53W
S63	4W	S149	CW	S235	33E	S319	50E
S64	4W	S150	CW	S236	33E	S320	47E
S65	5W	S151	CW	S237	33E	S321	47W
S66	5W	S152	CW	S238	33E	S322	50W
S67	5W	S153	CW	S239	33E	S323	50W
S68	5W	S154	CE	S240	33E	S324	50W
S69	6E	S155	CE	S241	33E	S325	49E
S70	6E	S156	DW	S242	33E	S326	49E
S71	6E	S157	EW	S243	33E	S327	49E
S72	7W	S158	EW	S243A	33E	S328	49E
S73	10W	S159	EW	S244	28W	S329	49E
S74	10W	S160	EW	S245	28W	S330	49E
S75	10W	S161	20E	S246	28W	S331	49E
S76	10W	S162	20E	S247	33E	S332	dne
S77	10E	S163	19W	S248	33E	S333	dne
S78	10E	S164	19W	S249	37E	S334	49E
S79	10E	S165	19W	S250	40E	S335	49E
S80	10E	S166	19W	S251	40E	S336	49E
S81	10E	S167	19W	S252	40E	S337	49E
S82	10E	S168	19W	S253	40E	S337C	53W
S83	10W	S169	19W	S254	40E	S338	49E
S84	12W	S170	20E	S255	40E	S339	50W
S85	12W	S171	20E	S256	39W	S340	50W
S86	12W	S172	20E	S257	39W	S341	50W

S342	50W	S410	58W	S470	61E	S530	65E
S343	50W	S411	58W	S471	61E	S531	65E
S344	50W	S412	58W	S472	61E	S532	65E
S345	50W	S413	58W	S473	61E	S533	65E
S346	50W	S414	62W	S474	61E	S534	65E
S347	50W	S415	62W	S475	61E	S535	65E
S348	50W	S416	62E	S476	61E	S536	65E
S349	50W	S417	62E	S477	61E	S537	65E
S350	50W	S418	62E	S478	61E	S538	65E
S350C	57E	S419	62E	S479	61E	S539	65E
S351	50W	S420	62E	S480	61E	S540	65E
S351C	57E	S421	62E	S481	61E	S541	65E
S352	50W	S422	62E	S482	61E	S542	65E
S352C	57E	S423	62E	S483	61E	S543	65E
S353	50W	S424	62E	S484	61E	S544	65E
S353C	57E	S425	62E	S485	61E	S545	65E
S354	47W	S426	62E	S486	61E	S546	65E
S354C	57E	S427	62E	S487	61E	S547	65E
S355	47W	S428	62E	S488	61E	S548	65E
S355C	57E	S429	62E	S489	61E	S549	65E
S356	47W	S430	62E	S490	61E	S550	65E
S356C	57E	S431	62E	S491	61E	S551	61E
S357	47W	S432	62E	S492	61E	S552	61E
S357C	57E	S433	62E	S493	61E	S553	61E
S358	53W	S434	62E	S494	61E	S554	61E
S358C	57E	S435	62E	S495	61E	S555	61E
S359	58W	S436	62E	S496	61E	S556	61E
S360	58W	S437	62E	S497	61E	S557	61E
S361	58W	S438	62E	S498	61E	S558	61E
S362	58W	S439	62E	S499	dne	S559	61E
S363	62W	S440	62E	S500	dne	S560	61E
S364	62W	S441	62E	S501	dne	S561	61E
S365	62W	S442	62E	S502	61E	S562	61W
S366	62W	S443	62E	S503	61E	S563	61W
S367	62W	S444	62E	S504	61E	S564	61W
S368	62W	S445	62E	S505	65E	S565	61W
S369	62W	S446	61W	S506	65E	S566	61E
S370	58W	S447	61W	S507	65E	S567	dne
S371	58W	S448	61W	S508	65E	to	dne
S372	58W	S449	61W	S509	65E	S600	dne
S373	58W	S450	61W	S510	65E	S601	3W
S374	58W	S451	61W	S511	65E	S602	3W
S375	58W	S452	61W	S512	65E	S603	3W
S376	dne	S453	61W	S513	65E	S604	3W
to	dne	S454	61W	S514	65E	S605	3W
S395	dne	S455	61W	S515	65E	S606	3W
S396	57E	S456	61W	S516	61E	S607	3W
S397	57E	S457	61E	S517	61E	S608	dne
S398	57E	S458	61E	S518	61E	S609	dne
S399	57E	S459	61E	S519	61E	S610	dne
S400	57E	S460	61E	S520	61E	S611	3W
S401	57E	S461	61W	S521	61E	S612	3W
S402	57E	S462	61W	S522	61E	S613	3W
S403	57E	S463	61W	S523	61E	S614	3W
S404	57E	S464	61W	S524	61E	S615	3W
S405	58W	S465	61W	S525	61E	S616	3W
S406	58W	S466	61W	S526	61E	S617	3W
S407	58W	S467	61E	S527	61E		
S408	58W	S468	61E	S528	61E		
S409	58W	S469	61E	S529	65E		

dne = does not exist
(S 337C; 350C-358C are Coward only)

X-localities

(Samples from S,M,B and T localities renumbered by G - Pearce, Harris)
A few do not correspond with an S,M,B,N, or T number, and are shown separately on the microfiche mapps. Most of the rest are not shown separately on the maps.

Sample	Equivalent locality	Map Sheet	Sample	Equivalent locality	Map Sheet	Sample	Equivalent locality	Map Sheet
X1	T11	3W	X25	S205	25C	X49	%167	19W
X2	M8	1W	X26	S205	25C	X50	143	CW
X3	S70	6E	X27	S205	25C	X51	S146	BW
X4	S70	6E	X28	S205	25C	X52	S145	BW
X5	M47	10W	X29	S203	25C	X53	B24	FW
X6	M47	10W	X30	S203	25C	X54	---	30E
X7	M47	10W	X31	S203	25C	X55	S245	28W
X8	M47	10W	X32	S203	25C	X56	S262	39W
X9	M64	11E	X33	S205	25C	X57	B67	45E
X10	M64	11E	X34	---	26W	X58	M245	62W
X11	M64	11E	X35	M81	26W	X59	M253	62W
X12	M64	11E	X36	M82	26W	X60	M254	58W
X13	M64	11E	X37	M86	26W	X61	877	58W
X14	S94	10W	X38	M80	26W	X62	M262	58W
X15	S94	10W	X39	M90	26W	X63	B85	62E
X16	S94	10W	X40	M98	17W	X64	M279	62E
X17	M71	13W	X41	M98	17W	X65	B89	62E
X18	M71	13W	X42	M146	20E	X66	S475	61E
X19	M71	13W	X43	M142	20E	X67	M296	63E
X20	M71	13W	X44	M139	20E	X68	M297	63E
X21	S205	25C	X45	S160	EW	X69	S458	61E
X22	S205	25C	X46	S159	EW	X70	S550	65E
X23	S205	25C	X47	S167	19W	X71	S546	65E
X24	S205	25C	X48	S166	19W			

Equivalents of section numbers used by Pearce and Mei (Volcanics - Chapter 6)

Sequence		Maps	Locality number(s)
LT1	Dagze	1W, 1E, 3E	G14, 16, 17, 18, 19
LT2	Quesang	4W, 4E	G32
LP1	Maqu	4W, 4E	G29, 31, 33, 36
LP2	Yangbajian	7W	G41, 45, 46
LJ1	Lubuchong	23E	G106, 107
LJ2	S. Amdo	28W	G129, 130, 131
LC1	Nagqu	17W	G55
LC2	Norbuzhong	20E	G98, 99
LC3	Pamu Co/Kyiru Co.	23E	G85-89
LC4	Amdo	28W	G133
QJ1	N. Wenquan	40E	G138
QP1	Kaixin Ridge	44E	G150, 151
QP2	Banacomu Ridge	44E	G152
QT1	Zhakonjian	45E	G154
KP1	Wantaogou	62E	G216, 228, 230
KD1	N. Kunlun (N)	65E	G240, 241, 243, 244, 251, 253, 255, 256
KD2	N. Kunlun (S)	65E	G250, 254, 257, 258
KT1	N. Kunlun dikes	65E	G239, 240, 241, 245, 252, 259-261
QN1	Zhangmaxikong	50E	G141

Localities in sections discussed in Pearce and Deng (Ophiolites - Chapter 8)

Sections		Maps	Localities
BG1	Baila	20W	G94-97; N5-11
BG2	Nalong	19W, 20E	G91-92; S161, 164-167
BG3	Lubuchong	23E	G106, 107
BG4	Dongqiao	30E	G103, 104, 105
BG5	Amdo	28W	G127, 132, 134
BG6	Amdo (S)	28W	G129-131
--	Ado	20E	G81
--	Yila	10E	G54; S120-12,