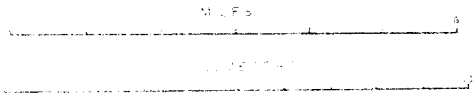
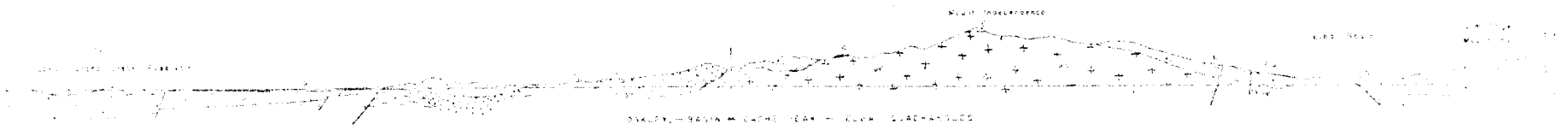
GEOLOGIC CROSS SECTIONS

BASIN 30 QUADRANGLE, IDAHO





C. STRUCTURAL GEOLOGY

II METAMORPHIC FABRIC

STRIKE AND DIP OF FOLIATION

0-20°
20-40°
40-60° Foliation Attitude
60-90°

Axial Plane Foliation for NE Trending Folds
Axial Plane Foliation for NW Trending Folds

LINEATION

Lineation Trend with Arrow in Direction of Plunge
a. NE Trending Structures
b. NW Trending Structures

FOLD AXES

Vergence Indeterminant
Clockwise Rotation (Z Fold)
Counterclockwise Rotation (S Fold)

D. METAMORPHIC GRAD

— INDEX MINERALS

MINERAL OCCURRENCE

C Chloritoid

T Tremolite

S Staurolite

K Kyanite

D Diopside

F Sillimanite (Fibrolite)

ISOGRAD

Staurolite - Tremolite

Sillimanite - Diopside

Regional Events

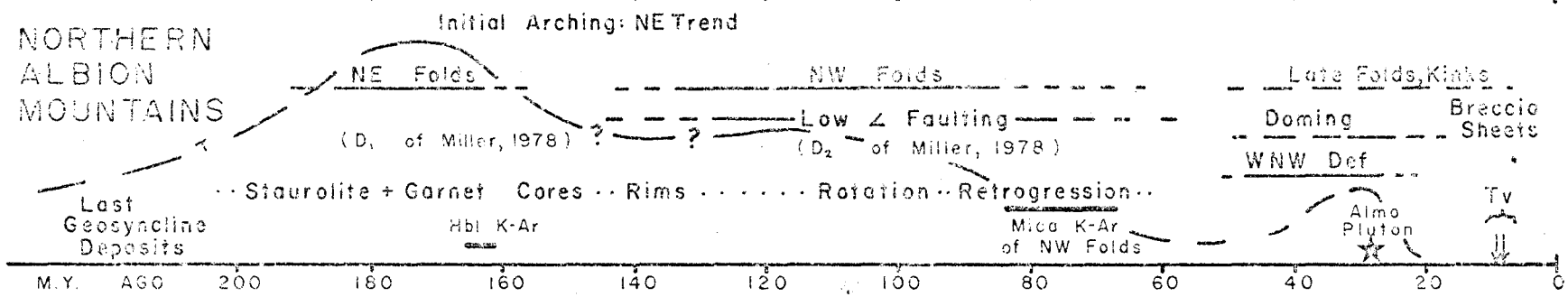
N NEVADA WNW-Overturned Folds

NE NEVADA
R.M. Mm, Recumbent Folding
W.H. NW-Overturned Folds
Mid Mesozoic Mm
Hi T Mylonitization
Ductile Faulting
P.M. ESE Transport of Allochthons
} Denudation, Gravity Slides, Breccias

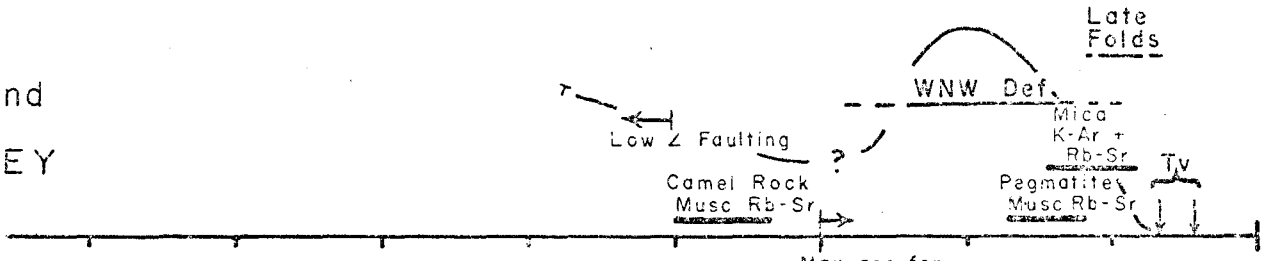
SE IDAHO - N UTAH
Initial Movement on Paris Thrust
Culmination of Thrusting
} in S.O.B.

Basin Quadrangle

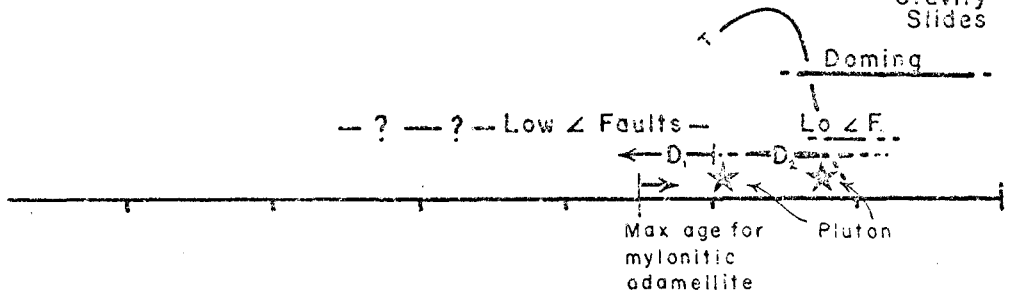
NORTHERN ALBION MOUNTAINS



MIDDLE MOUTAIN and BIRCH CREEK VALLEY



RAFT RIVER and GROUSE CREEK MOUNTAINS



Phases: Metamorphism Transport Denudation

BASIN 30' QUADRANGLE

42° to 42°30' N 113°30' to 114° W

SCALE 1:100,000

A. GENERALIZED GEOLOGY

EXPLANATION

COVER

Quaternary Sedimentary Rocks

Basalt of the Snake River Plain

Tertiary Sedimentary and Volcanic Rocks

Breccia Sheets

POST-DEVONIAN ASSEMBLAGE

Permian Limestone and Chert

Pennsylvanian Limestone and Sandy Limestone

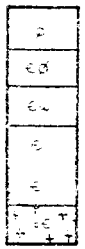
Mississippian Black Phyllite, Conglomerate, and Limestone

QUARTZITE ASSEMBLAGE

Ordovician to Devonian Dolomite, Quartzite, and Limestone

Paleozoic (?) Impure Quartzite and Limestone

RAFT RIVER ASSEMBLAGE



Ordovician to Devonian Limestone, Quartzite, and Dolomite

Schist of Mahogany Peaks

White Quartzite (Quartzite of Clarks Basin ?)

Schist of the Upper Narrows to Quartzite of Clarks Basin

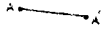
Elba Quartzite

Green Creek Complex

INTRUSIVE ROCKS

Almo Pluton

Gneiss of Camel Rock, Middle Mountain, and East Hills



LINE OF CROSS SECTION

B. STRUCTURAL GEOLOGY

I PRIMARY FEATURES & FOLDS AND FAULTS

STRIKE AND DIP

Horizontal

0-20°

20-40°

40-60°

60-90°

} Bedding Attitude in Stratified Rocks

right side up

overturned

} Confirmed by Cross Stratification

0-20°

20-40°

40-60°

60-90°

} Pre-Elba Foliation in Precambrian Green Creek Complex

MAJOR FOLD AXIAL TRACE

ANTICLINE

SYNCLINE

} Arrow Indicates Plunge Direction

MAJOR FAULTS

Low Angle Fault between Raft River and Siliceous Assemblages

Other Low Angle Faults

} Teeth on Upper Plate

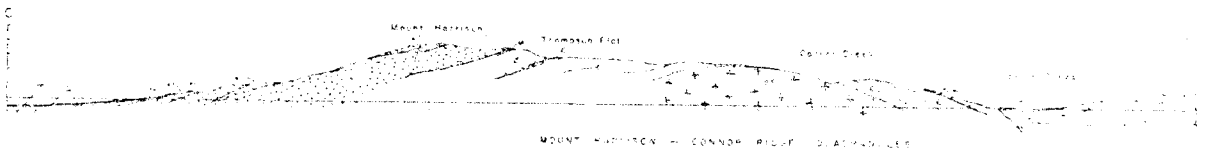
High Angle Faults — Teeth on Downdropped Block

GEOLOGIC CROSS SECTIONS

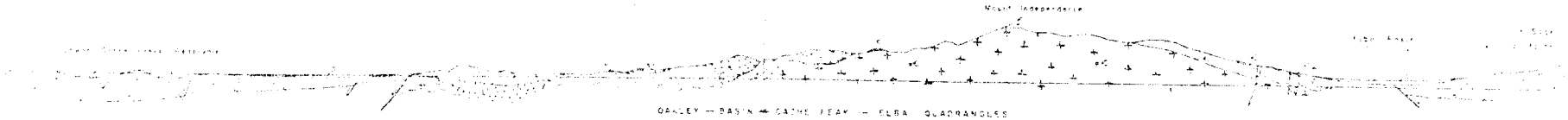
BURLEY 30' QUADRANGLE, IDAHO

MILES

KILOMETERS



MOUNT HARRISON — CONNOR RIDGE QUADRANGLES



OAKLEY — BASIN — CASTLE PEAK — ELBA QUADRANGLES

ROSE HILL — LYMAN PASS — ALMO — JIM SAGE QUADRANGLES


A
A'
km
mi


km
mi