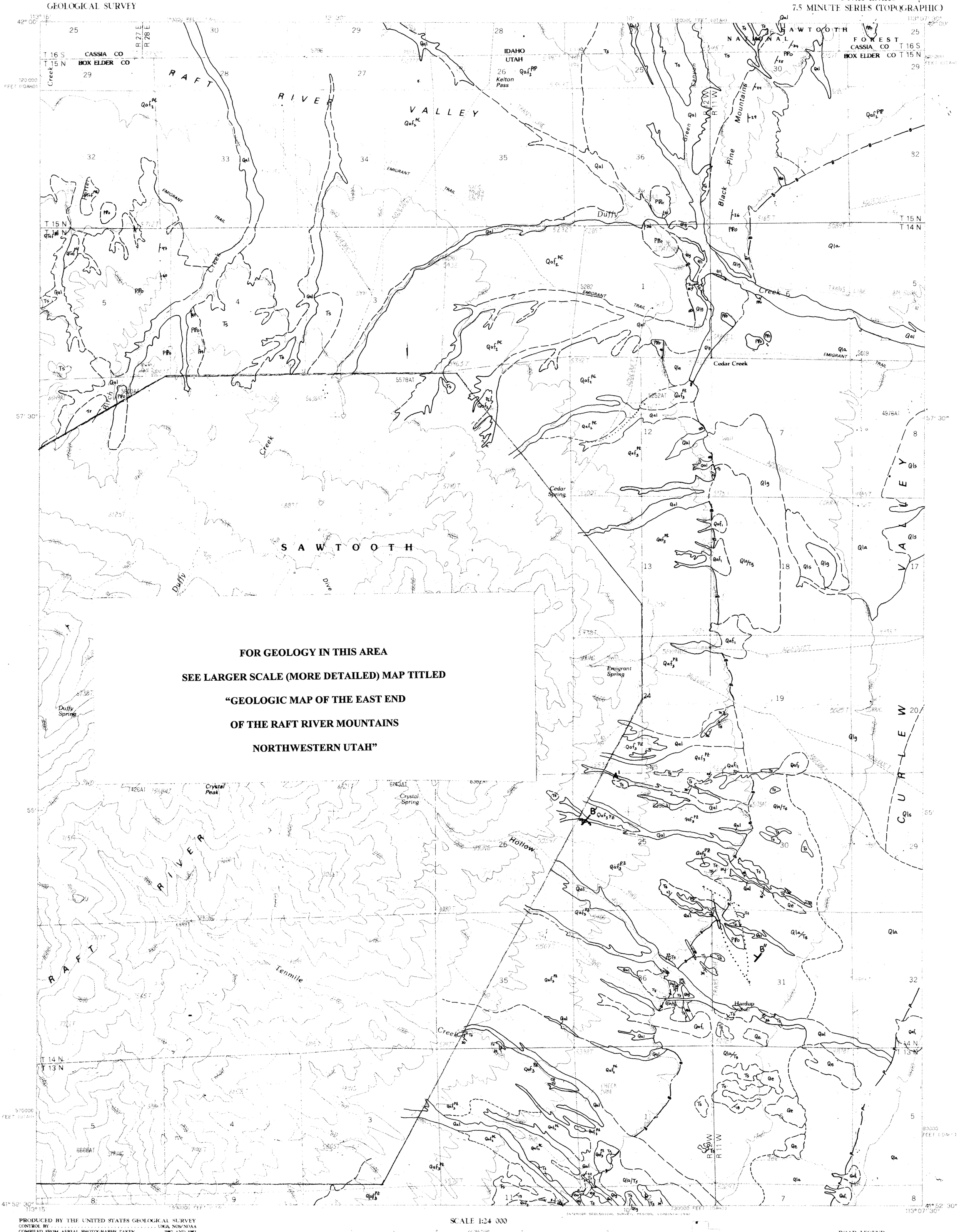
**PLATE 1**
**Interim Geologic Map - Kelton Pass Quadrangle**
**Open-File Report 342 December 1996**
**UTAH GEOLOGICAL SURVEY**
*a division of*
Utah Department of Natural Resources

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

KELTON PASS QUADRANGLE
UTAH-IDAHO
7.5 MINUTE SERIES (TOPOGRAPHIC)




**FOR GEOLOGY IN THIS AREA**

**SEE LARGER SCALE (MORE DETAILED) MAP TITLED**

**"GEOLOGIC MAP OF THE EAST END**

**OF THE RAFT RIVER MOUNTAINS**

**NORTHWESTERN UTAH"**

PRODUCED BY THE UNITED STATES GEOLOGICAL SURVEY
CONTROL BY . . . . . USGS, NOS/NOAA
COMPILED FROM AERIAL PHOTOGRAPHS TAKEN . . . . . 1982 AND 1983
FIELD CHECKED . . . . . 1985 MAP EDITED . . . . . 1990
PROJECTION. . . . . LAMBERT CONFORMAL CONIC
GRID: 1000-METER UNIVERSAL TRANSVERSE MERCATOR . . . . . ZONE 12
10,000-FOOT STATE GRID TICKS . . . . . UTAH, NORTH ZONE AND IDAHO, CENTRAL ZONE
UTM GRID DECLINATION . . . . . 1°28' WEST
1990 MAGNETIC NORTH DECLINATION . . . . . 15° EAST
VERTICAL DATUM . . . . . NATIONAL GEODETIC VERTICAL DATUM OF 1929
HORIZONTAL DATUM . . . . . 1927 NORTH AMERICAN DATUM

To place on the predicted North American Datum of 1983, move the projection lines as shown by dashed corner ticks (12 meters north and 69 meters east)
There may be private inholdings within the boundaries of any Federal and State Reservations shown on this map
No distinction made between houses, barns, and other buildings
Certain land lines are omitted because of insufficient data

PROVISIONAL MAP
Produced from original manuscript drawings. Information shown as of date of photography. 1

SCALE 1:24 000

CONTOUR INTERVAL 40 FEET
To convert feet to meters multiply by .3048
To convert meters to feet multiply by 3.2808

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS

UTAH
QUADRANGLE LOCATION

| | | |
|---|---|---|
| 1 | 2 | 3 |
| 4 | | 5 |
| 6 | 7 | 8 |

1 Naf
2 Strevell
3 Black Pine Peak
4 Rosevere Point
5 Curlew Junction
6 Park Valley
7 Black Butte
8 Kelton Pass SE

ADJOINING 7.5' QUADRANGLE NAMES

ROAD LEGEND
Improved Road . . . . . .
Unimproved Road . . . . . .
Trail . . . . . .
Interstate Route U.S. Route State Route

KELTON PASS, UTAH-IDAHO
PROVISIONAL EDITION 1990

41113-H2-TF-024

PLATE 2
Interim Geologic Map - Kelton Pass Quadrangle
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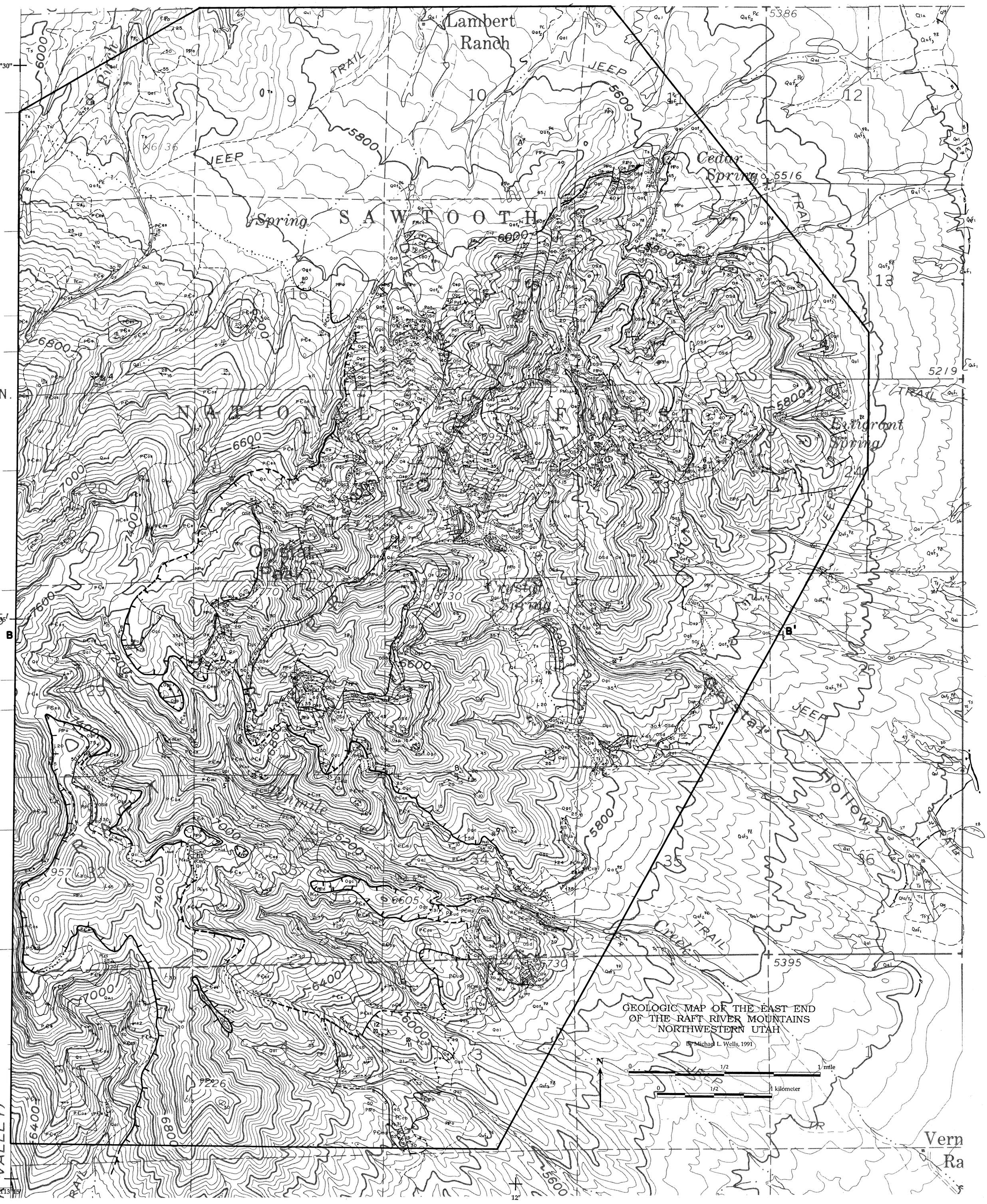

PLATE 3
Interim Geologic Map - Kelton Pass Quadrangle
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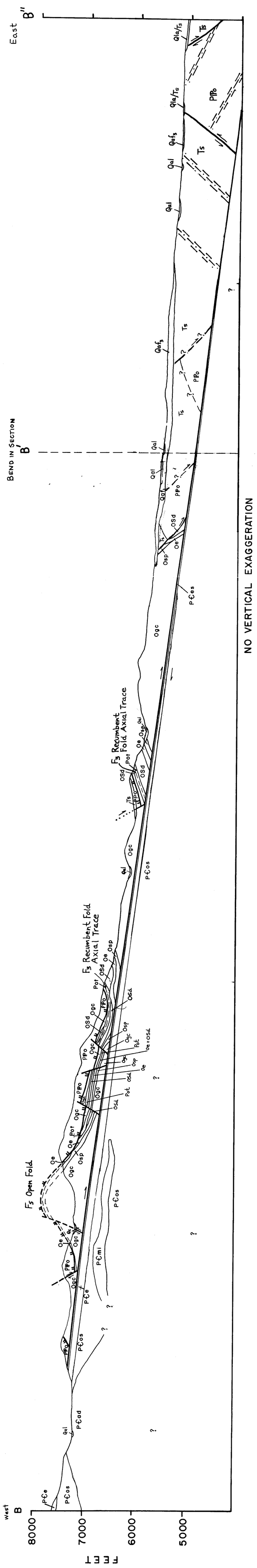
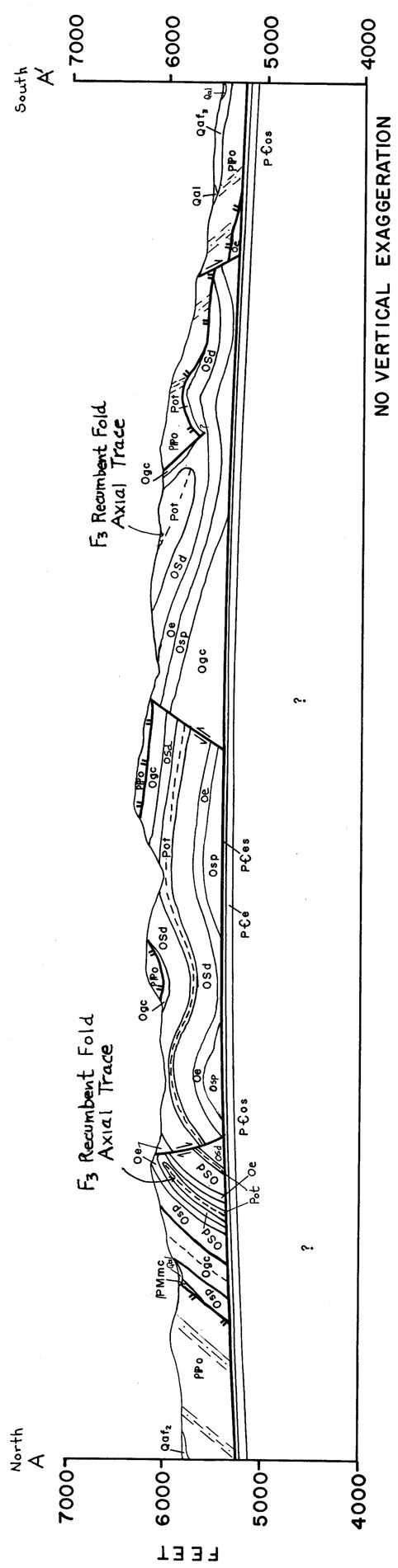
# GEOLOGIC CROSS SECTIONS OF THE EASTERN RAFT RIVER MOUNTAINS, NORTHWESTERN UTAH




## LITHOLOGIC COLUMN

| UNIT | SYMBOL | TECTONIC UNIT | LITHOLOGY | THICKNESS feet (meters) |
|---|---|---|---|---|
| Sedimentary Rocks | $T_s$ | | | 1700 + (520+) |
| | | Unconformity | | |
| Oquirrh Formation | PIPo | Middle Allochthon | | 4000 + (1200+) |
| Chainman Shale and Diamond Peak Formation | MIPcd | Middle detachment | | 0-49 (0-15) |
| Lower Oquirrh Formation marble tectonite | IPot | Emigrant Spring Fault | | 0-130 (0-40) |
| Dolomite | OSd | | | 0-425 (0-130) |
| | | Attenuation fault | | |
| Eureka Quartzite | Oe | | | 0-200 (0-60) |
| | | Attenuation fault | | |
| Kanosh, Lehman, Swan Peak and Crystal Peak Formation | Osp | Lower Allochthon | | 0-230 (0-70) |
| | | Attenuation fault | | |
| Garden City Formation | Ogc | | | 985 (300) |
| Schist of Mahogany Peaks | Pmp | Mahogany Peaks Fault | | 0-33 (0-10) |
| Quartzite of Clarks Basin | Pcb | Raft River detachment | | 0-164 (0-50) |
| Schist member of Elba Quartzite | Pes | | | 16-82 (5-25) |
| Elba Quartzite | Pe | | | 0-160(49) |
| | | Unconformity | | |
| Older schist and metamorphosed mafic igneous rocks | Aos Ami | Parautochthon | | 400+ (122+) |
| | | Intrusive contact | | |
| Metamorphosed adamellite | Aad | | | 120+ (36+) |