MAP EXPLANATION

Recently active faults mapped by Bryant (this report), based on air photo interpretation and limited field mapping (indicated by f/c and date). Solid line indicates well-defined feature, dashed where approximately located, short dash where inferred, dotted where concealed; queries indicate additional uncertainty; hachures indicate extent and direction scarp faces.

Faults mapped by Wood (1960), dashed where inferred, dotted where concealed. U, upthrown side; D, downthrown side.

(2) Locality referred to in text.

✓ Fault is well-defined and/or was verified as exhibiting geomorphic evidence of latest Pleistocene to Holocene displacement by Bryant (this report).

NV Fault is not well-defined and/or was not verified as exhibiting geomorphic evidence of latest Pleistocene to Holocene displacement by Bryant (this report).

Key to faulted and unfaulted deposits

□ -deposit offset H -Holocene L -late Pleistocene
○ -deposit not offset Q -Quaternary b -bedrock

Scarp Profile Data measured by Bryant (this report)

∢-scarp-slope angle h-scarp height c-scarp crest width

Geomorphic features indicative of fault recency and/or location, based on air photo interpretation and field mapping by Bryant (this report)

- bd - beheaded drainage
- bis - break in slope
- cd - closed depression
- dd - deflected drainage
  - rl - right lateral
  - ll - left lateral
- dno - drainage not offset
- dov - drainage offset vertically or exhibits "wineglass" configuration
- F - open, linear fissure associated with scarp; unfilled.
- fs - faceted spur
- ld - linear drainage
- lr - linear ridge
- pa - ponded alluvium
- s - saddle
- sb - sidehill bench
- t - tonal lineament
- tr - trough

FIELD LOCALITY DESCRIPTIONS

(A) Soil test pit sites 3 and 4. Playa surface is characterized by Bt soil horizon with 10 YR color and moderate, continuous clay films. Luster of clay films indicates high Si content, consistent with abundant volcanic ash in parent material. Soil site 4 excavated in 40-cm high mound of eolian sand that accumulated around sage. This mound also has Bt horizon.

(B) Apparent scarp is actually coalescing mounds of eolian deposits along a vegetation lineament. Vegetation scarp is about 1.5 m high.

(C) Subtle scarp in playa surface ranges in height from 15 to 46 cm. Vegetation lineament and associated eolian accumulation are fairly continuous.

(D) Scarp in basalt about 20m high. Linear fissure near top of scarp is about 6m wide and up to about 24m deep. Very fresh boulders of columnar- jointed basalt at base of fissure. Near southern end of fissure displacement is purely extensional, but to north there may be as much as 3m of vertical separation across surface of scarp. No fine-grained deposits were observed at base of fissure.

(E) Linear fissures at top of about 6m high scarp in basalt. Fissures locally up to 6m deep. Eolian silty fine sand at bottom of shallow fissure (1m-deep). A weakly developed A horizon (paleosol) with weak subangular blocky structure observed near bottom of 40 cm deep soil pit.

Figure 2a (to FER-210). Recently active faults in the Butte Valley study area, based on available mapping of others and air photo interpretation and limited field mapping by Bryant (this report). Faults highlighted in yellow are recommended for zoning for special studies.