

**Plate IIa: Features related to faulting along the Helendale fault
(Apple Valley North and Northwest Fairview Valley Quadrangles)**

Interpreted Features

Photo Lineament

Interpreted Fault
(Solid line where accurately located,
long dash where approximately located)

ridd - right-deflected drainage

tl - tonal lineament

lt - linear trough

pa - ponded alluvium

orr - right offset ridge

vc - vegetation contrast

s - scarp

vl - vegetation lineament

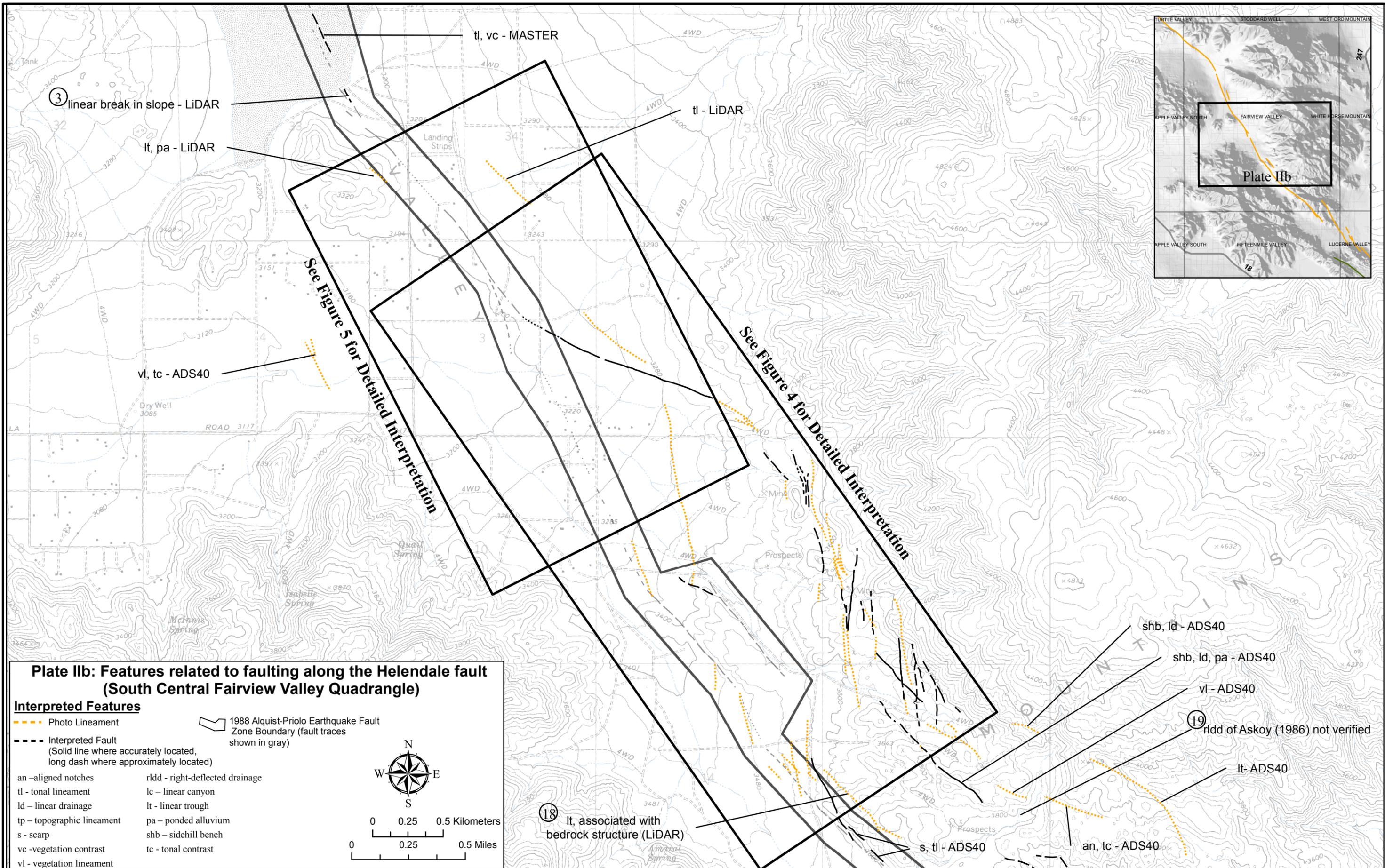
tc - tonal contrast

1988 Alquist-Priolo Earthquake Fault
Zone Boundary (fault traces
shown in gray)



0 0.25 0.5 Kilometers

0 0.25 0.5 Miles

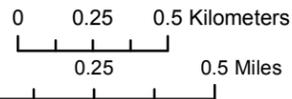


**Plate IIb: Features related to faulting along the Helendale fault
(South Central Fairview Valley Quadrangle)**

Interpreted Features

- Photo Lineament
- Interpreted Fault
(Solid line where accurately located,
long dash where approximately located)
- an - aligned notches
- tl - tonal lineament
- ld - linear drainage
- tp - topographic lineament
- s - scarp
- vc - vegetation contrast
- vl - vegetation lineament
- ridd - right-deflected drainage
- lc - linear canyon
- lt - linear trough
- pa - ponded alluvium
- shb - sidehill bench
- tc - tonal contrast

1988 Alquist-Priolo Earthquake Fault
Zone Boundary (fault traces
shown in gray)



18 lt, associated with
bedrock structure (LiDAR)

19 ridd of Askoy (1986) not verified

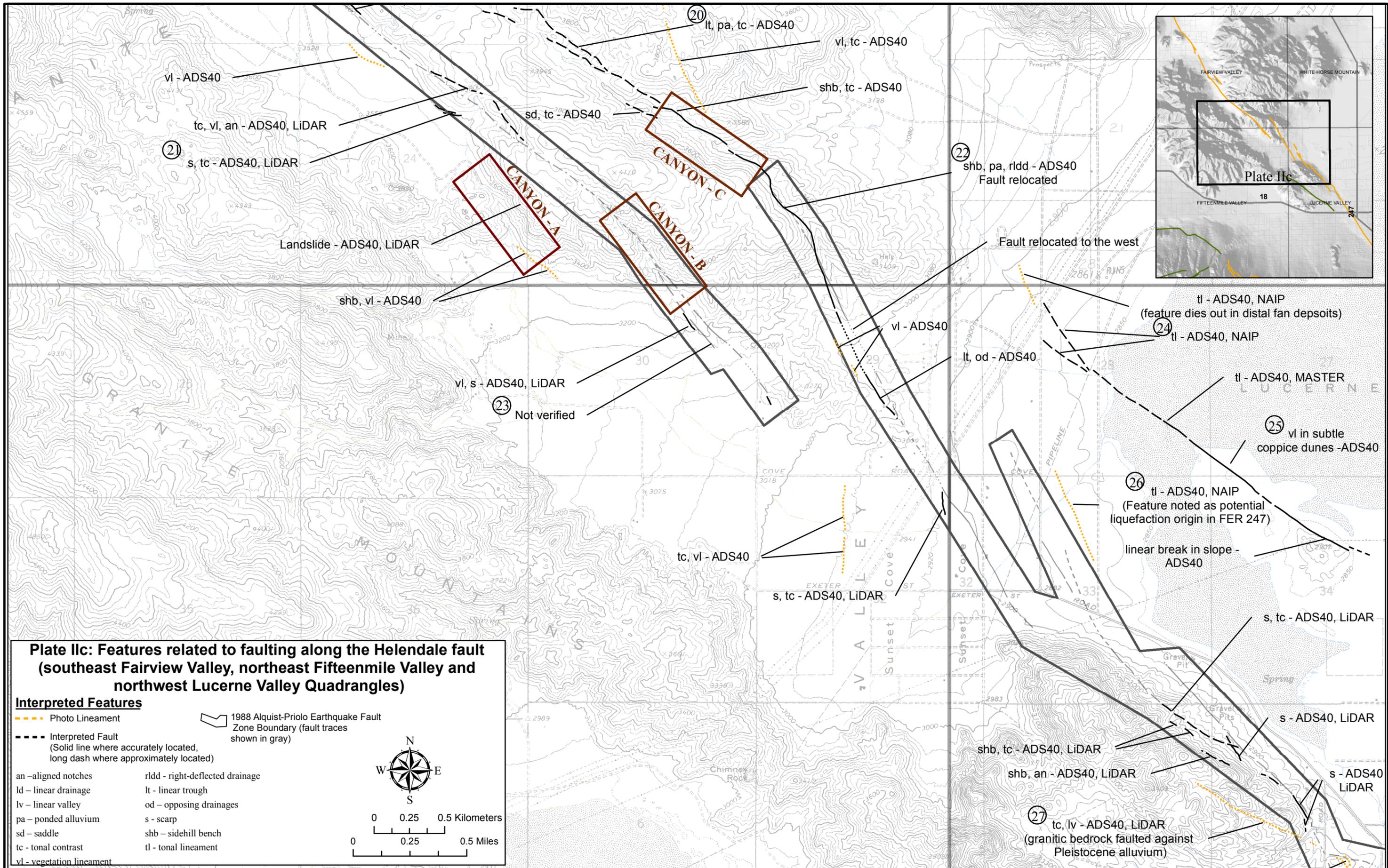
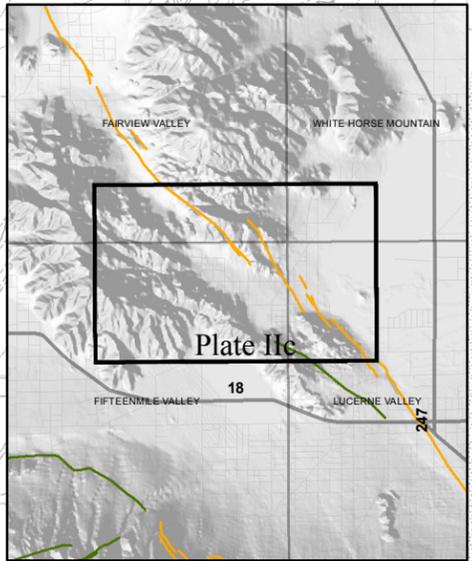
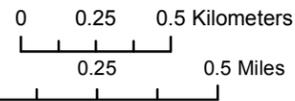
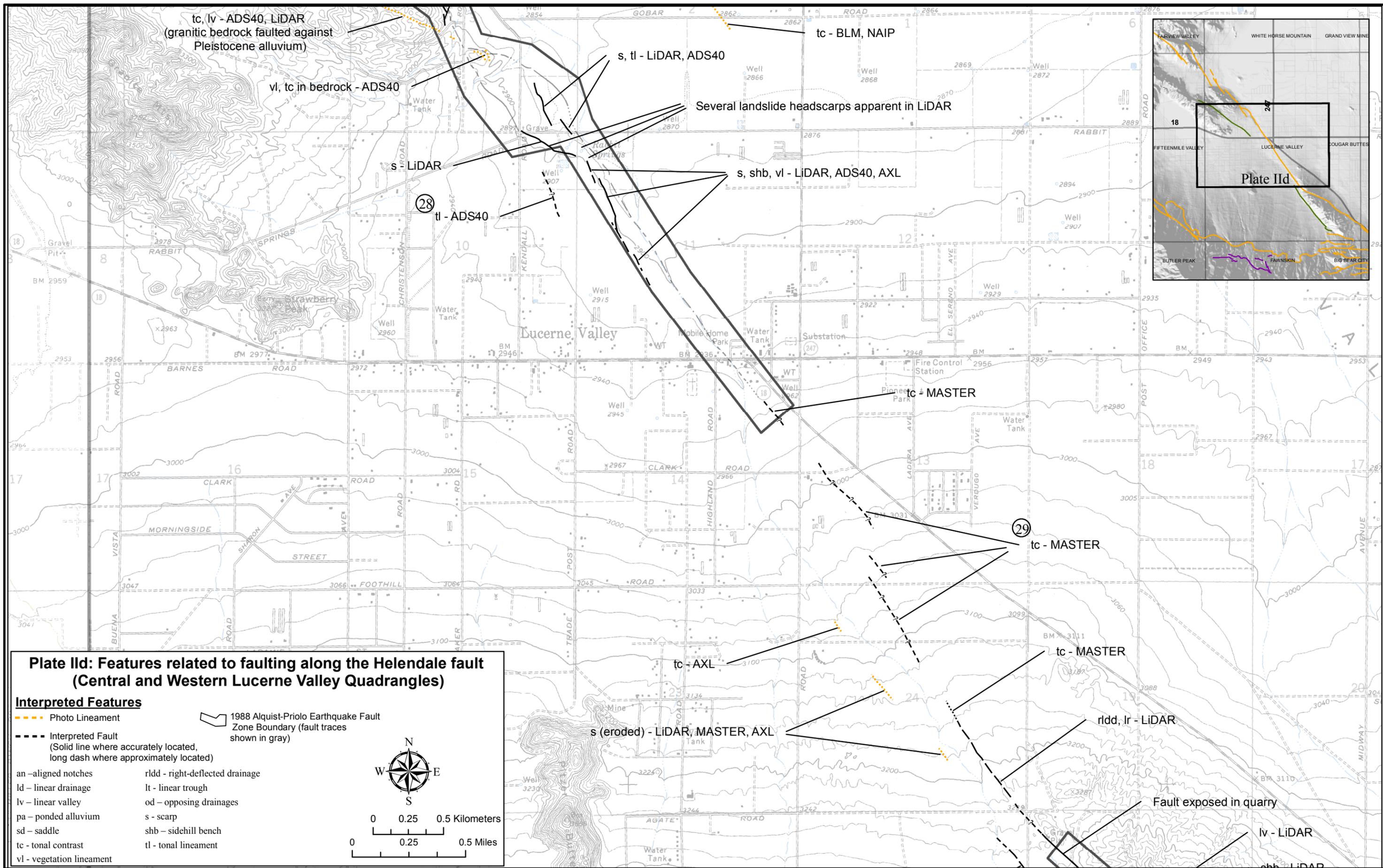


Plate IIc: Features related to faulting along the Helendale fault (southeast Fairview Valley, northeast Fifteenmile Valley and northwest Lucerne Valley Quadrangles)

Interpreted Features

- Photo Lineament
 - Interpreted Fault (Solid line where accurately located, long dash where approximately located)
 - 1988 Alquist-Priolo Earthquake Fault Zone Boundary (fault traces shown in gray)
- | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> an - aligned notches ld - linear drainage lv - linear valley pa - ponded alluvium sd - saddle tc - tonal contrast vl - vegetation lineament | <ul style="list-style-type: none"> ridd - right-deflected drainage lt - linear trough od - opposing drainages s - scarp shb - sidehill bench tl - tonal lineament |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|





tc, lv - ADS40, LiDAR
(granitic bedrock faulted against
Pleistocene alluvium)

vl, tc in bedrock - ADS40

s, tl - LiDAR, ADS40

tc - BLM, NAIP

Several landslide headscarps apparent in LiDAR

s - LiDAR

s, shb, vl - LiDAR, ADS40, AXL

28
tl - ADS40

tc - MASTER

29
tc - MASTER

tc - AXL

tc - MASTER

s (eroded) - LiDAR, MASTER, AXL

ridd, lr - LiDAR

Fault exposed in quarry

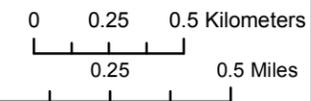
lv - LiDAR

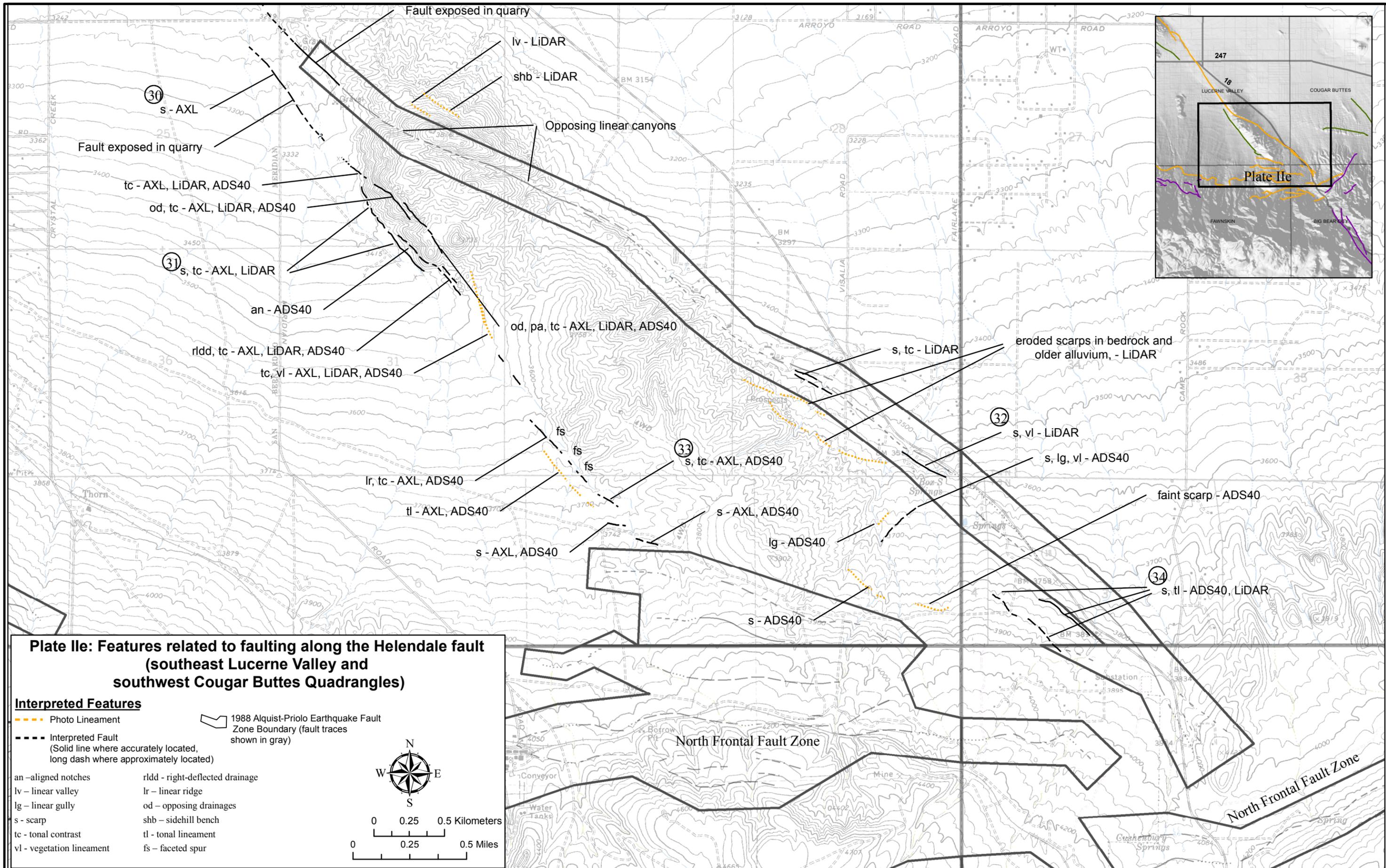
shb - LiDAR

**Plate IId: Features related to faulting along the Helendale fault
(Central and Western Lucerne Valley Quadrangles)**

Interpreted Features

- Photo Lineament
- Interpreted Fault
(Solid line where accurately located,
long dash where approximately located)
- 1988 Alquist-Priolo Earthquake Fault
Zone Boundary (fault traces
shown in gray)
- an - aligned notches
- ld - linear drainage
- lv - linear valley
- pa - ponded alluvium
- sd - saddle
- tc - tonal contrast
- vl - vegetation lineament
- ridd - right-deflected drainage
- lt - linear trough
- od - opposing drainages
- s - scarp
- shb - sidehill bench
- tl - tonal lineament





**Plate IIe: Features related to faulting along the Helendale fault
(southeast Lucerne Valley and southwest Cougar Buttes Quadrangles)**

Interpreted Features

- Photo Lineament
- Interpreted Fault
(Solid line where accurately located,
long dash where approximately located)
- 1988 Alquist-Priolo Earthquake Fault
Zone Boundary (fault traces
shown in gray)
- an - aligned notches
- lv - linear valley
- lg - linear gully
- s - scarp
- tc - tonal contrast
- vl - vegetation lineament
- ridd - right-deflected drainage
- lr - linear ridge
- od - opposing drainages
- shb - sidehill bench
- tl - tonal lineament
- fs - faceted spur

