

**Explanation**

- Lineament group mapped for this study coinciding with previously mapped fault or lineament
- Quaternary fault, solid where well constrained, long dashed line where moderately constrained, short dashed line where inferred (Alaska DGGS, 2012)
- Faults Compiled by FCL (Wilson et al., 2009; Csejczy et al., 1978)*
- Fault, solid where certain, long dashed line where approximate, short dashed line where inferred, dotted where concealed
- Lineament
- Lineaments Mapped by FCL (this study)*
- 1-4 See Figure A0.3 for explanation of numbered attributes for mapped lineaments
- 10
- 77
- 88

Note: Geologic units from Wilson et al., 2009, Talkeetna Mountains and Anchorage Quadrangles except units Tw, knl, and Jbc which are from Wilson et al., 1998.

Notes: 1. See Figures A0.2, A0.3, A0.4, and A0.5 for explanation.  
 2. Data frames have been rotated 15° east of north.  
 3. Geology by Wilson et al., 2009  
 4. Coordinates on NAD83 UTM Zone 6 North meters.  
 5. Elevation from INSAR data and USGS SRTM data.

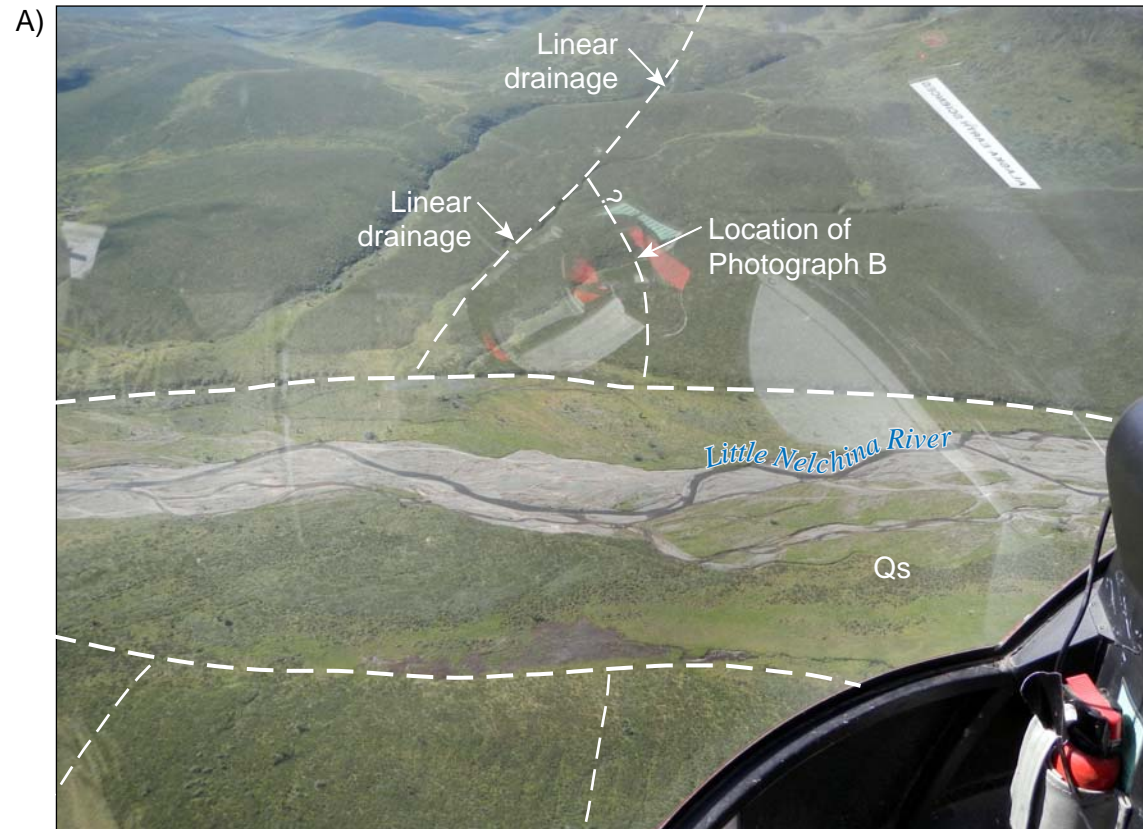


SUSITNA-WATANA HYDROELECTRIC PROJECT  
**Castle Mountain Extension Area**

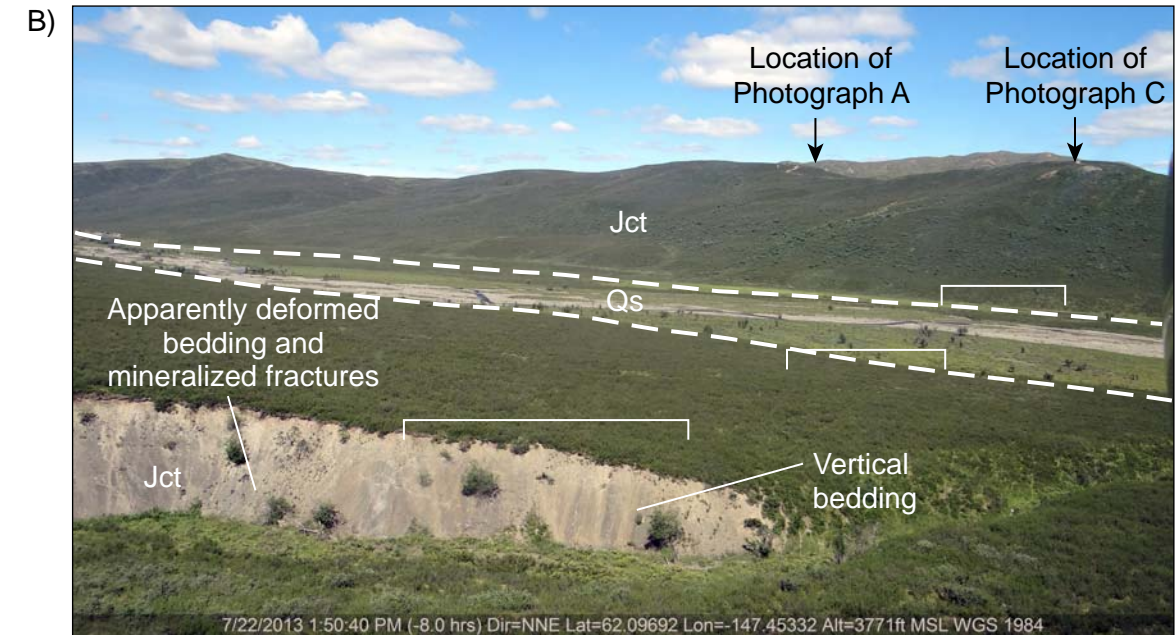
**Plate A-CME**

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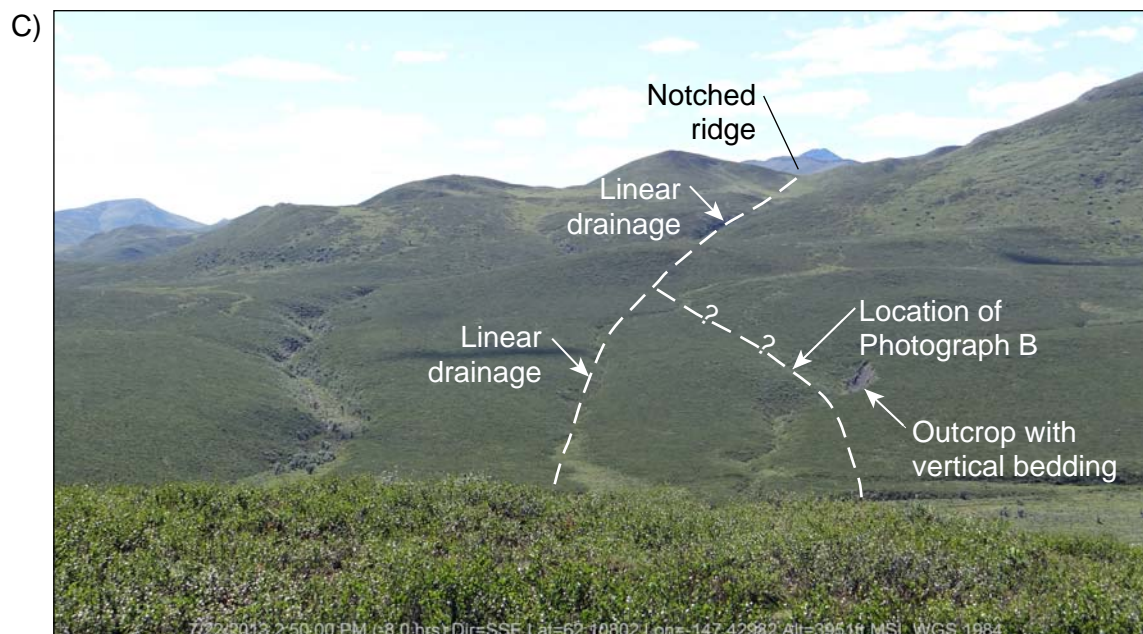




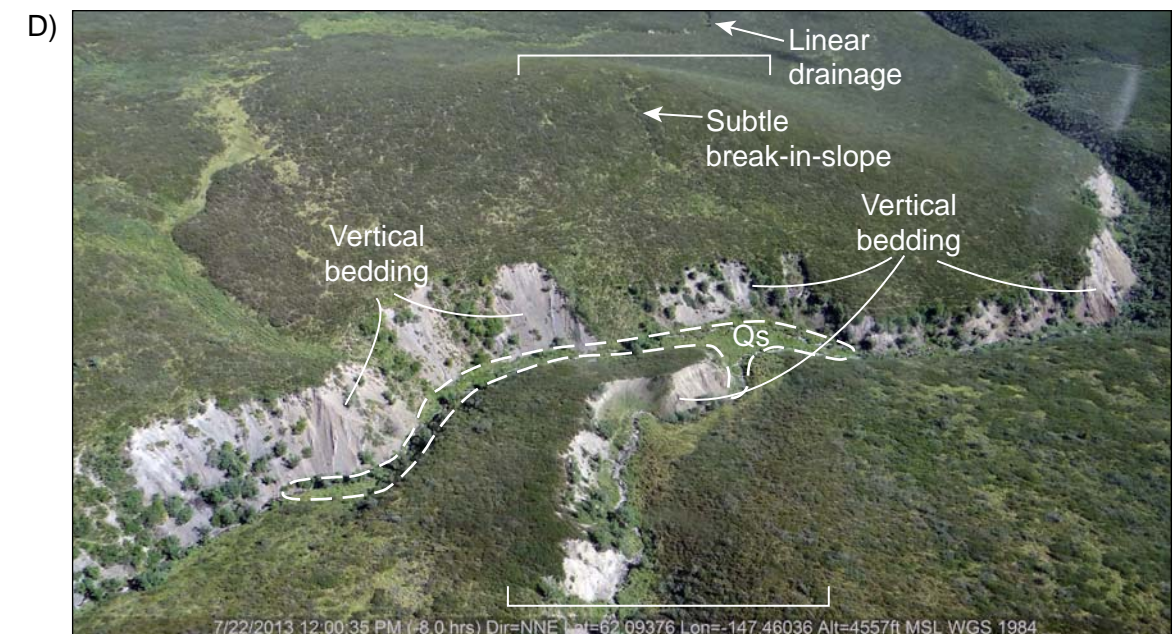
View looking southwest from location A, nearly along-strike with Csejtey et al. (1978) mapped faults. Note clear expression of linear features on bedrock landscape and absence of linear expression in Quaternary deposits.



View looking northeast from location B nearly along-strike with Csejtey et al. (1978) mapped fault. The mapped fault segment projects through the vertical beds observed in the outcrop towards photograph location C. Note apparent undeformed hillslope and Quaternary deposits over projected trace of fault.



View looking southwest from location C. Note alignment of features over mapped trace of fault.

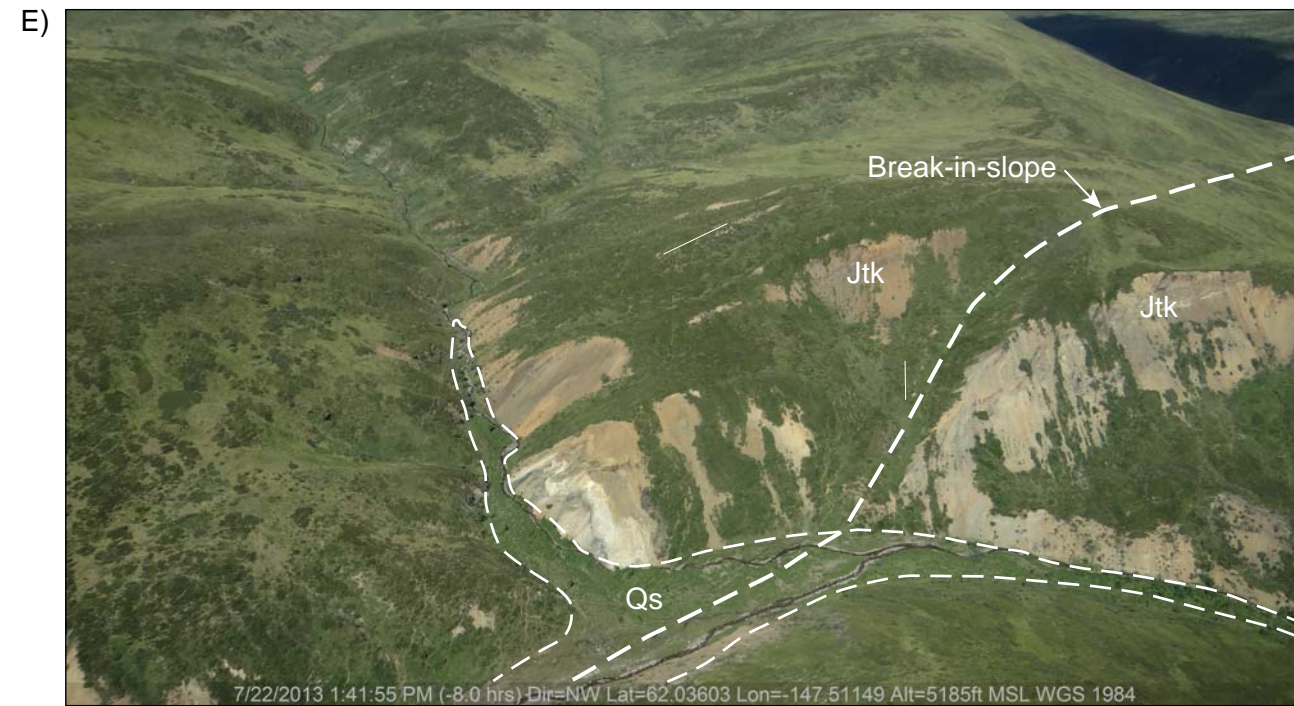


View looking northeast from location D along-strike with a Csejtey et al. (1978) mapped fault. A wide zone of deformation is expressed as vertical bedding exposed in outcrops. Note alignment of the break-in-slope on ridge crest, linear drainage, and the deformation zone.

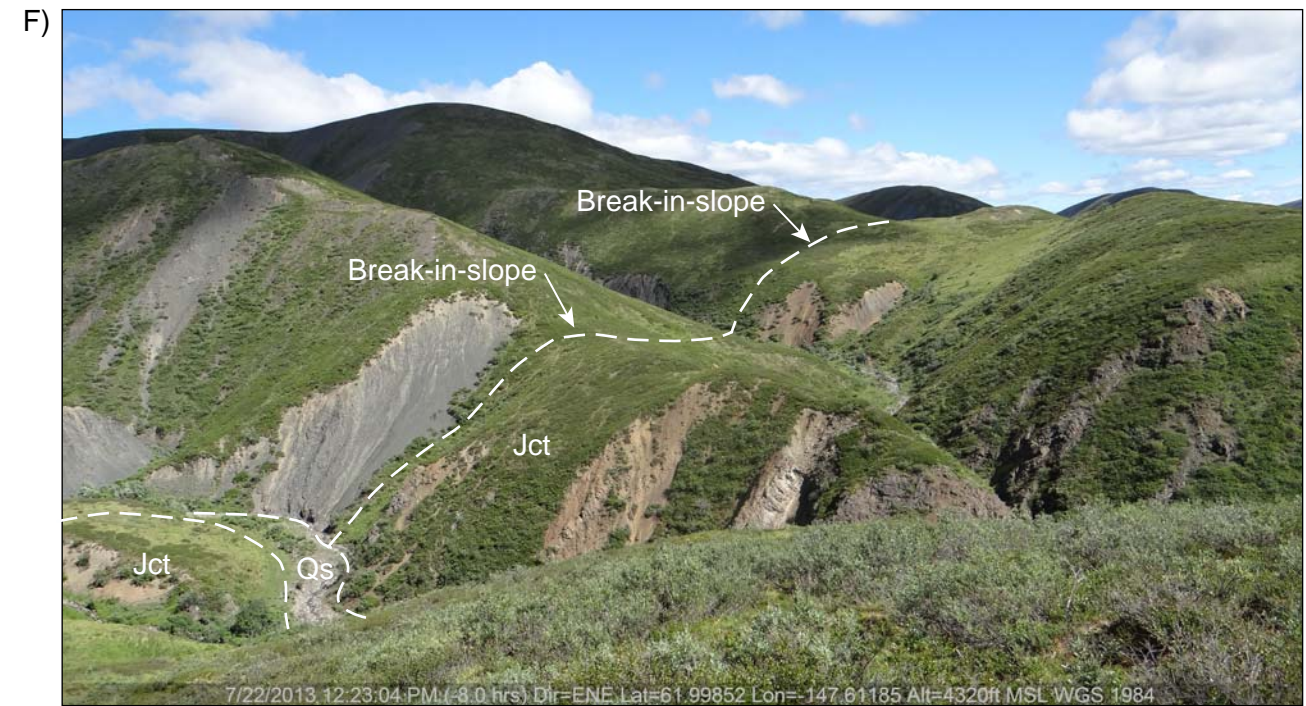
79\_218900\_Alaska\_Railbelt/2189\_Lineament Report October 2013, modified 10.18.13

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View looking northwest from location E at faulted Jurassic units. The fault occupies the linear valley then climbs the hill-slope where it correlates with a clear break-in-slope on the ridge crest.



View looking north-northeast from location F. The fault juxtaposes Cretaceous against Jurassic bedrock and coincides with a break-in-slope on each ridge crest.

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