

Notes: 1. See Figures A0.2, A0.3, A0.4, and A0.5 for explanation.  
2. Data frames have been rotated 45° west of north.  
3. Geologic map by Clauser et al., 2001 (top).  
4. Coordinates on NAD83 UTM Zone 8 North meters.  
5. Elevation from INSAR data.



BUSTNA-WATANA HYDROELECTRIC PROJECT  
Broad Pass Area

DRAFT  
Plate A-BP

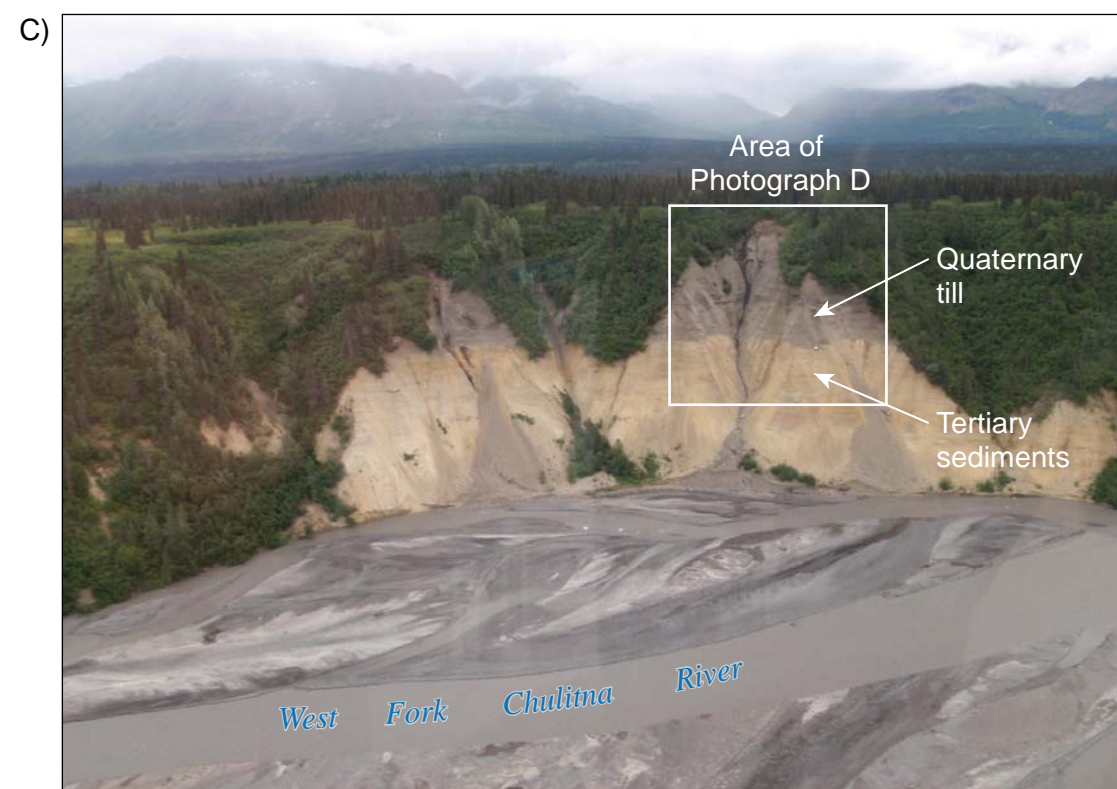




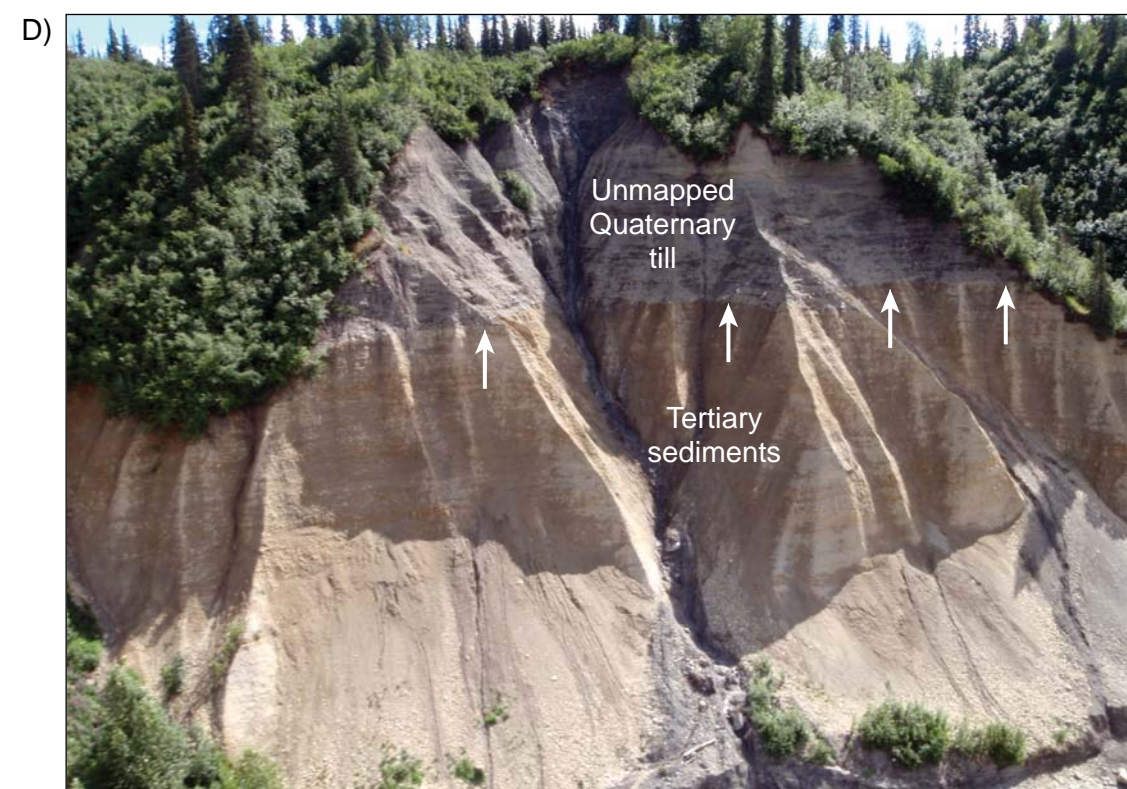
View looking north at location where mapped fault would traverse across Quaternary sediments.



View looking north (upstream) along the West Fork Chulitna River valley at exposures described in text and photographs below.



View looking west at exposure along east bank of the West Fork Chulitna River demonstrating Quaternary till overlying Tertiary fluvial sediments.



Close up view of exposure shown in Photograph C. Basal contact between overlying till and underlying fluvial deposits appears to be sub-horizontal.

**DRAFT**

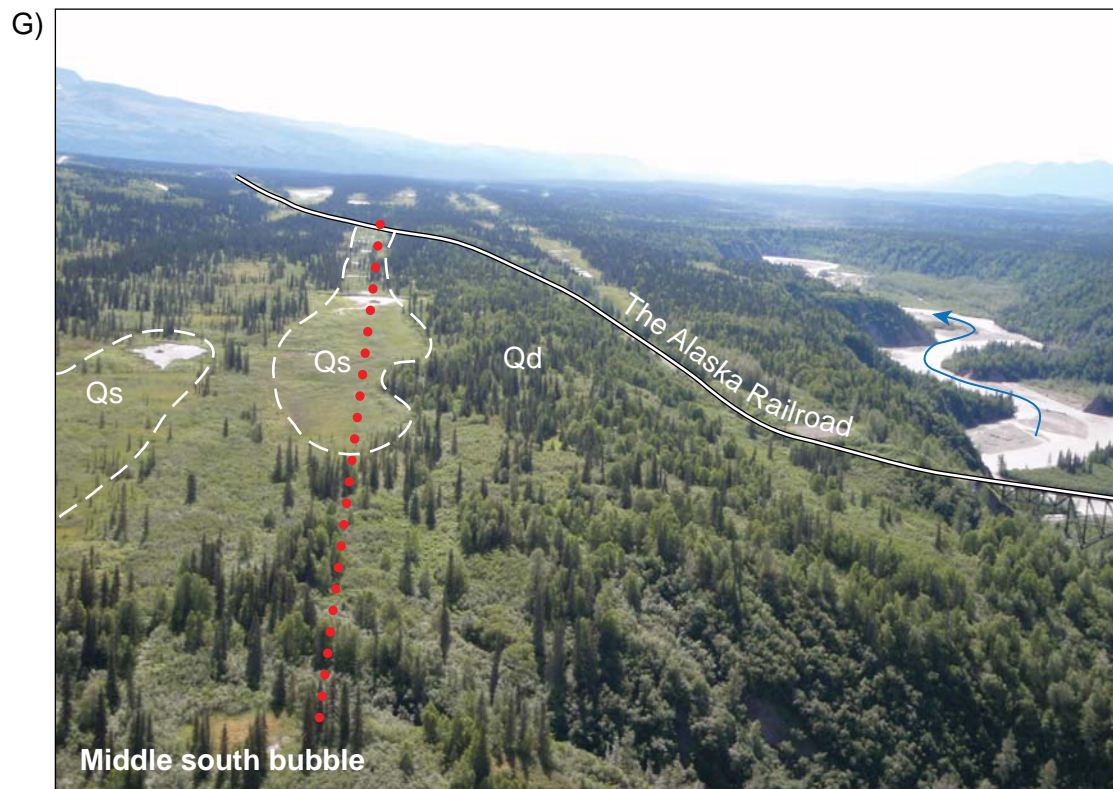




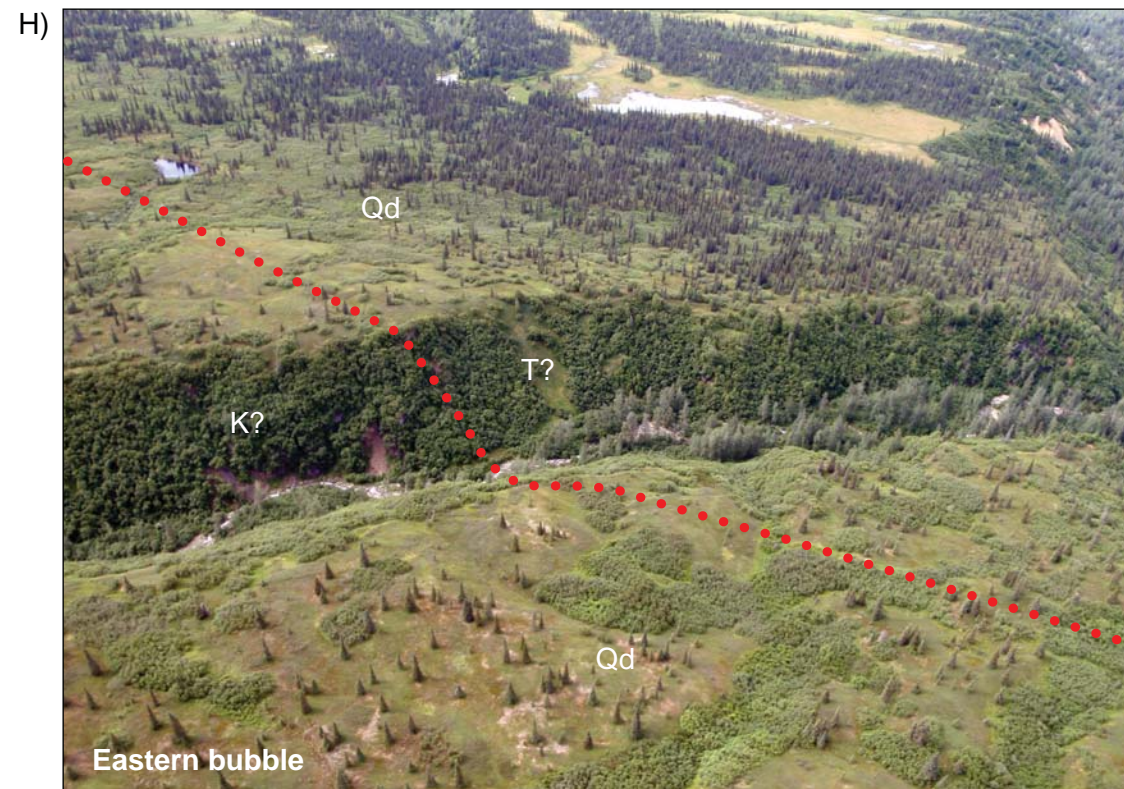
View looking northeast at subhorizontal contact between till and Tertiary sediments.



View looking south along Quaternary surface directly south of river valley. Marshy Quaternary sediments show no evidence of deformation or offset.



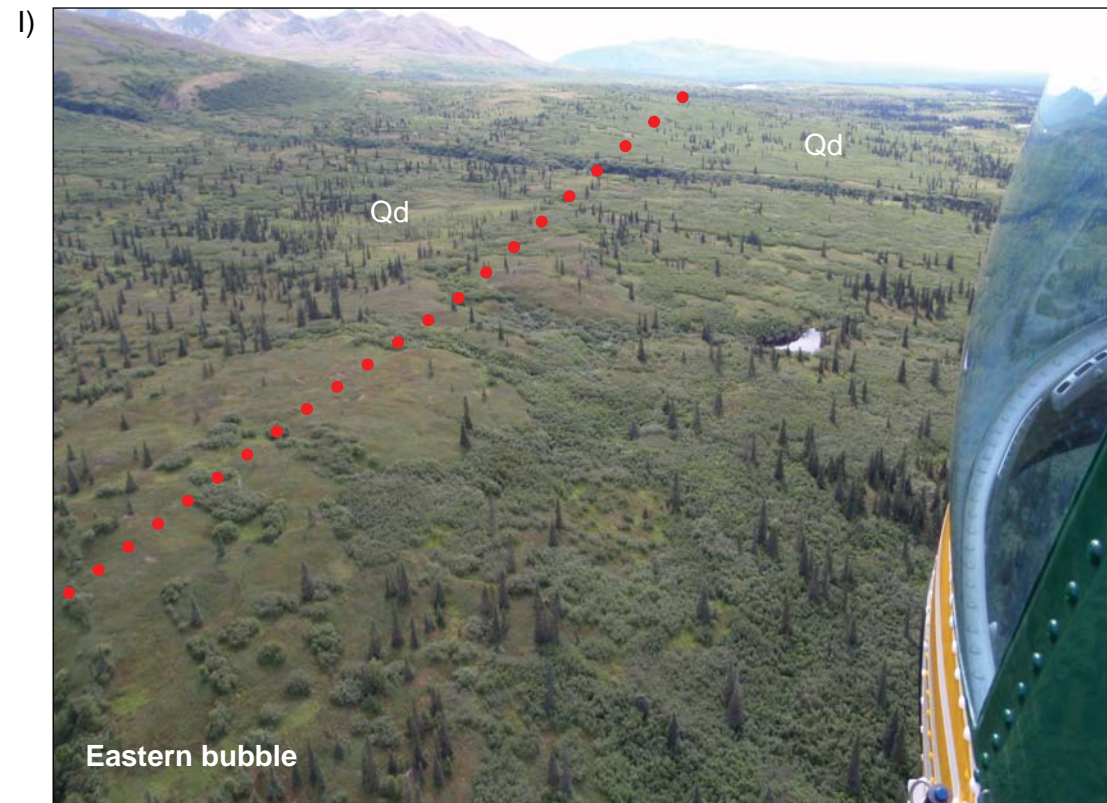
View looking south at location where inferred fault would traverse east of railroad tracks. Fault is mapped as juxtaposing Triassic and Cretaceous rocks outcropping in creek behind photograph. No evidence of faulting in Quaternary deposits.



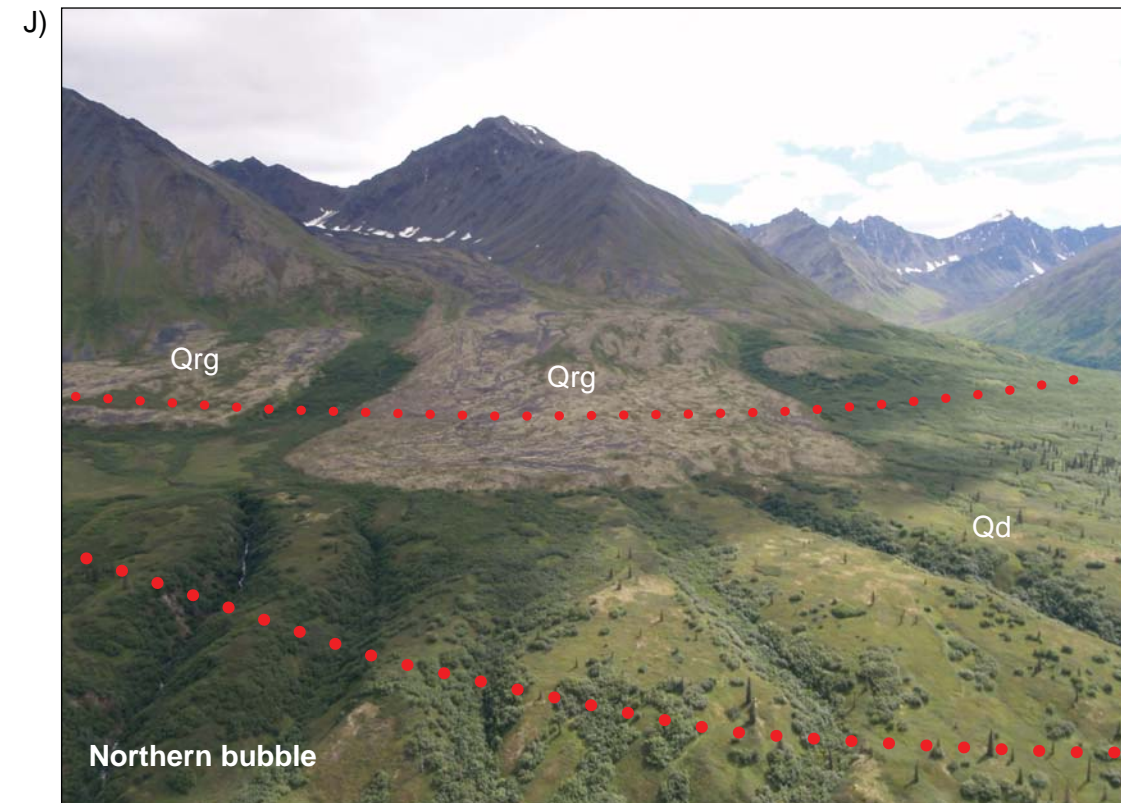
View looking west at creek exposure along projection of mapped fault that depicts Cretaceous/Tertiary juxtaposition. Undisturbed surfaces support absence of Quaternary faulting.

**DRAFT**





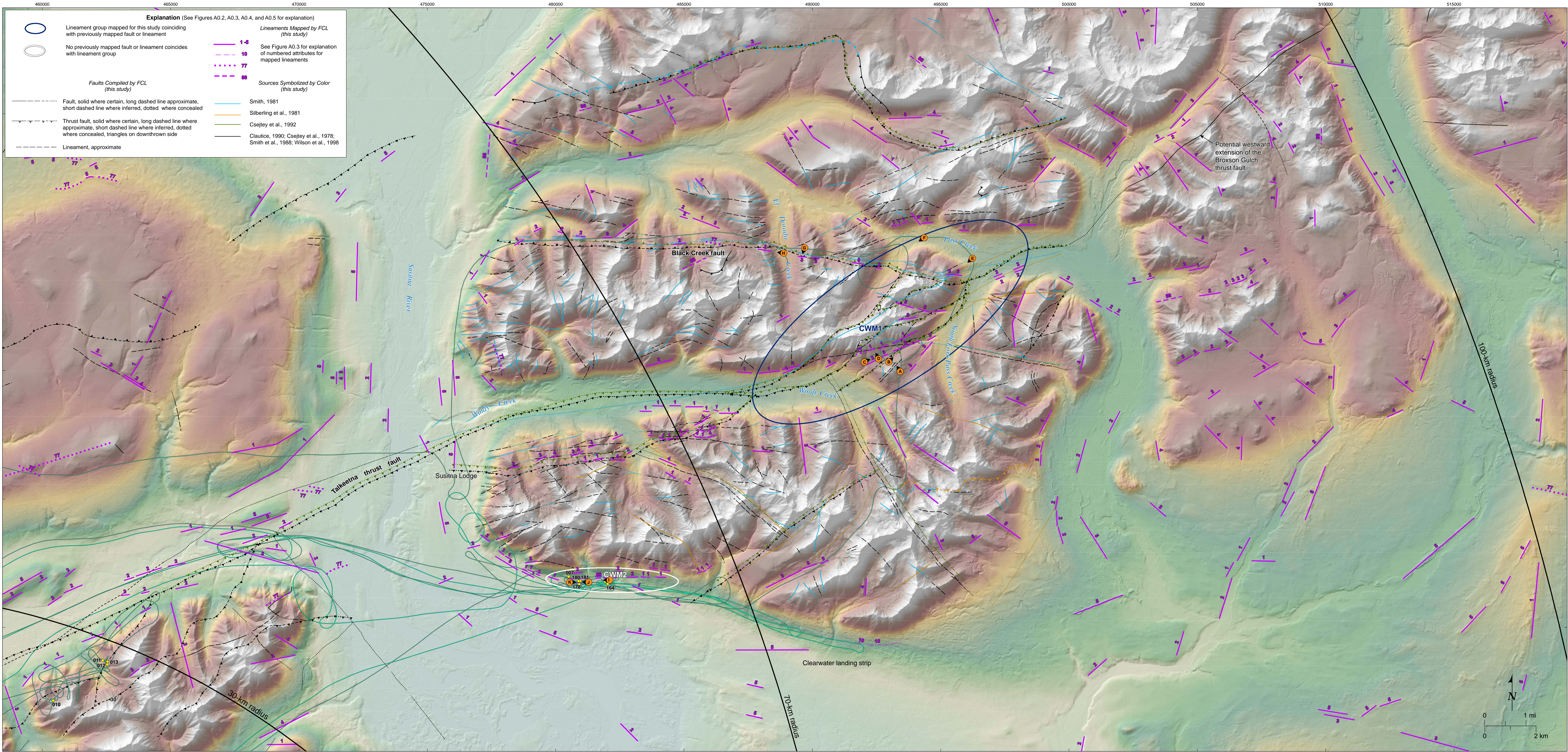
View looking west at creek exposure shown in Photograph H, Figure A-BP.2, showing morphology of Quaternary deposits along strike.



View looking east at uninterrupted interfluvial surfaces in dissected Quaternary glacial drift along with the mapped fault projects. Undisturbed surfaces support absence of Quaternary faulting.

**DRAFT**





Notes: 1. See Figures A0.2, A0.3, A0.4, and A0.5 for explanation.  
2. Coordinates in NAD83 UTM Zone 6 North meters.  
3. Elevation from INSAR data



SUSITNA-WATANA HYDROELECTRIC PROJECT  
Clearwater Mountains Area

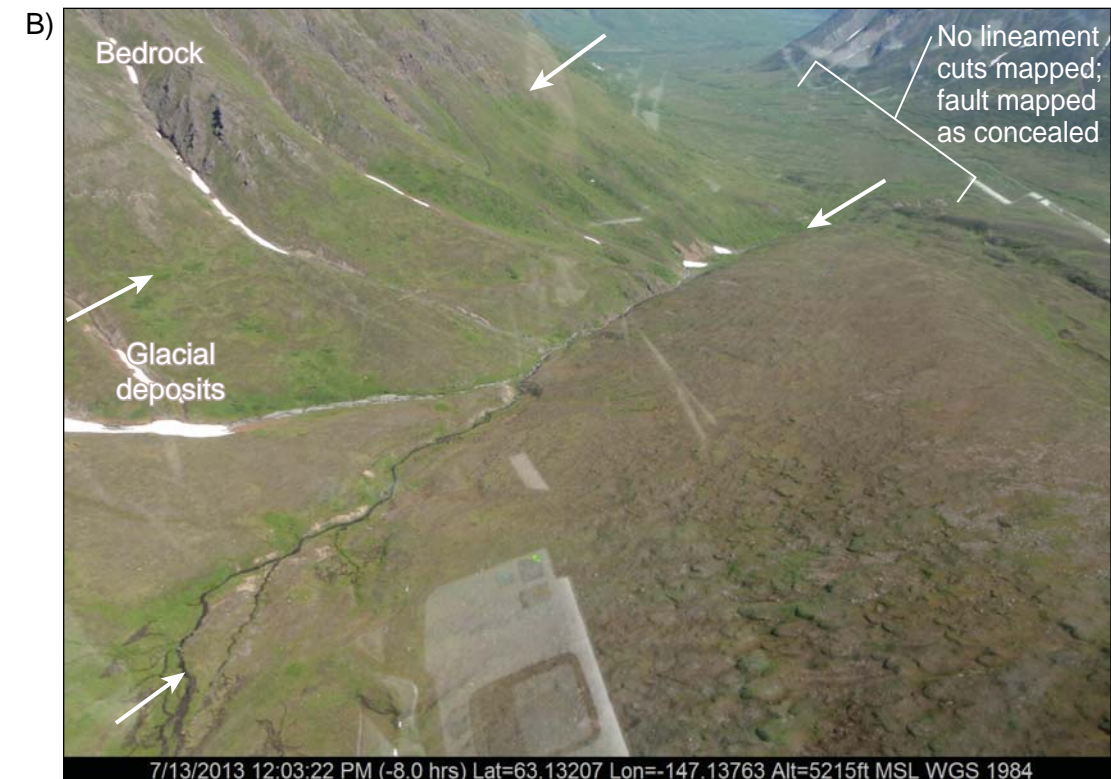
Plate A-CWM

DRAFT





View looking northwest at mine site located along apparent rock type contrast and mapped fault. Arrows point along mapped fault.



View looking northeast along linear drainage mapped as a lineament by FCL that coincides with a mapped fault. Another FCL-mapped lineament lies at the subtle break-in-slope and may correspond to the ice limit elevation.



View looking northeast through the broad saddle at the head of the linear drainage shown in Photograph B. Note the absence of any tectonic geomorphic features.



View looking northwest at location of FCL-mapped lineaments and mining roads partly shown in Photograph C. Note that FCL-mapped lineaments on the sidehill are not readily apparent and correspond to subtle break-in-slope like that shown in Photograph B.

**DRAFT**





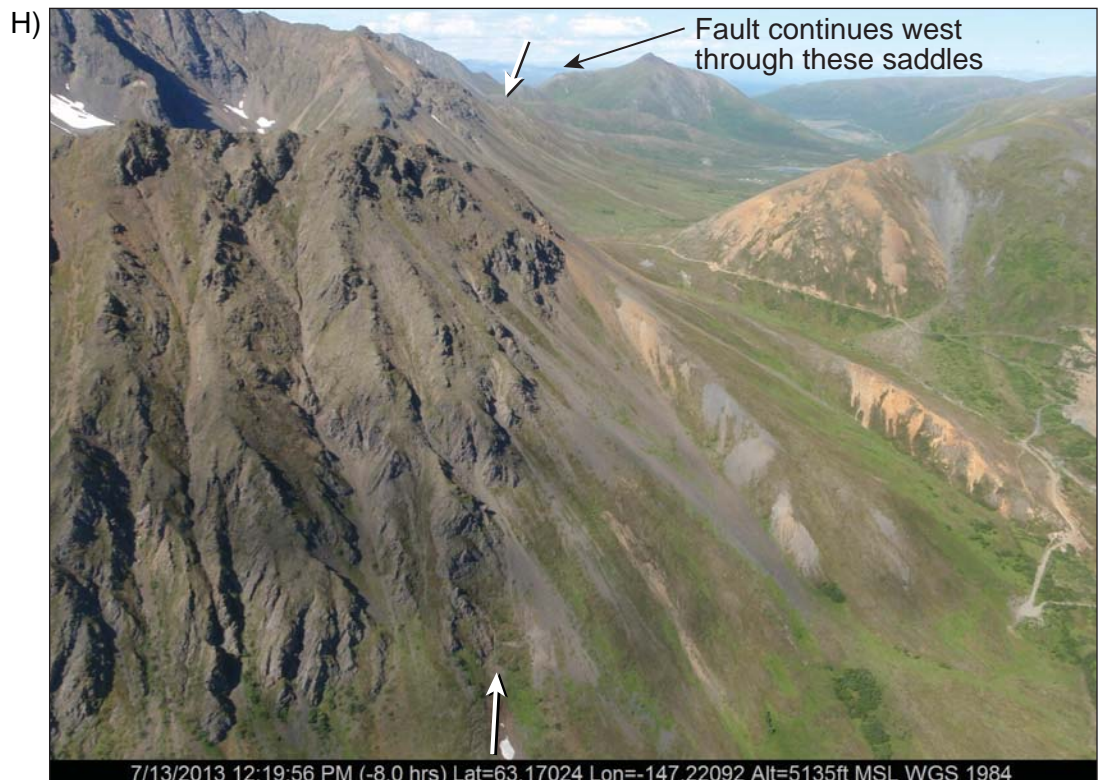
View looking southwest at several rock type contrasts (shown by arrows) that coincide with previously mapped faults.



View looking south-southwest up glaciated valley that shows no expression of the mapped Black Creek fault that is present in adjacent bedrock ridges.



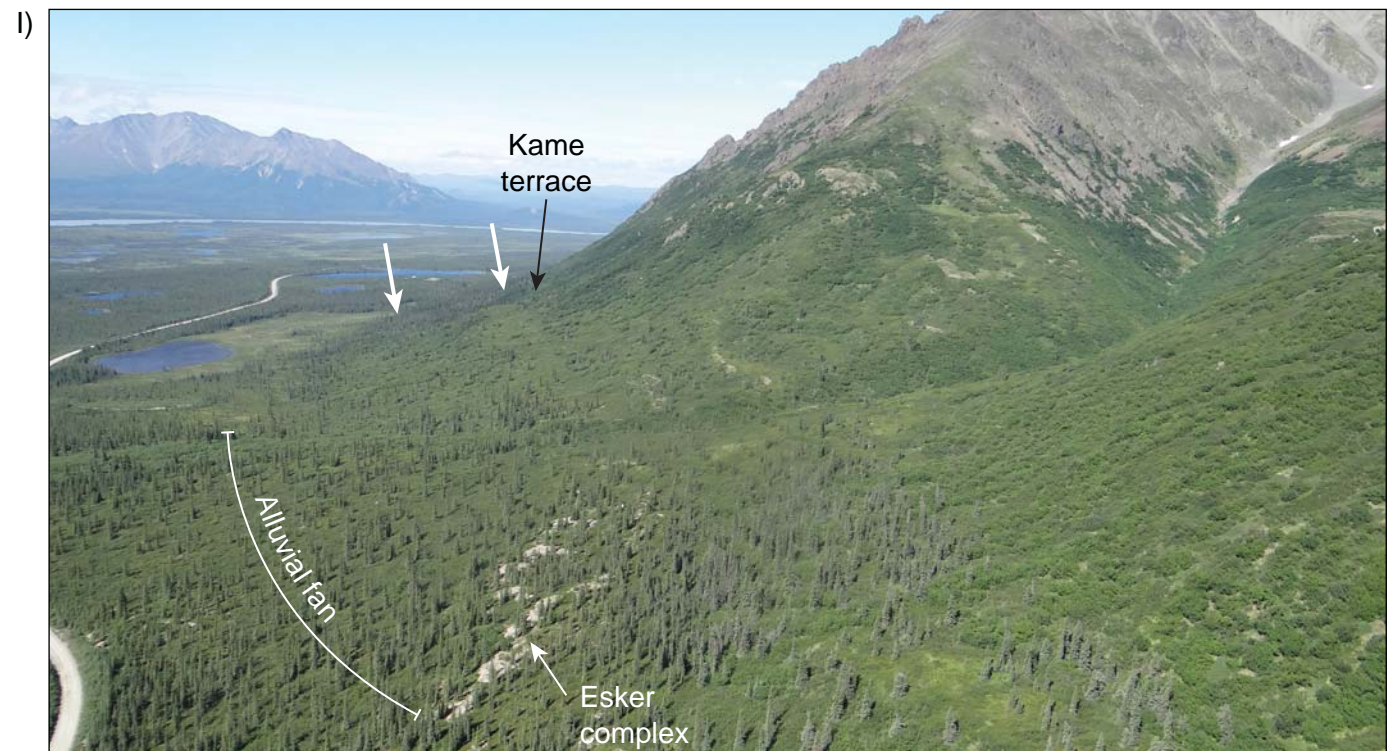
View looking southwest across an FCL-mapped lineament that corresponds to the trace of mapped Black Creek fault marked by a rock contrast. Note that no expression of faulting exists along trend in the glacial sediments of the valley floor.



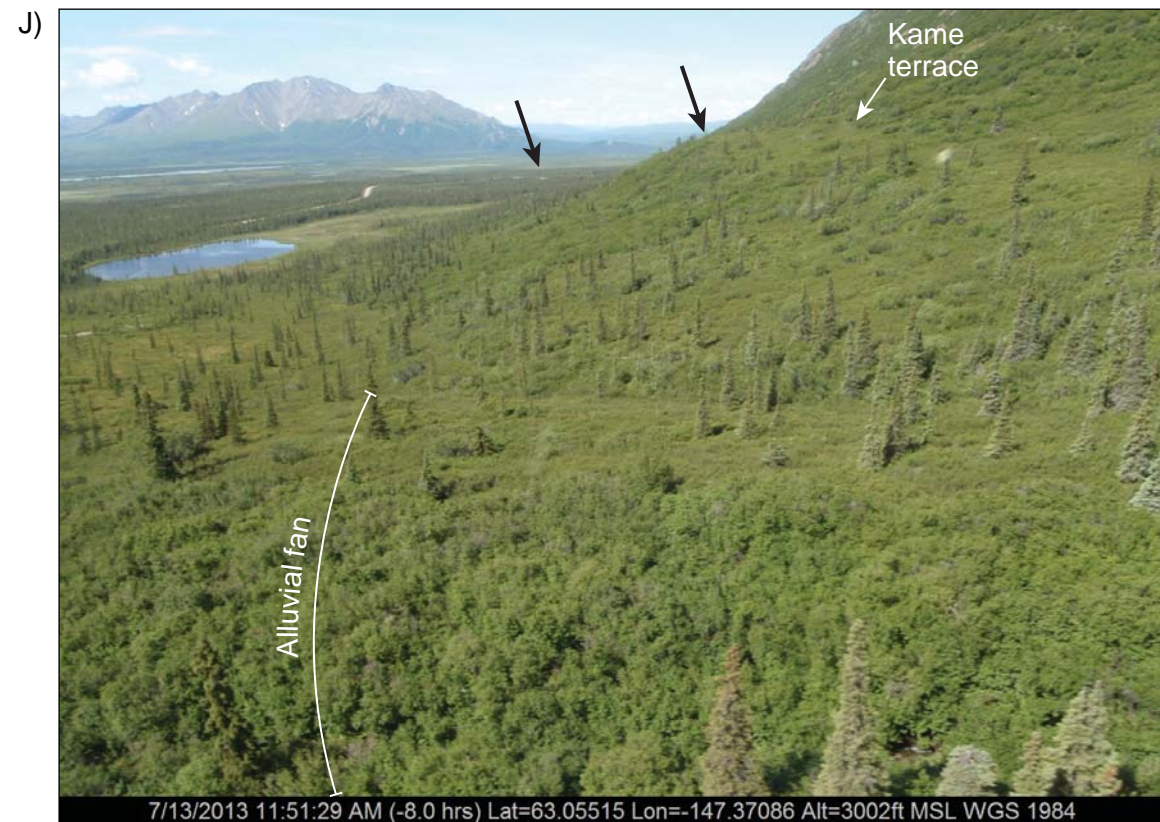
View looking west along the Black Creek fault. Note the obvious rock type contrast across the fault. Aerial reconnaissance confirmed the presence of the fault in bedrock ridges to the west and the lack of expression in glacial sediments in adjacent valley bottoms.

**DRAFT**

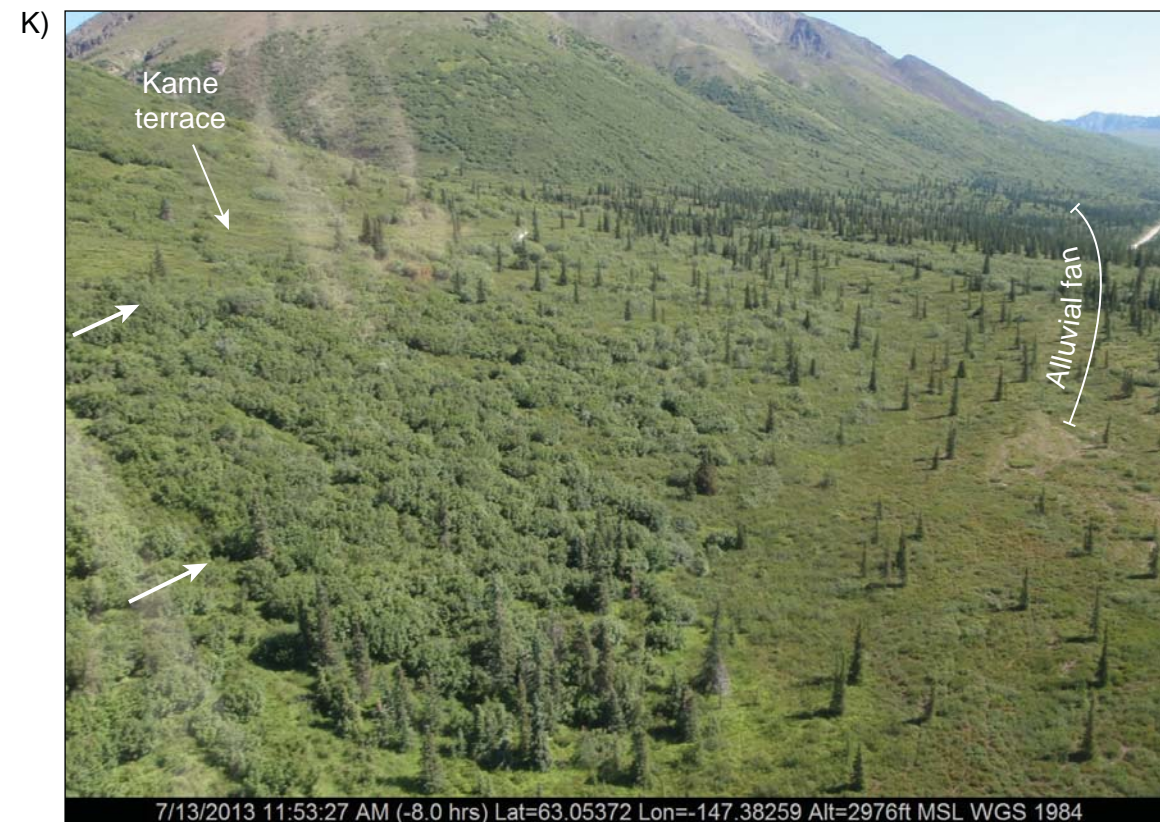




Overview looking west along mapped FCL-mapped lineaments that coincide with left-lateral moraines and kame terraces. The lineaments are interrupted by an alluvial fan and esker complex. Large arrows point along the mapped lineaments.



Close-up view looking west along FCL-mapped lineaments.



Close-up view looking east along FCL-mapped lineaments.