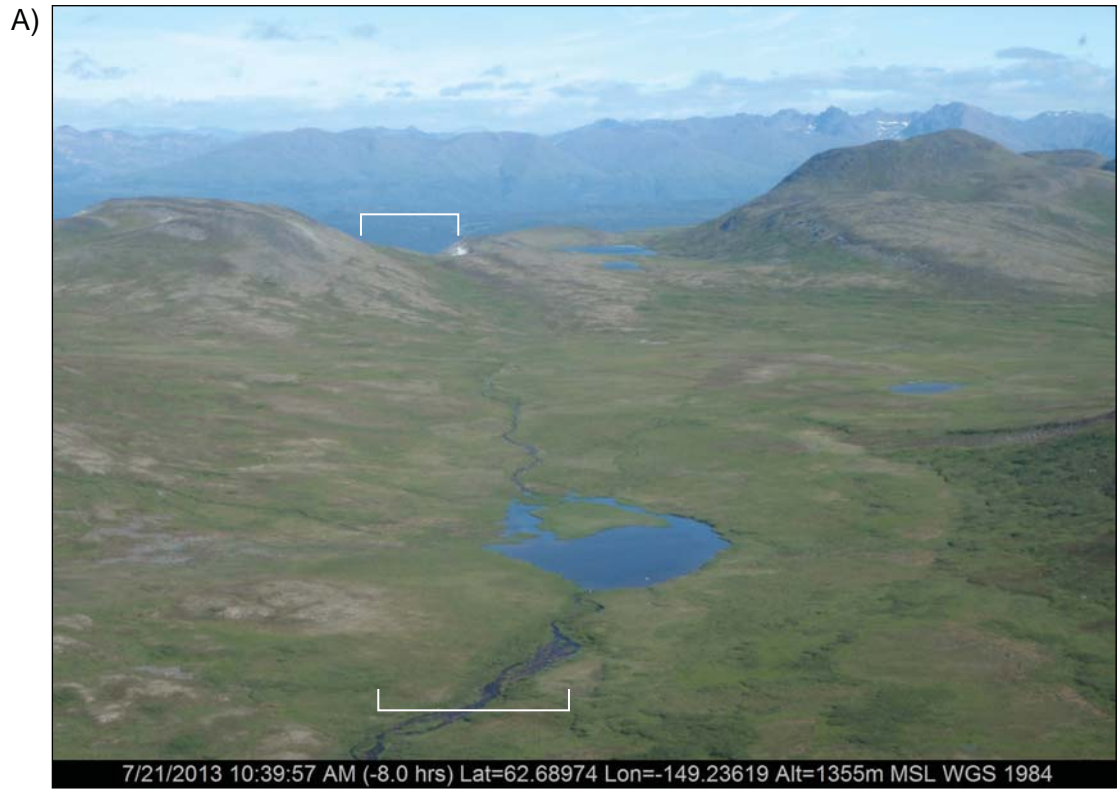


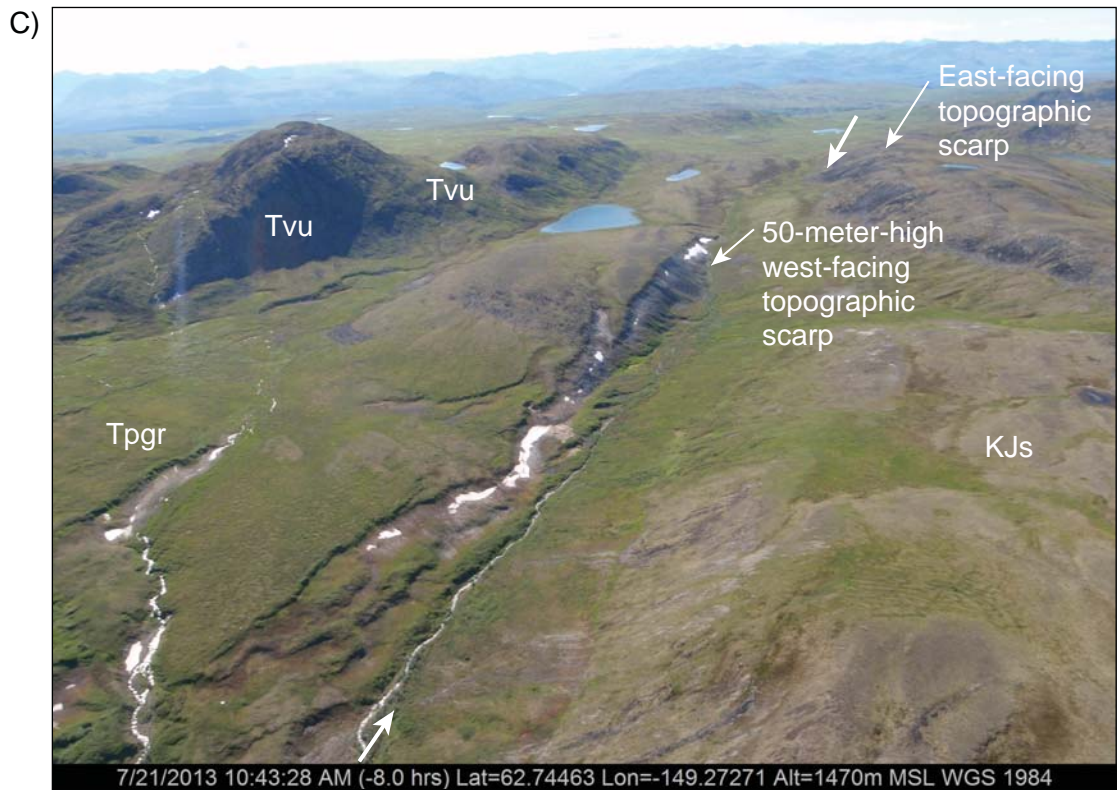
79_218900_Alaska_Railbel/2189_Lineament Report October 2013, modified 10.18.13



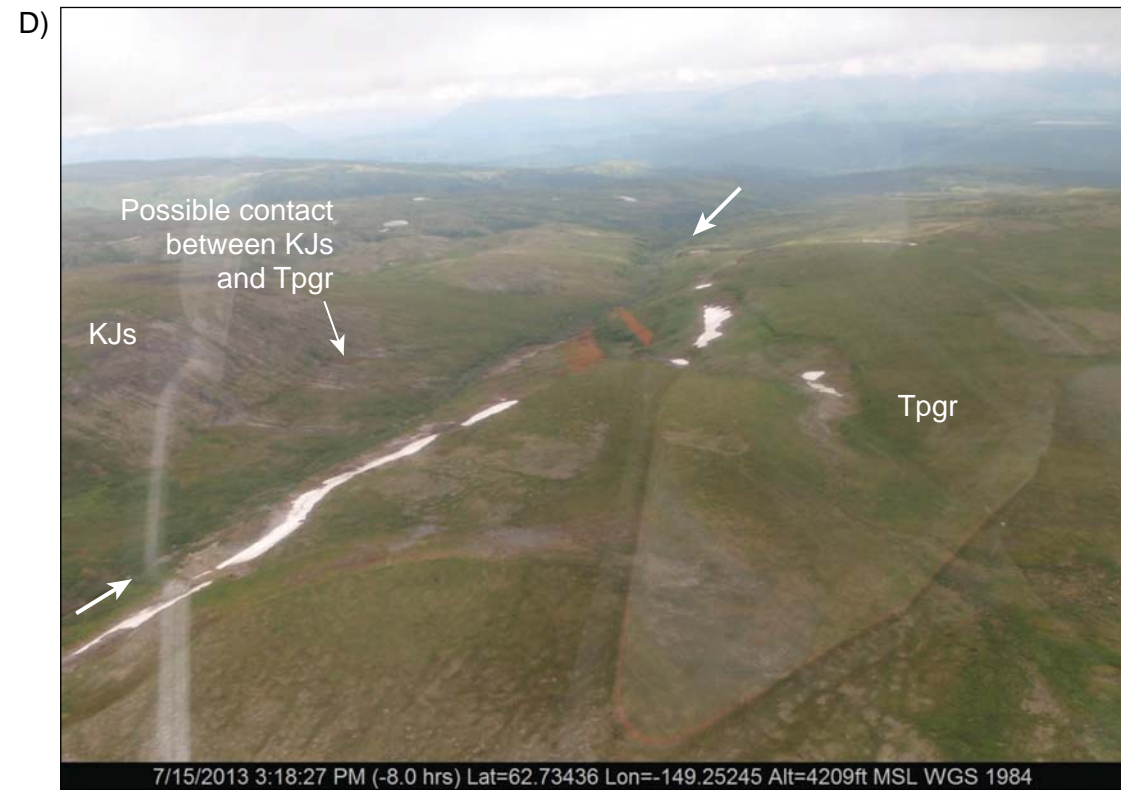
View looking north at middle portion of lineament group 8 along mapped inferred fault. Brackets show position of fault but note that no geomorphic expression of faulting is readily apparent.



Close up view of saddle area shown in Photograph A. Brackets, again, show position of fault but note that no geomorphic expression of faulting is readily apparent.



View looking south opposite that shown in Photograph B above. Mapped fault runs between large arrows. Note presence of many solifluction scarps in the landscape.

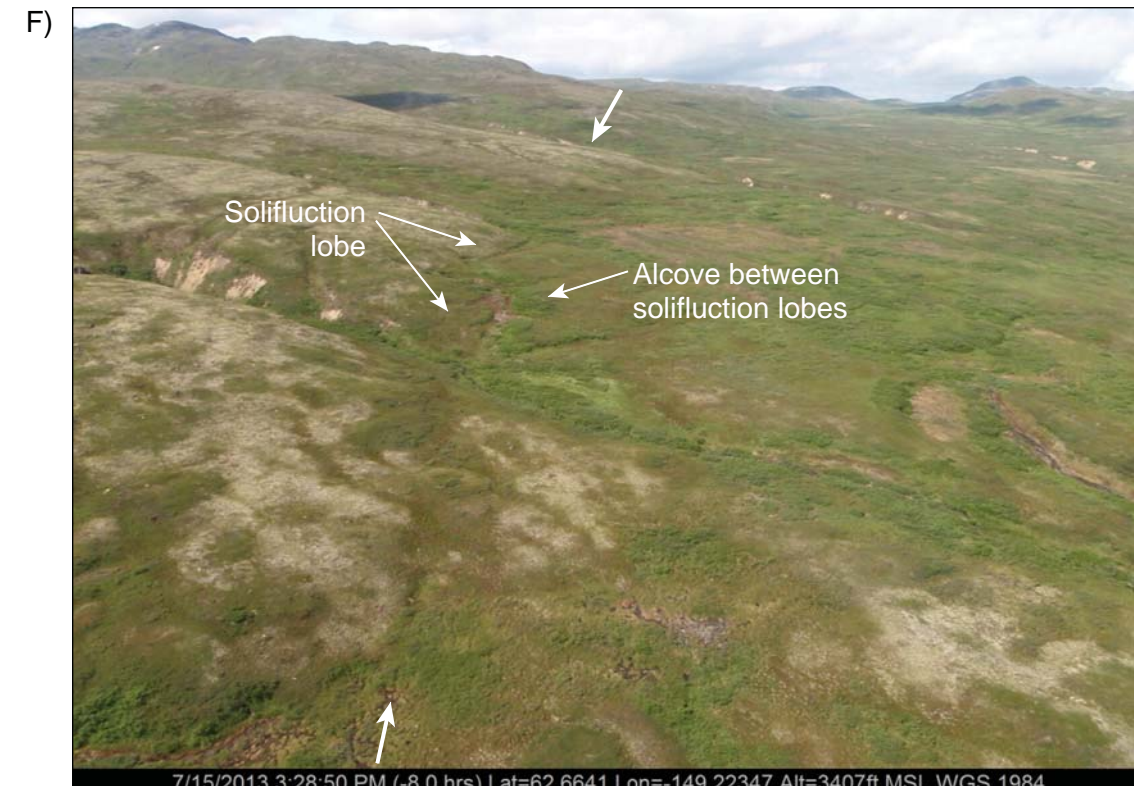


View looking north down the prominent, deeply incised linear drainage. Mapped fault runs between large arrows.

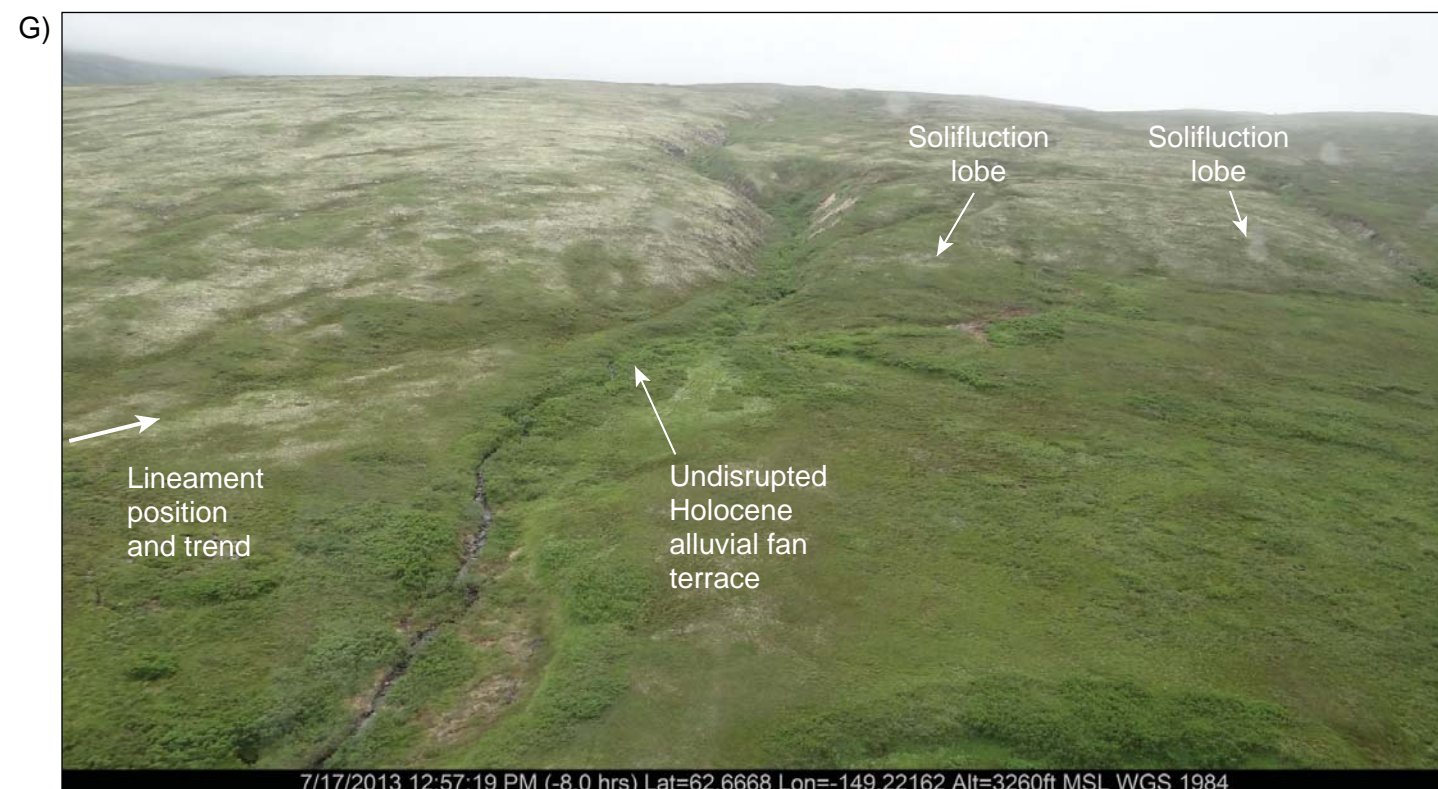
DRAFT



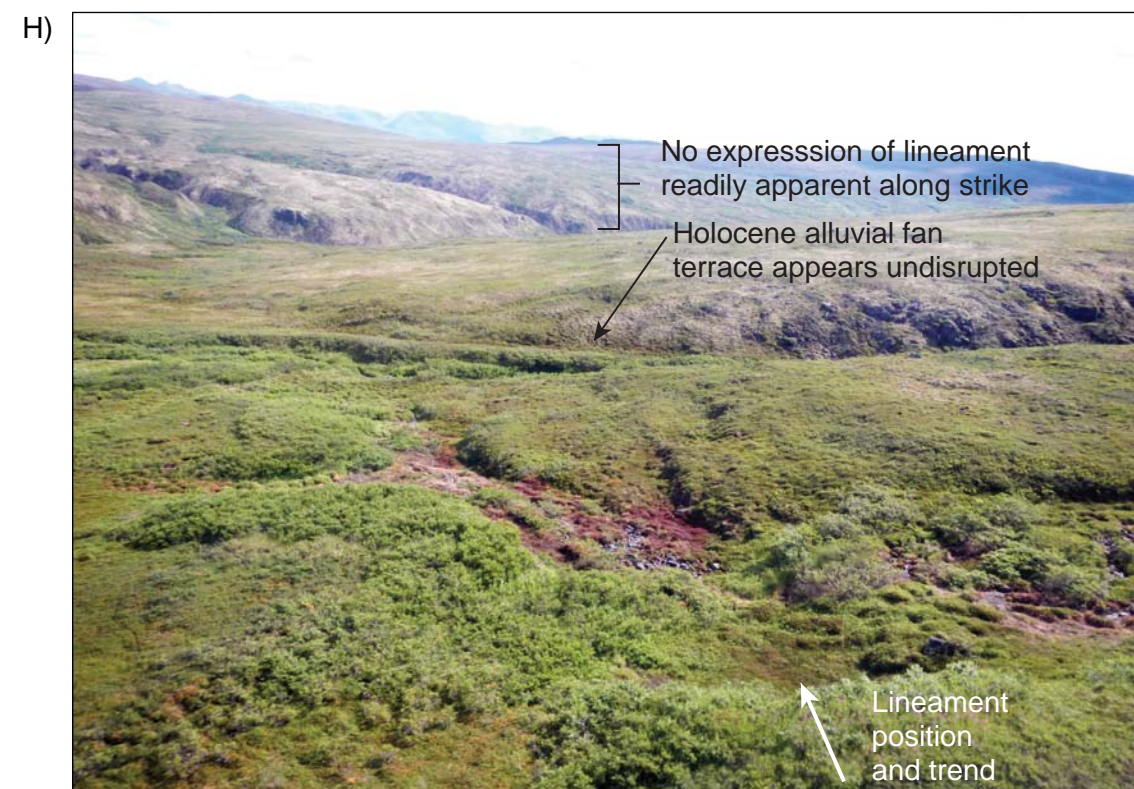
View looking north at north (right) bank of Susitna River showing oxidized mafic dike interpreted by WCC (1982) to not be truncated by the linear drainage.



View looking north along 1- to 2-m-high east-facing scarps along southern portion of lineament group 8. Large arrows point along mapped lineament. Note the presence of solifluction lobes with an alcove or recession in between them that create an irregular and curving topographic scarp.

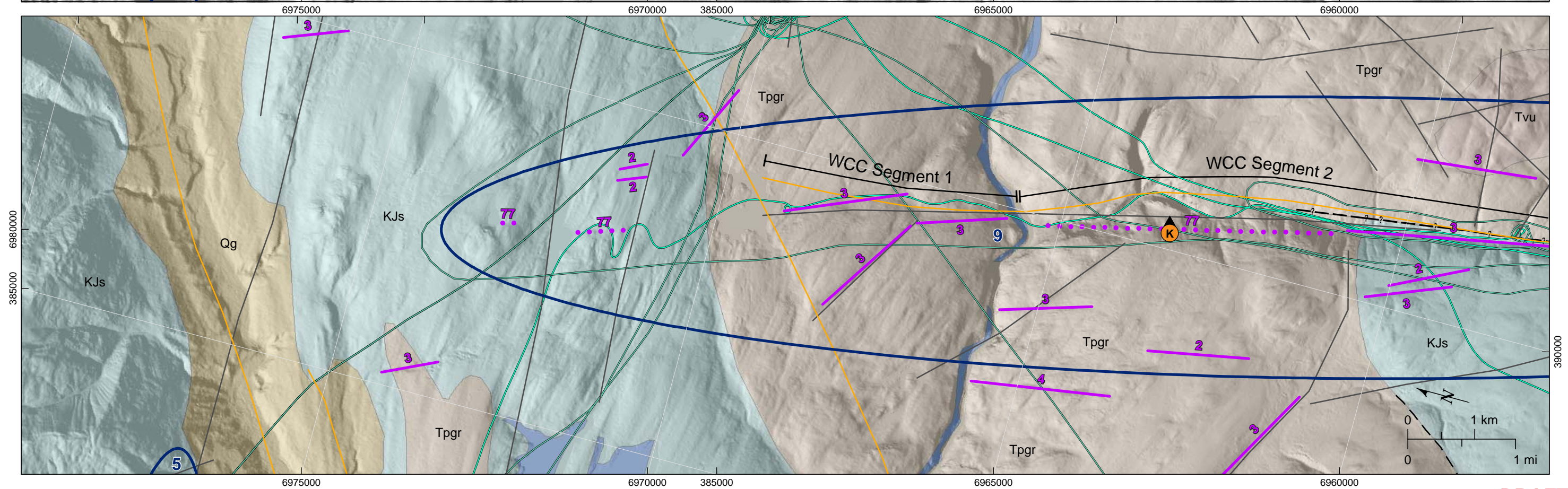
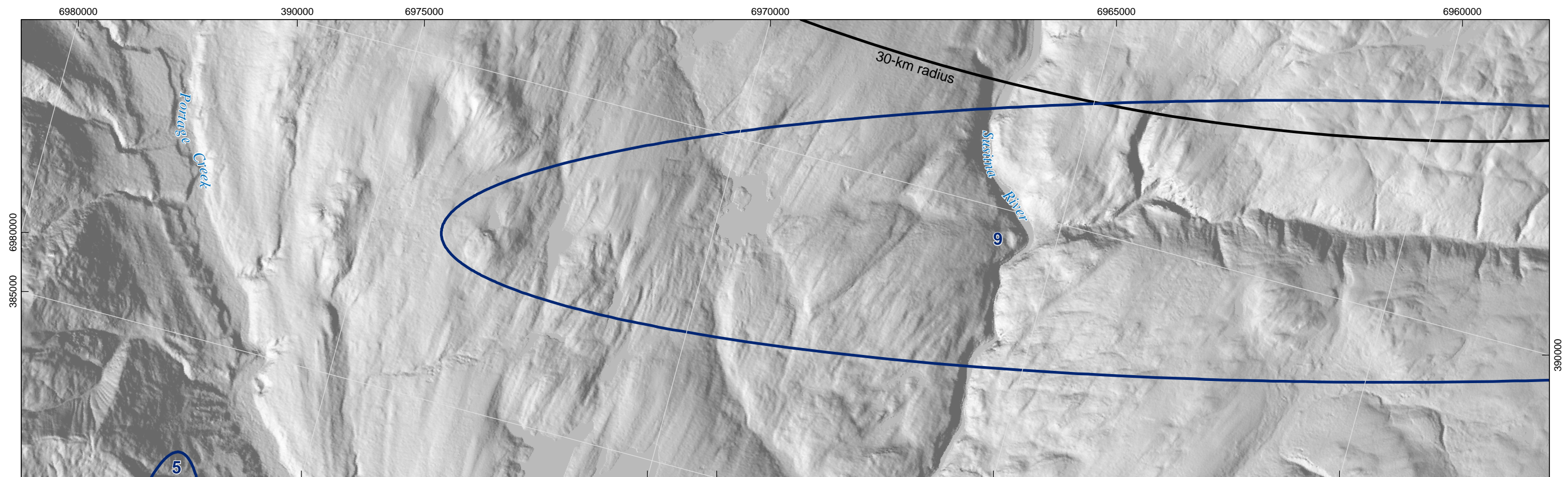


View looking west directly towards 1- to 2-m-high east-facing scarps shown in Photographs F and H. Large arrow points along mapped lineament.

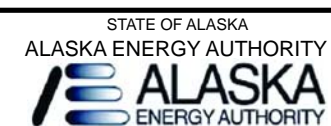


View looking south opposite that shown in Photograph F above. Large arrow points along lineament position and trend.

DRAFT



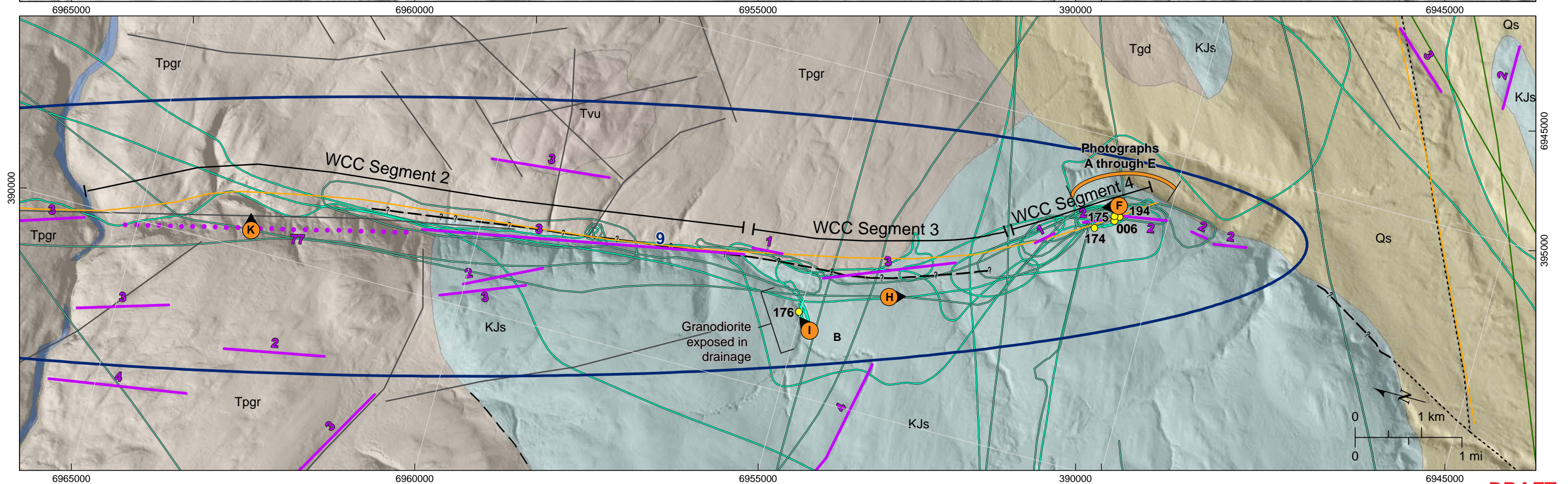
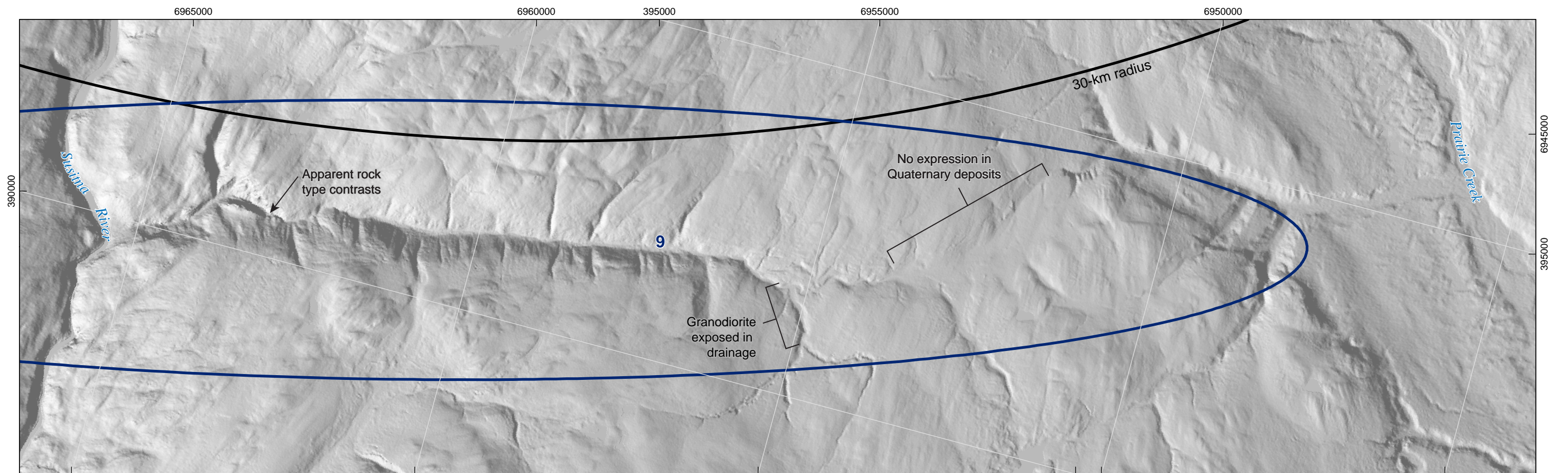
Notes: 1. See Figures A0.2, A0.3, A0.4, and A0.5 for explanation.
 2. Data frame has been rotated 75° west of north.
 3. Geologic map by Wilson et al., 2009.



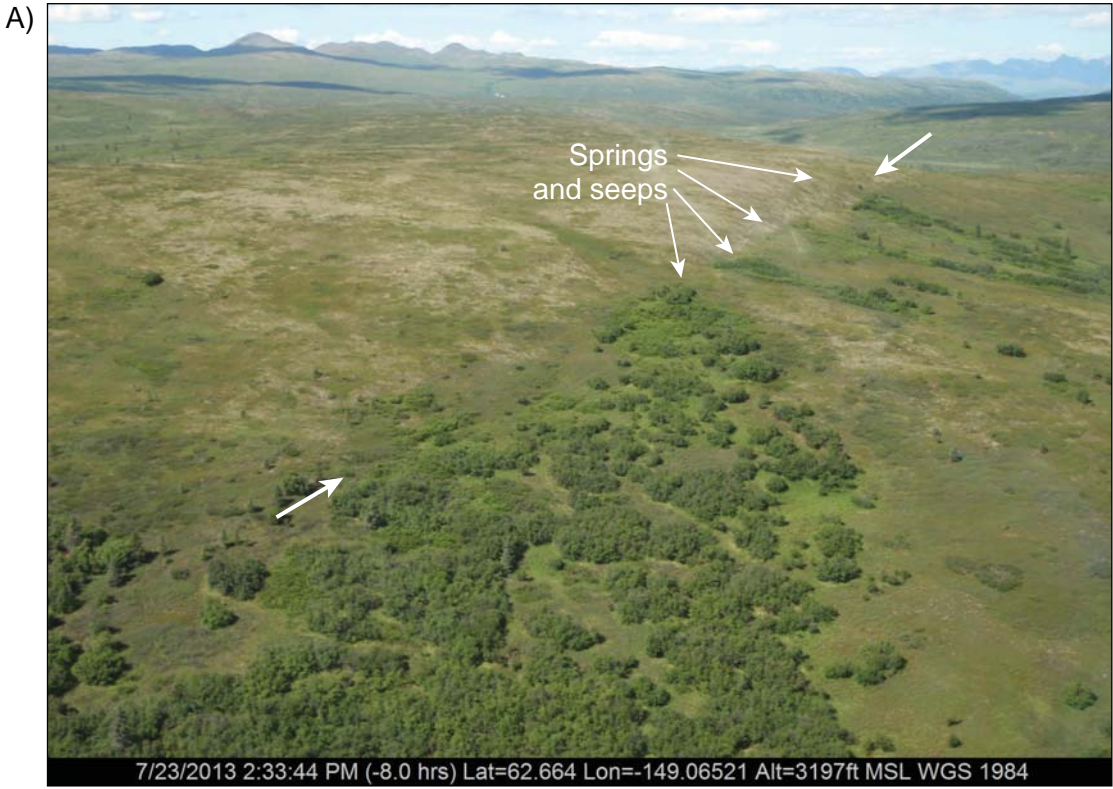
SUSITNA-WATANA HYDROELECTRIC PROJECT
 LINEAMENT GROUP 9
 MAP DATA

DRAFT

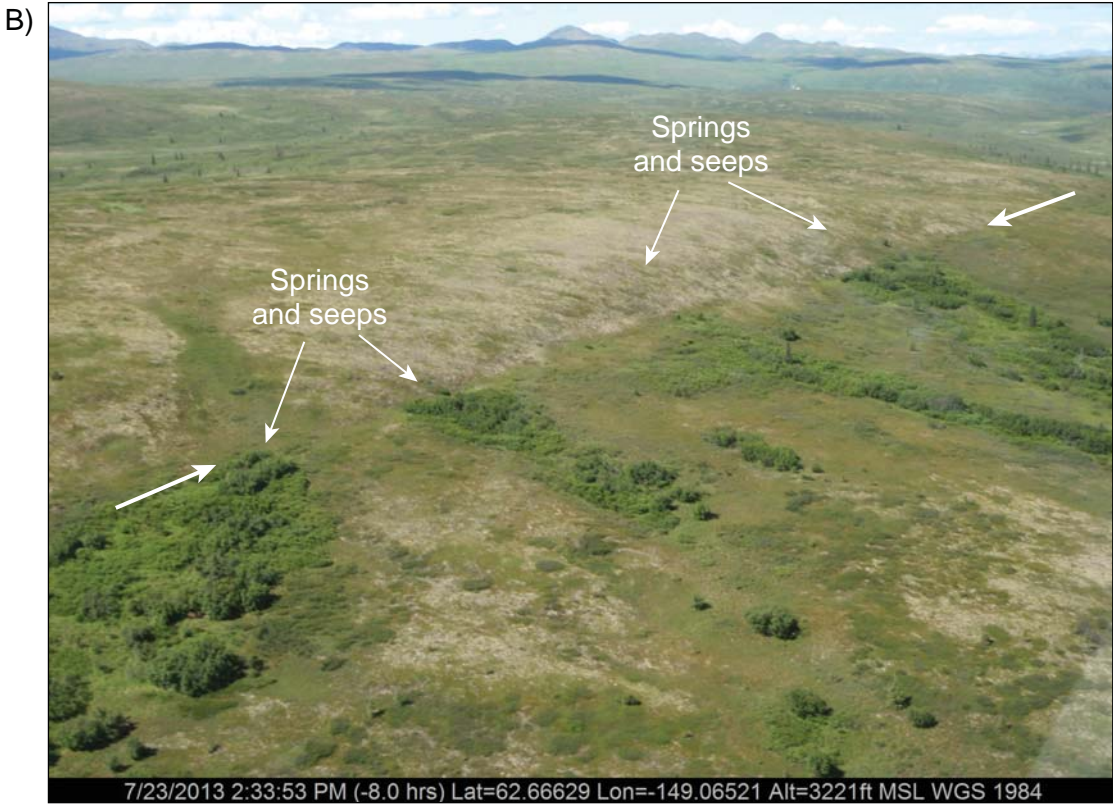
FIGURE
 A9-1.1



Notes: 1. See Figures A0.2, A0.3, A0.4, and A0.5 for explanation.
 2. Data frame has been rotated 75° west of north.
 3. Geology by Wilson et al., 2009.



The first in a sequence of 5 photographs looking northwest taken along a series of north-trending, east-facing aligned slope breaks in the southernmost portion of lineament group 8. Large arrows point along lineament.

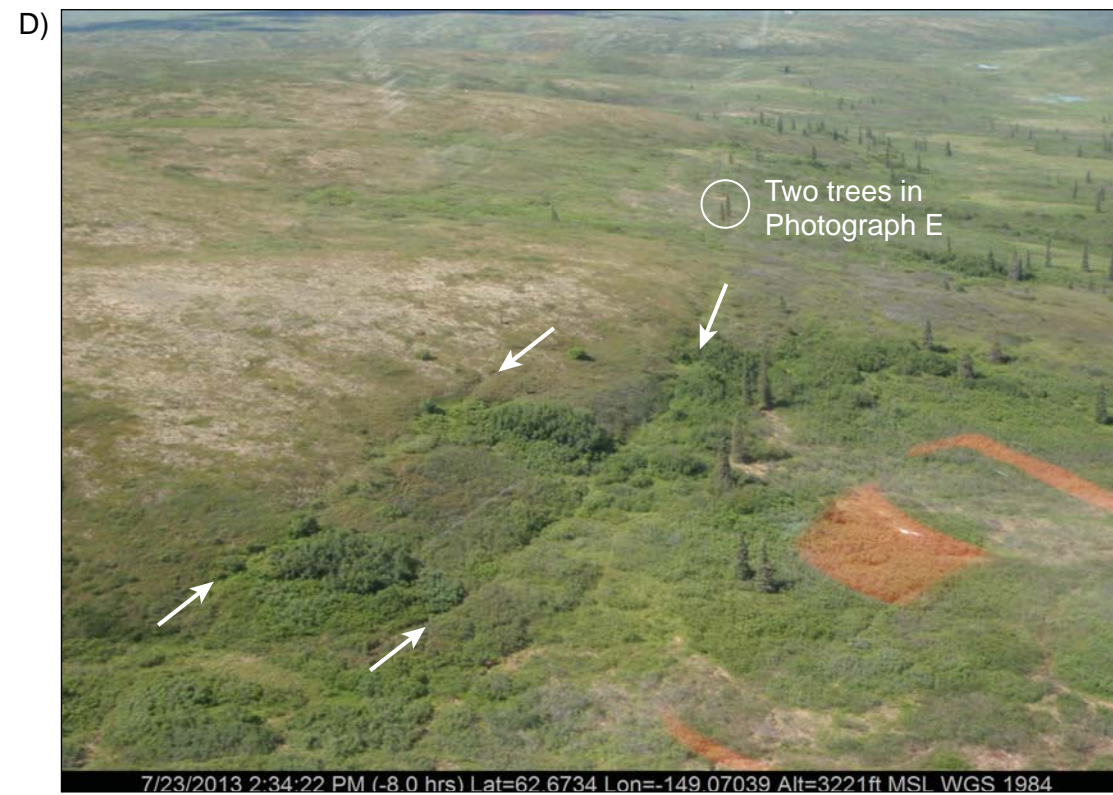


Photograph 2 of 5 looking northwest. Large arrows point along lineament.

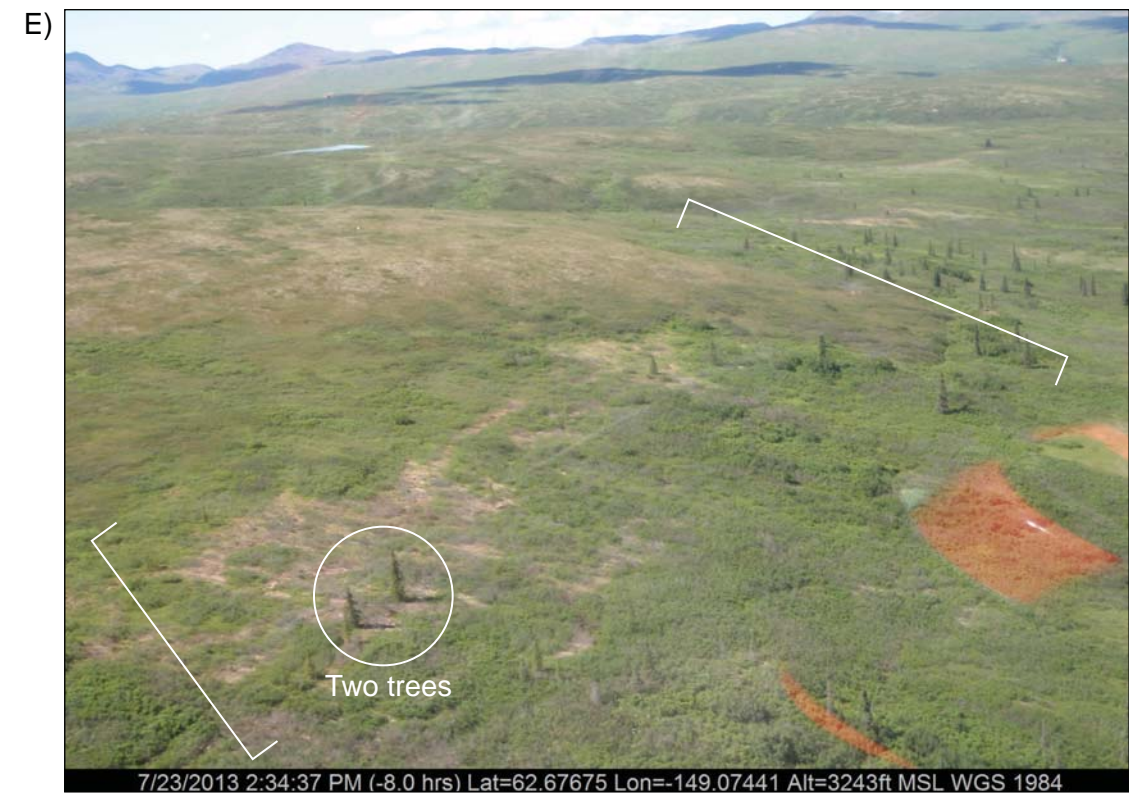


Photograph 3 of 5 looking northwest. Large arrows point along lineament.

DRAFT



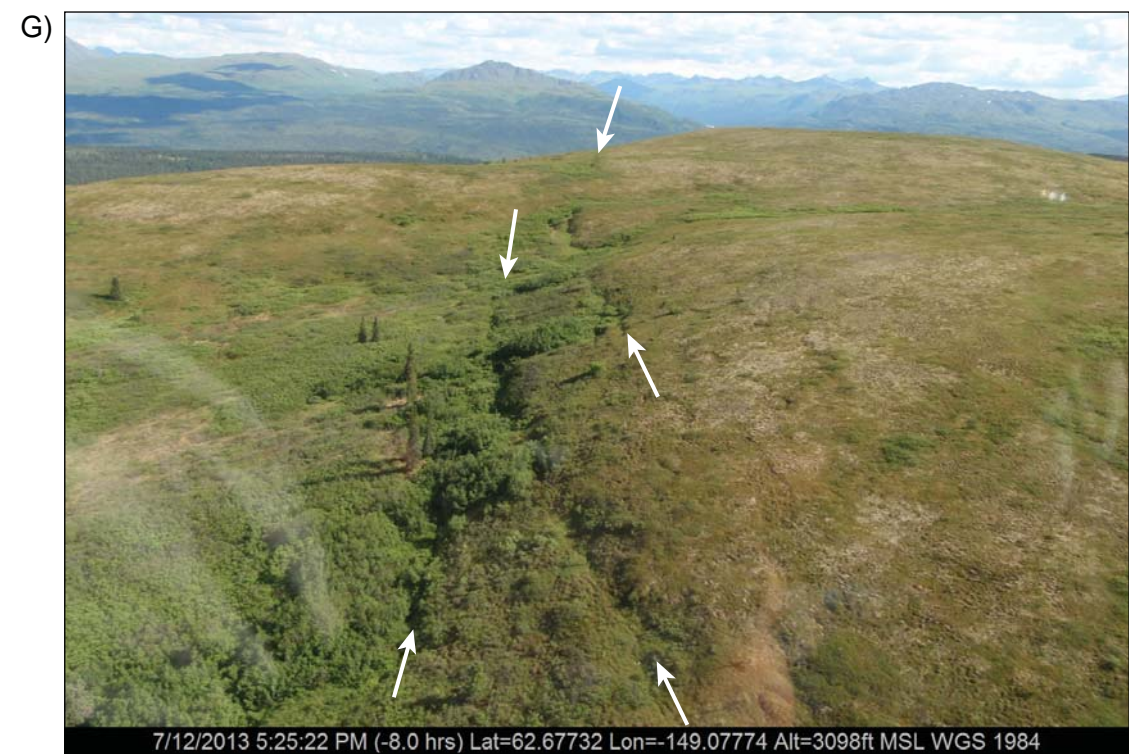
Photograph 4 of 5 with view looking northwest. Large arrows point along lineaments.



Photograph 5 of 5 with view looking northwest. Note that lineament expression has died out and brackets bound the location of its projection.



View looking north from location F. Geologist at base of east-facing break-in-slope is 170 cm tall.



View looking almost 180 degrees from that shown in Photograph D. Large arrows point along lineaments.

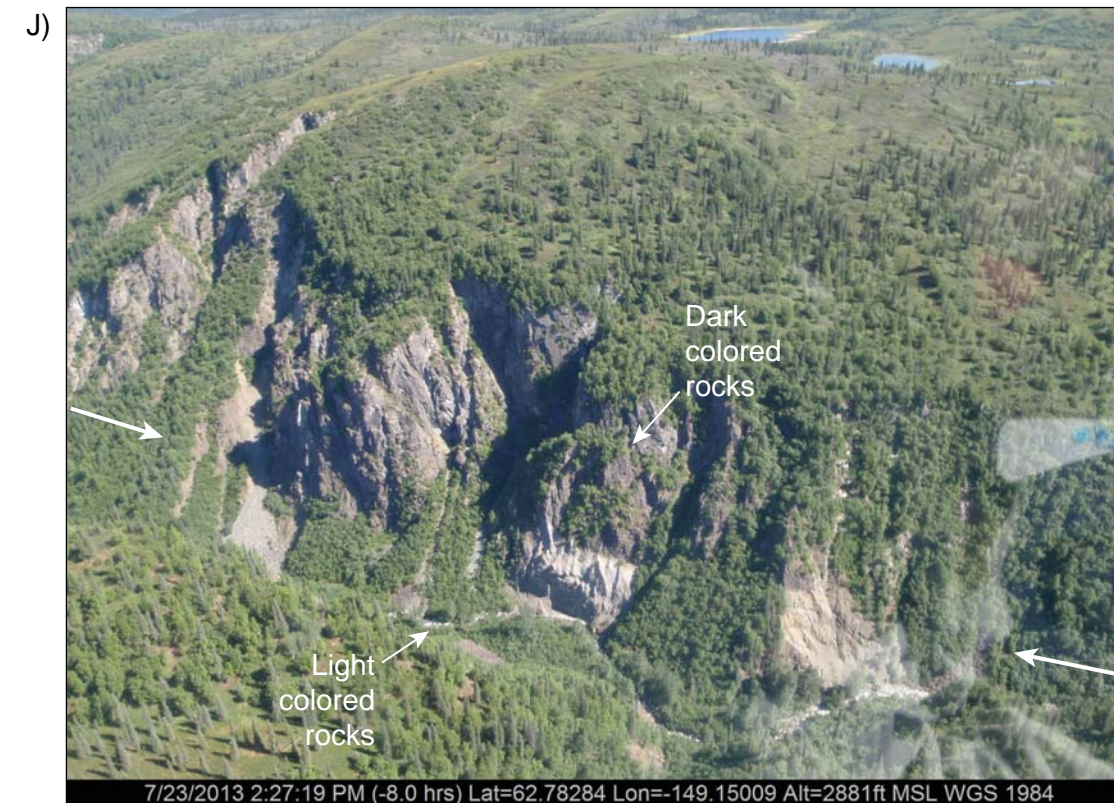
DRAFT



View looking south from location I across area within WCC's segment 3. Note the lack of expression of any lineaments in the broad depression.

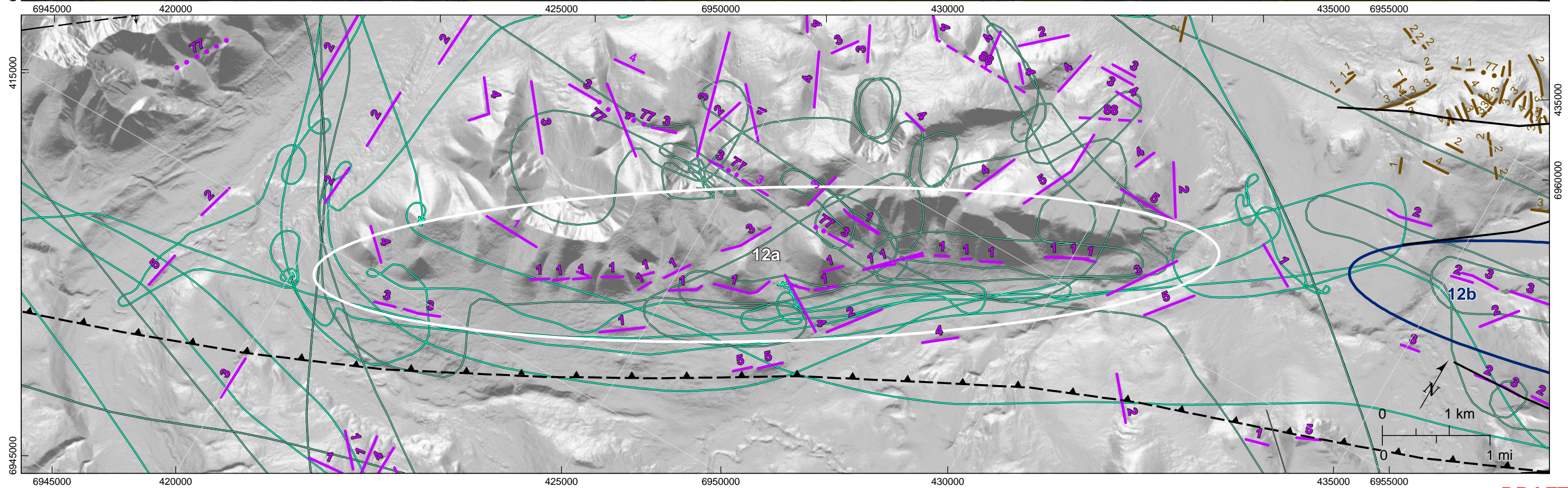
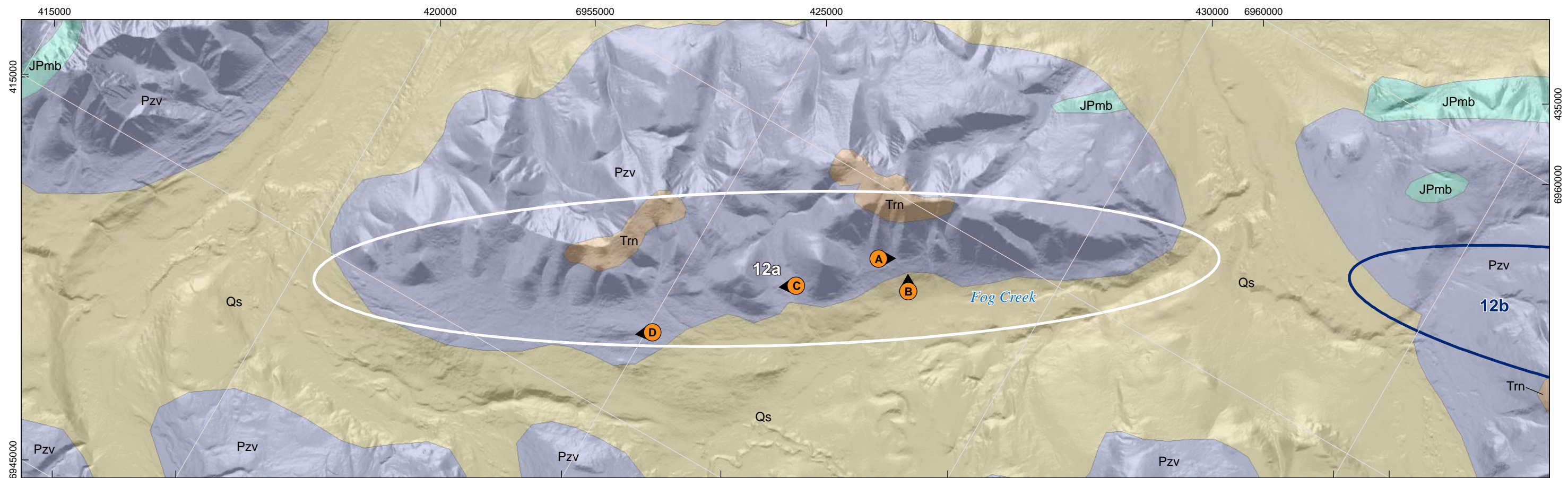


Exposures of widespread granodiorite in unnamed creek near GPS waypoint 176 in terrain mapped as flysch (map unit KJs) by Wilson et al. (2009). The geologist is approximately 175 cm tall.



View looking northeast at right wall of linear v-shaped canyon. Large arrows point along apparent bedrock type contrast.

DRAFT



Notes: 1. See Figures A0.2, A0.3, A0.4, and A0.5 for explanation.
 2. Data frame has been rotated 30° east of north.
 3. Geologic map by Wilson et al., 2009.



SUSITNA-WATANA HYDROELECTRIC PROJECT
 LINEAMENT GROUP 12a
 MAP DATA

DRAFT

FIGURE
 A12a.1



View looking northeasterly along lineaments. Arrows point along trend and position of lineaments.



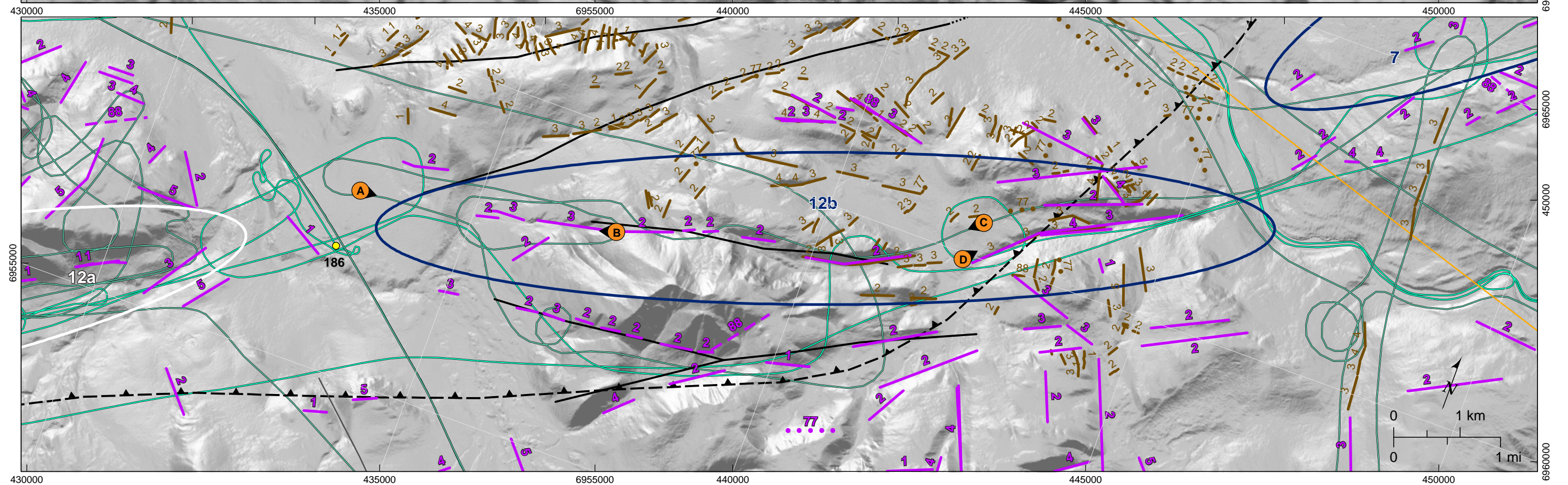
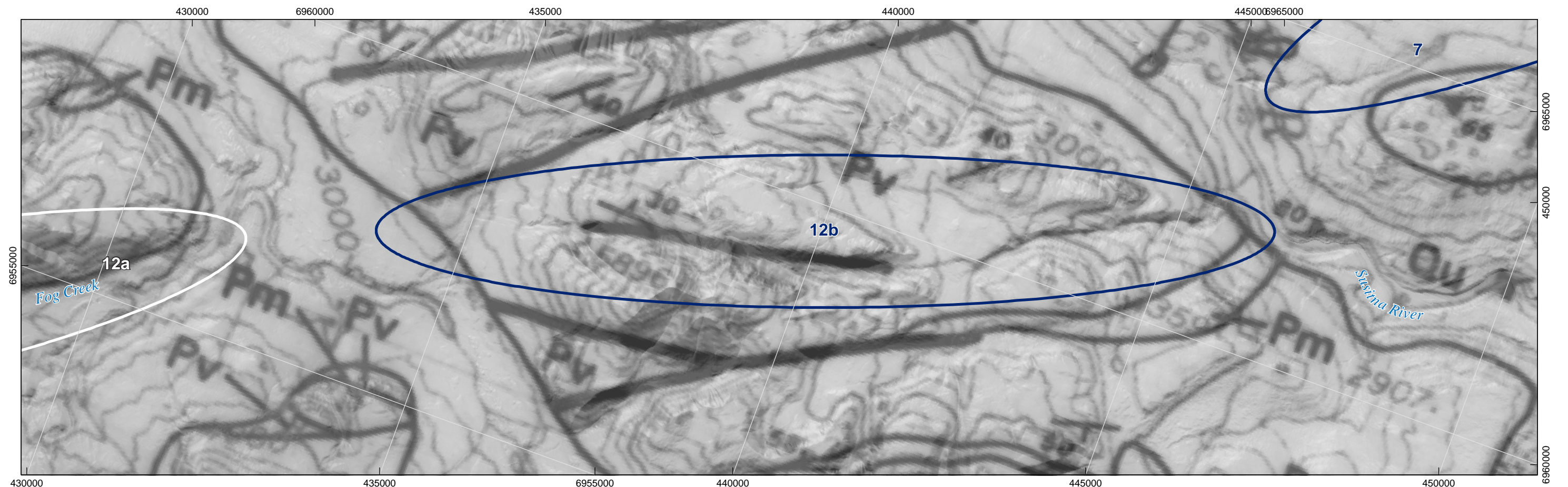
View of lineaments expressed in Quaternary sediment.



View looking at notch in bedrock with expression of apparent northwesterly dip.

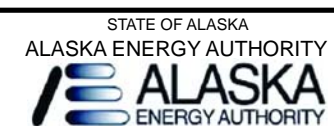


View looking southwesterly along glacially scoured surface.



Notes: 1. See Figures A0.2, A0.3, A0.4, and A0.5 for explanation.
 2. Data frame has been rotated 20° east of north.
 3. Geologic map by Clautice et al., 2009.

DRAFT



SUSITNA-WATANA HYDROELECTRIC PROJECT
 LINEAMENT GROUP 12b
 MAP DATA

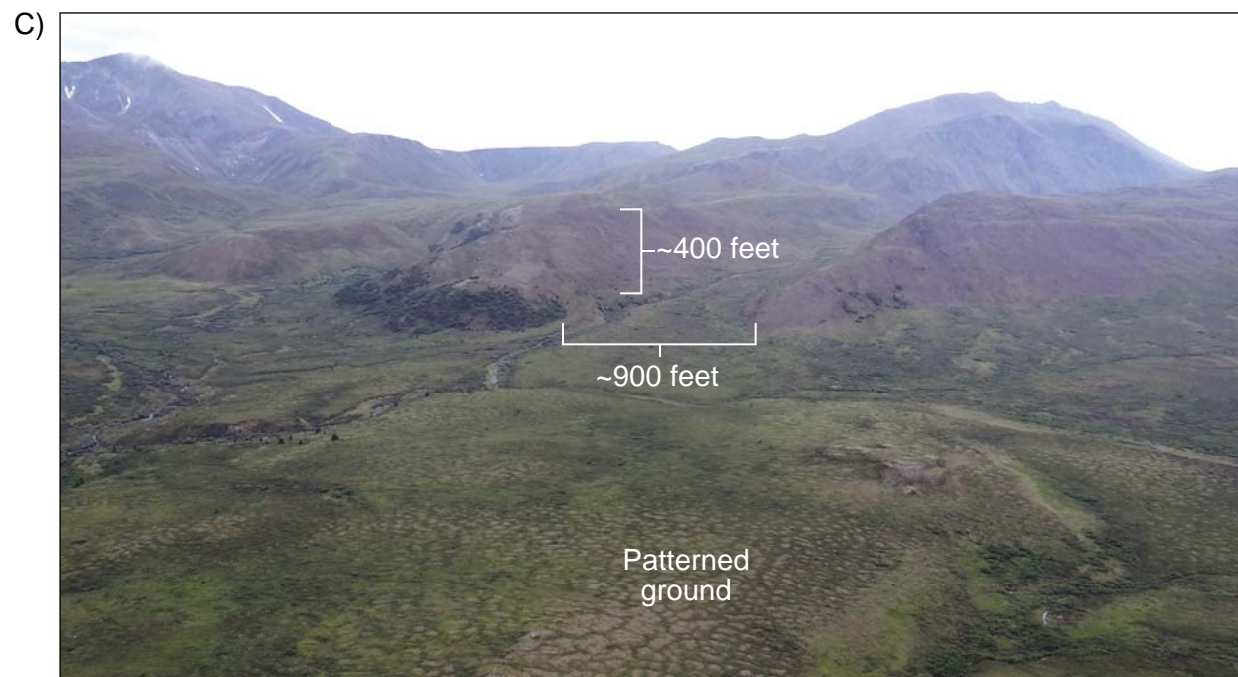
FIGURE
 A12b.1



View looking northeast at erosional break-in-slope mapped as an individual lineament. Feature is absent in the background along projection of strike.



View looking southwest down-valley along lineament geomorphically expressed as linear valley. Very little alluvium has accumulated in the drainage, and glacially sculpted bedrock is shallow.

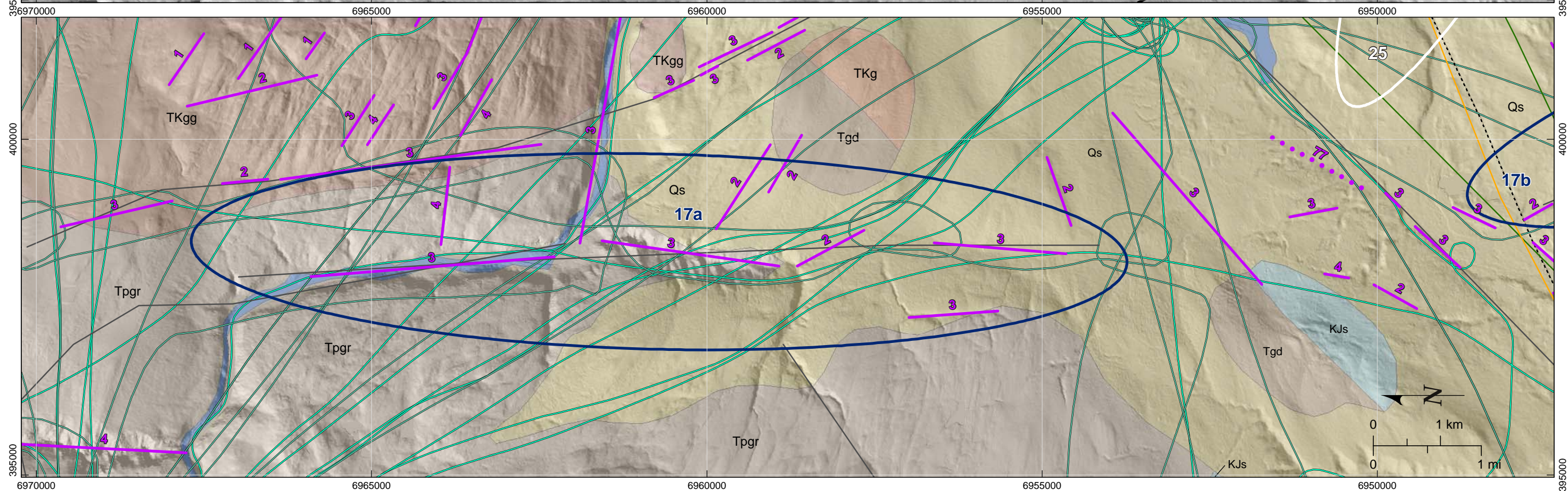
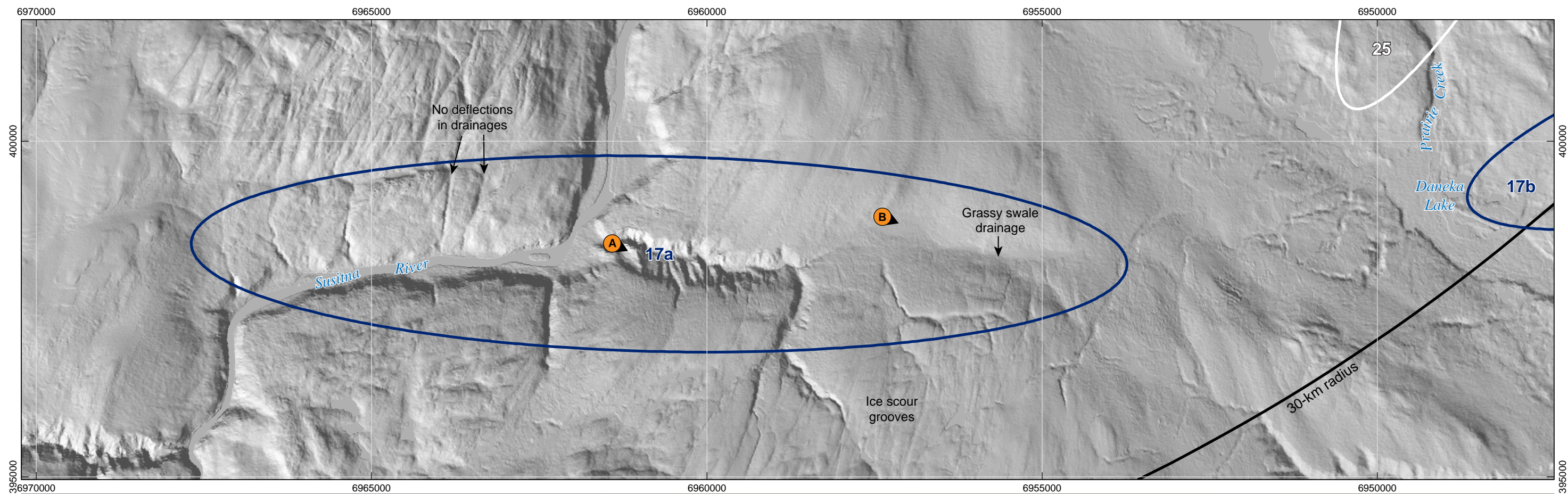


View southerly up-valley into glacial valley along lineaments geomorphically expressed as linear valley and drainage. Underfit creek in deep linear valley suggests landform created by sub-ice channel meltwater.

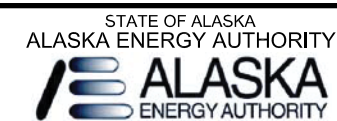
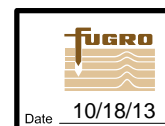


View northerly down-valley along lineaments geomorphically expressed as linear drainage. Thin cover of unconsolidated surficial sediment mantles the Paleozoic rocks.

DRAFT



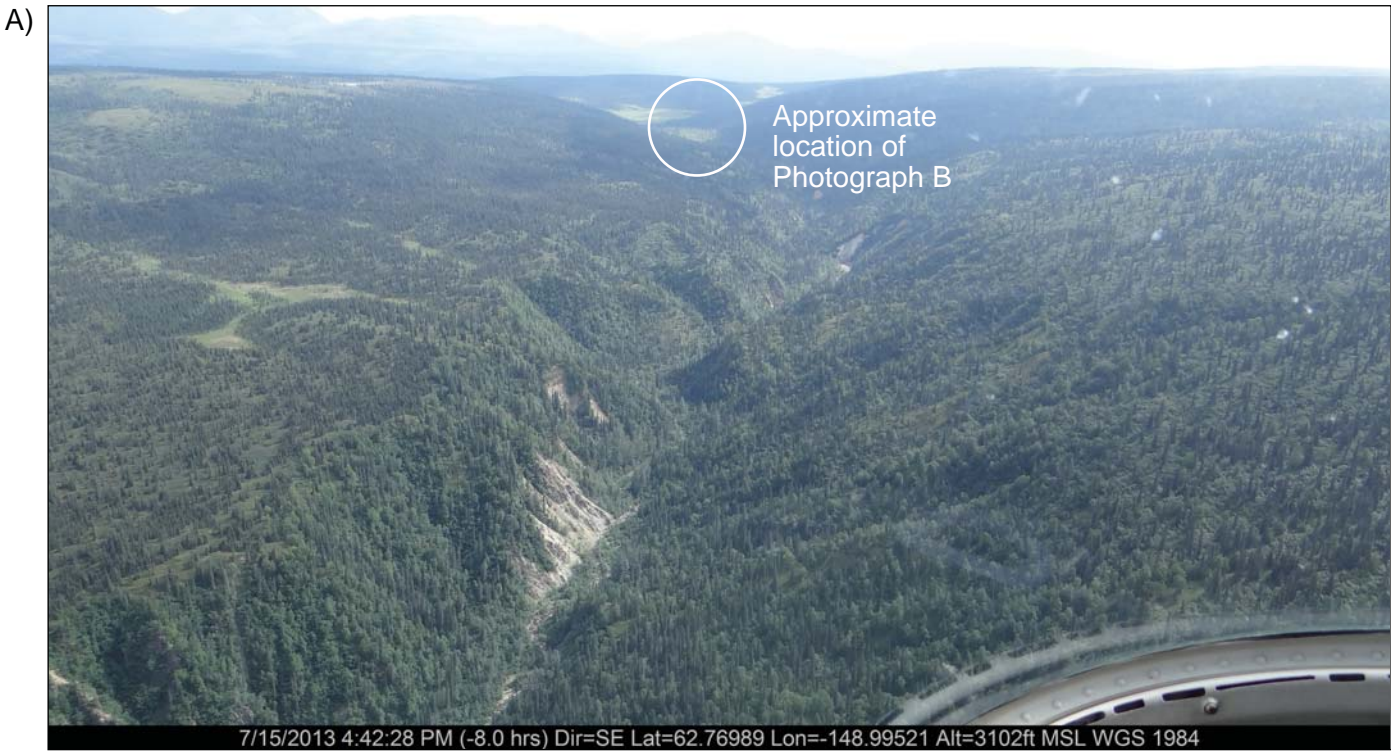
Notes: 1. See Figures A0.2, A0.3, A0.4, and A0.5 for explanation.
 2. Data frame has been rotated 90° west of north.
 3. Geology by Wilson et al., 2009.



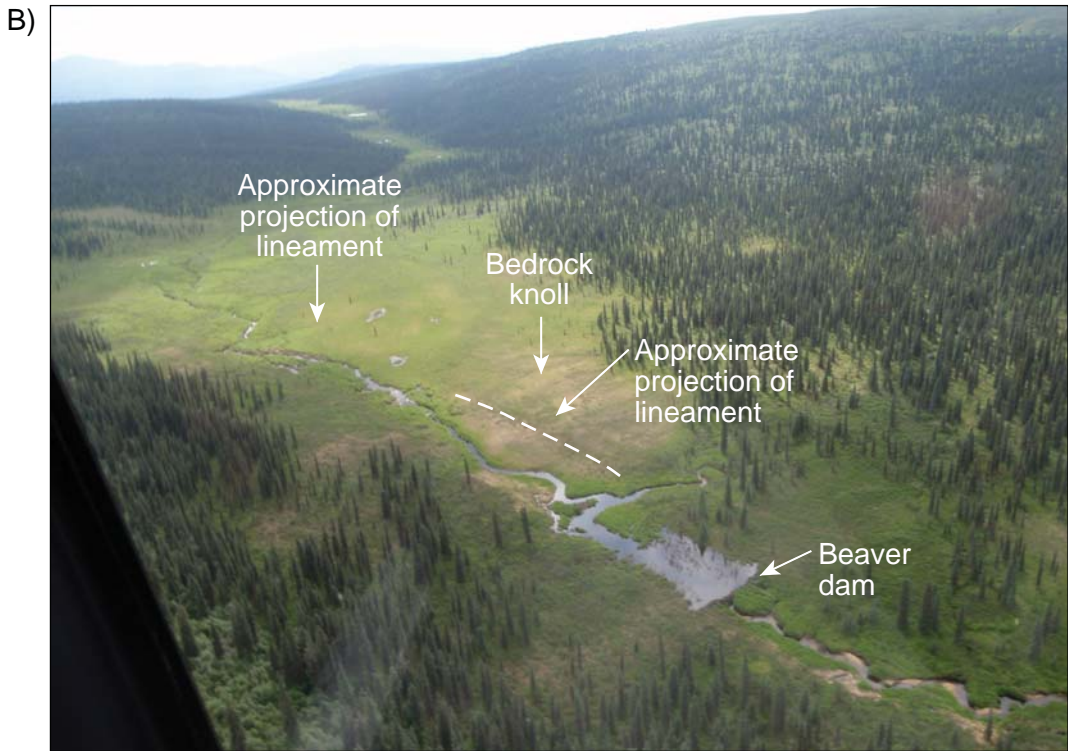
SUSITNA-WATANA HYDROELECTRIC PROJECT
 LINEAMENT GROUP 17a
 MAP DATA

DRAFT

FIGURE
 A17a.1

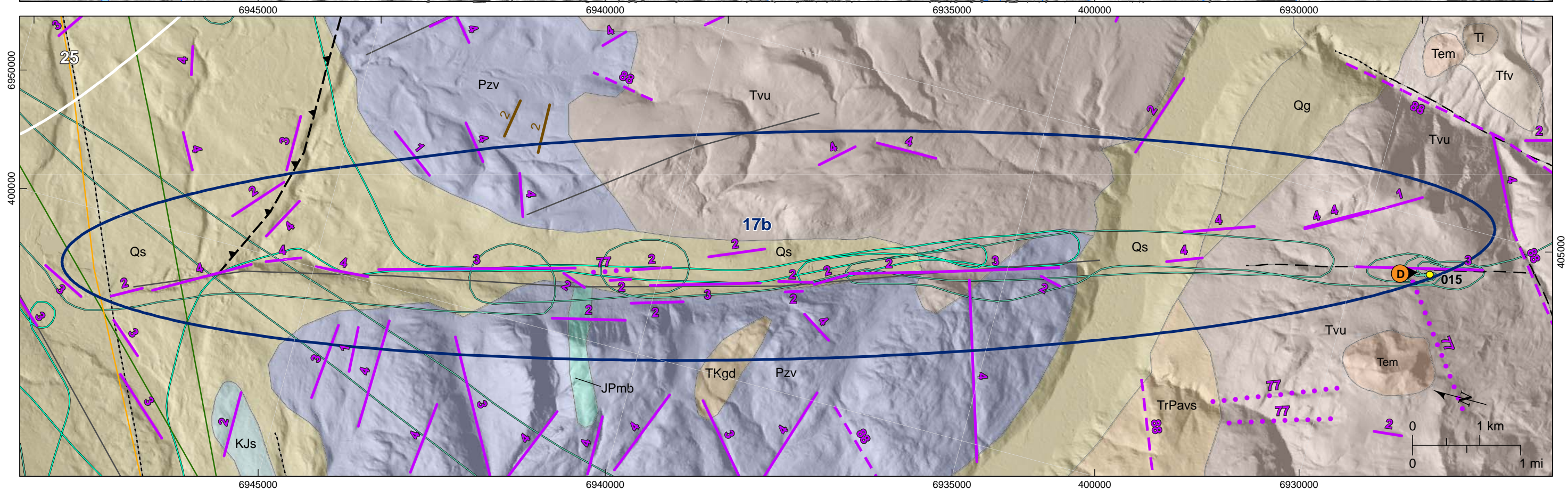
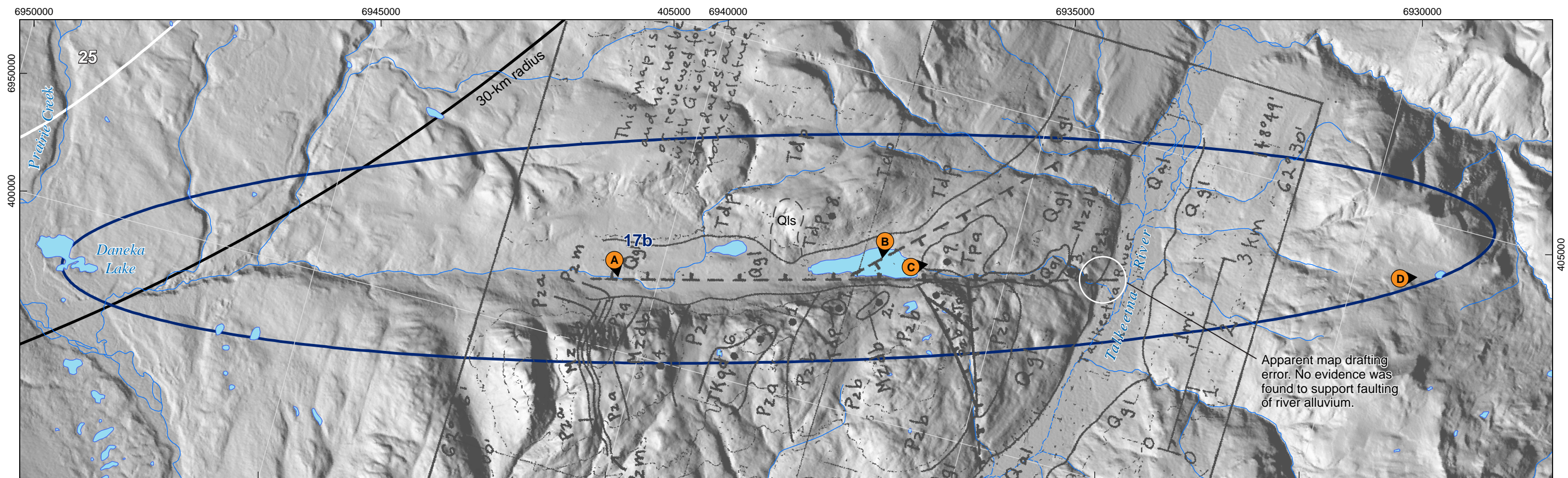


View looking south at linear canyon that is tributary to the Susitna River. Canyon bottom and creek drainage have sinuosity not apparent at smaller scales.



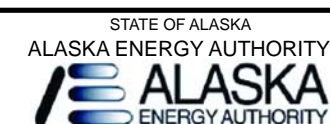
View looking north-northeast at creek in boggy (Holocene) drainage. Lineament is expressed as a depositional contact along the shallow bedrock knoll.

DRAFT



- Notes: 1. See Figures A0.2, A0.3, A0.4, and A0.5 for explanation.
 2. Data frame has been rotated 75° west of north.
 3. Geology by Csejtey (1974), Talkeetna Mountains, Figure 4 (top) and Wilson et al., 2009 (bottom).

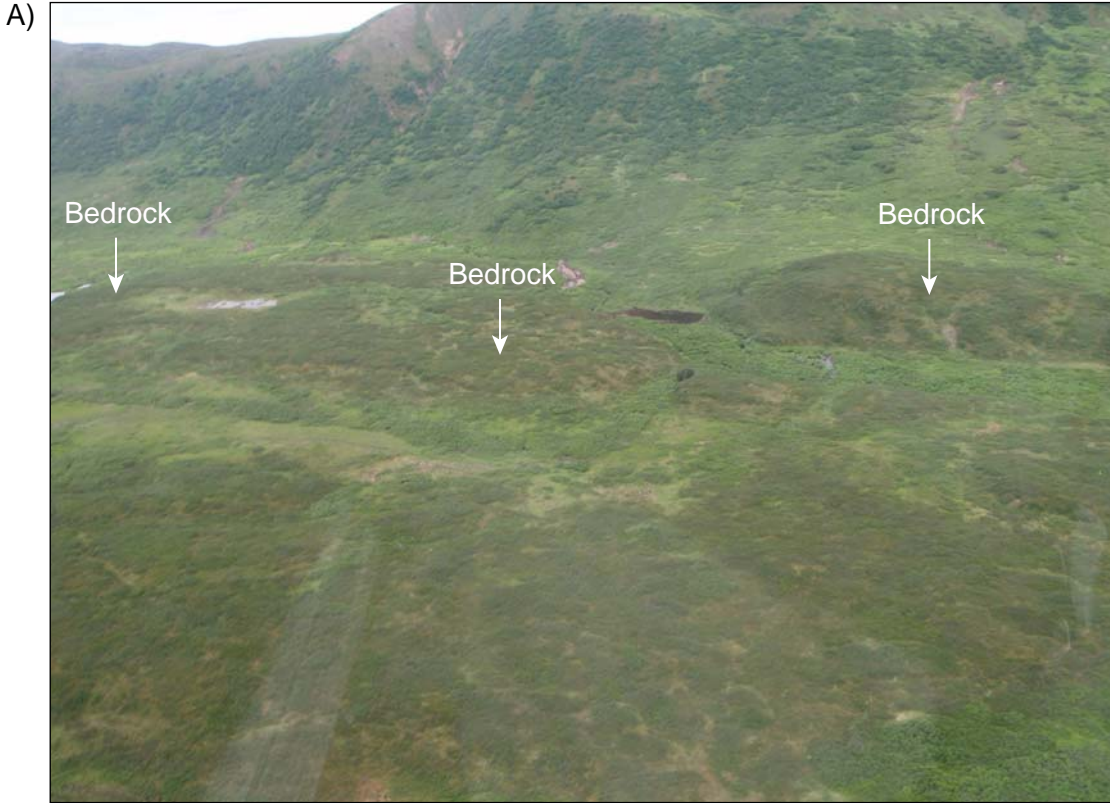
DRAFT



SUSITNA-WATANA HYDROELECTRIC PROJECT
 LINEAMENT GROUP 17b
 MAP DATA

FIGURE
 A17b.1

79_218900_Alaska_Railbelt/2189_Lineament Report October 2013, modified 10.18.13



View looking westerly at break-in-slope at base of hillside and undulating glacially-eroded bedrock knobs in foreground.

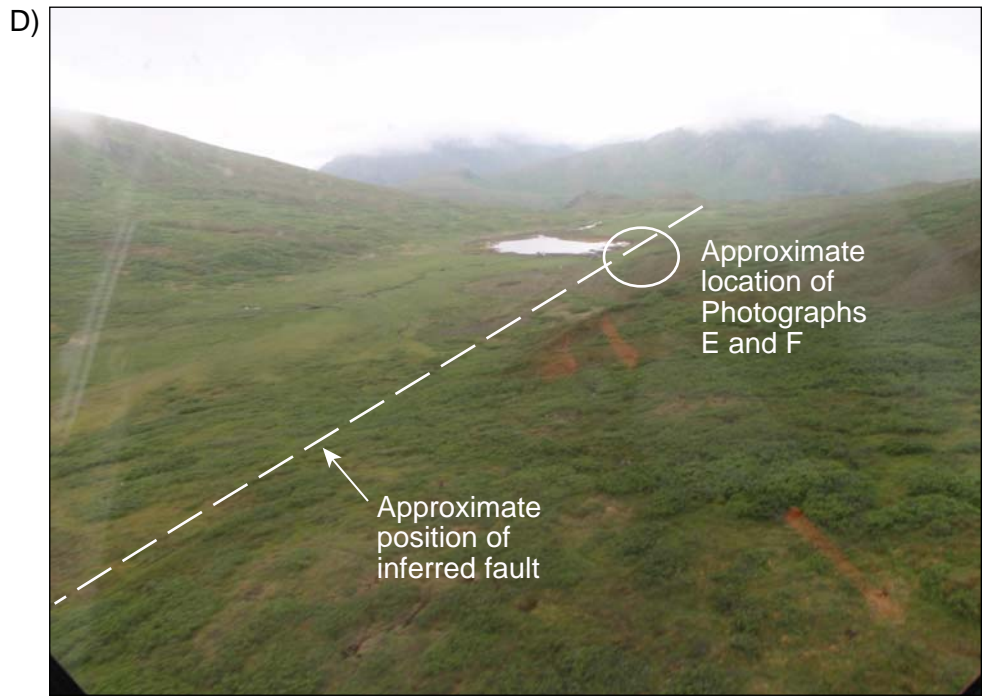


View looking south southwest at lake margin of glacial valley. Lineament was mapped at base of slope, and is not expressed as a scarp-type feature. Apparent colluvium along projection of lineament does not appear offset.



View looking south southeast along glacially-sculpted terrain along which Csejtey (1974) has inferred a fault within the glacial sediment that mantles the bedrock knolls (Figure A17b.1).

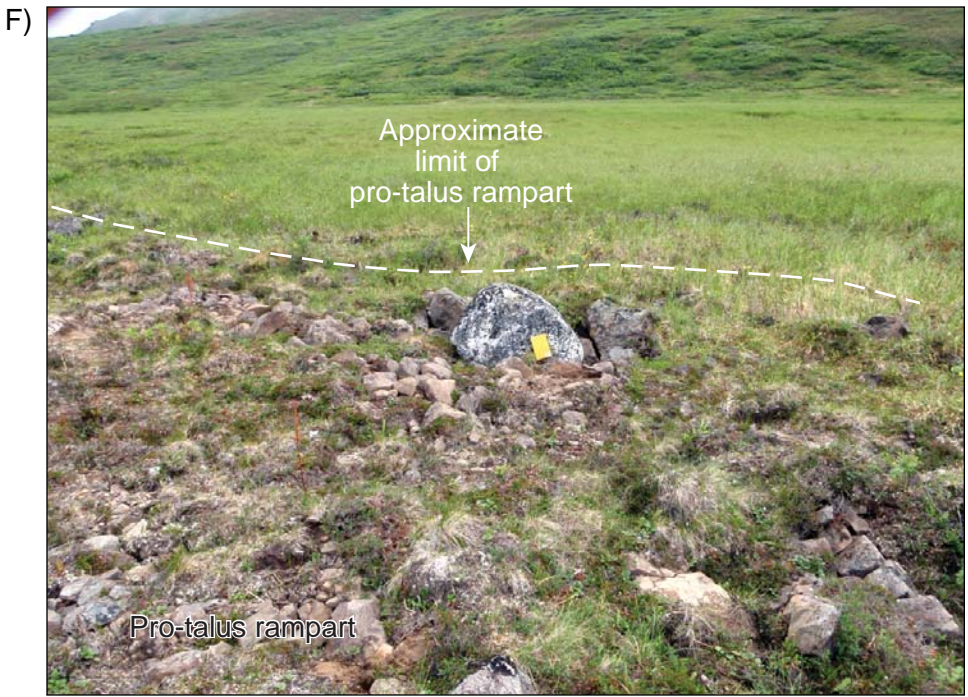
DRAFT



View looking south along southern extent of group 17b, along which an inferred bedrock fault is mapped by Wilson (2009). Photographs B and C are adjacent to lake.



View looking south at pro-talus rampart and GPS waypoint 15. Note lateral distance between base of slope to crest of rampart. Geologist for scale is about 180 cm tall.



Pro-talus rampart constructed from blocky, frost-shattered volcanic rocks. Photograph is centered on more sub-rounded glacial erratic (granitic) that is not similar to any of the local hillside lithologies. Field notebook is 19 cm tall.

DRAFT