



Fig. 5. The channel networks present on the northern flanks of Hecates Tholus are similar to many of the fluvial systems described for other parts of Mars by *Pieri* [1980]. Although the characteristic 'amphitheater' morphology of the source region (typically indicative of groundwater sapping) is absent, the undissected nature of the interchannel areas and the development of crude stream lines (arrowed) suggest a groundwater origin for these channels. Direction of channel flow is from the top to the bottom of the image. Image resolution is 40 m per pixel, Viking frames 86A39-43.