Apollinaris Patera
Elysium Planitia, Mars

Apollinaris Patera is a complex shield volcano 180 x 280 kilometers across and 5 kilometers high. Apollinaris features an unusually large complex summit caldera 85 kilometers across and 1 kilometer deep and a basal scarp up to 1 kilometer high. These features resemble those observed on Olympus Mons. A broad fan-shaped volcanic deposit formed on the southern flank.

Although the composition of lava on Apollinaris Patera is unknown, the morphology of these features may indicate that silicic lavas (andesite or rhyolite, for example) were extruded at Apollinaris Patera. Eroded deposits just east of Apollinaris Patera have been interpreted as pyroclastic or volcanic ash deposits similar to those associated with silicic volcanos like Cerro Galan on Earth.

Apollinaris Patera is located on the southern edge of the Elysium Planitia volcanic province. Apollinaris is older than most of the Elysium or Tharsis volcanos (perhaps greater than 3.5 billion years old) and is roughly similar in age to other highland volcanos. The structural complexity and lower relief of these older volcanos indicate that the style, and perhaps the composition, of volcanic features may have been different early in Mars' history.

Location:	8.5° S, 186.0° W
Quadrangle:	MC-23 (Aeolis)
Mission:	Viking 1
Image Numbers:	603A42, 639A92

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