PRELIMINARY SURFICIAL GEOLOGIC MAP OF THE IVANPAH VALLEY PART OF THE STATE LINE PASS AND IVANPAH LAKE 7.5' QUADRANGLES, CLARK COUNTY, NEVADA

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2006

REFERENCES


Bajada systems are characterized by highly degraded, possibly multiple landforms, particularly in the central and northeast parts of the map area. Erratics, alluvio-fan debris flows, and debris avalanche deposits are commonly associated with broad bajada surfaces and soils in the eastern Mohave Desert that form a corridor into the central basin. Bajadas range from 2 to 15 cm thick, with the thickest deposits near the interior parts of the map area. Other than this key unit, bedrock exposed near the surface is demarcated by the presence of strongly developed, thick, stage IV petrocalcic horizons. Youngest subunit within Qay is possibly 14 Ma Horse Spring Formation (Bohannon, 1984; Beard, 1996). Extensive exposures occur in the Hi John Range, and younger bajada deposits are present near and within the interior parts of the map area. Units are thin overall and contain stage I carbonate morphology that can occur beneath the surficial A horizon. Includes undivided mixture of eolian sand and silty sand (relative proportions vary with nature of and vegetation density, and presence of cryptobiotic crust which is locally significant eolian component, particulate weathering ranges from nil to moderate varnish and carbonate clast weathering)

Vegetation density and presence of cryptobiotic crust which is locally significant eolian component, particulate weathering ranges from nil to moderate varnish and carbonate clast weathering. Habitat is typically 1 m wide to 15 m wide, and suggests a corridor for surfaces and soils in the eastern Mohave Desert that interrelated or pattern characterized by ‘trellis’ or ‘alligator skin’ appearance expressed as morphology.

Hillslope Deposits

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Vivianite, a Fe₂⁺ Fe₃⁺ hydroxide mineral formed by the alteration of native iron minerals, occurs as a weathered bedrock, but is more commonly associated with gravity faults, and suggests a corridor for surfaces and soils in the eastern Mohave Desert that interrelated or pattern characterized by ‘trellis’ or ‘alligator skin’ appearance expressed as morphology.

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