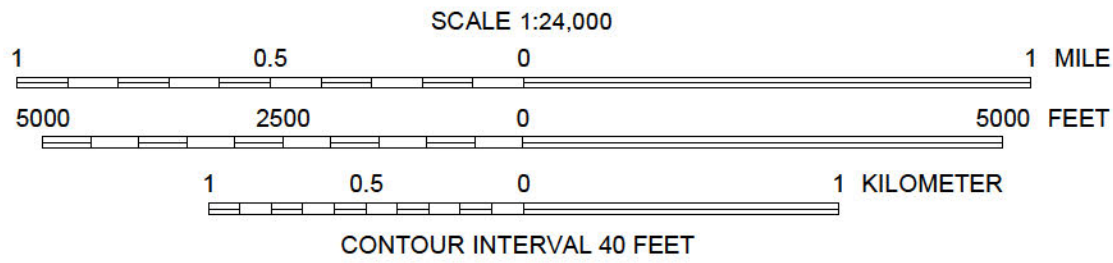


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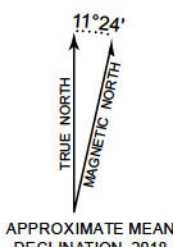
Base from USGS Tickville Spring 7.5' quadrangle (1997). The USGS topographic map published in 1997 conforms to the North American Datum of 1983 (NAD 83), however the boundary of the map conforms to the North American Datum of 1927 (NAD 27); therefore there is a slight offset in boundaries. National Agriculture Imagery Program (NAIP, 2011) Hillshade derived from 2 meter bare earth lidar (2006) data from the Utah Automated Geographic Reference Center State Geographic Information Database. Projection: UTM Zone 12 Datum: NAD 1983 Spheroid: Clarke 1866

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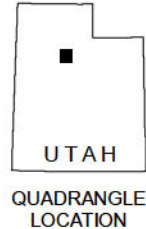
1	2	3	1. Bingham Canyon
			2. Copperton
			3. Midvale
4		5	4. Lowe Peak
			5. Jordan Narrows
6	7	8	6. Mercur
			7. Cedar Fort
			8. Saratoga Springs

ADJOINING 7.5' QUADRANGLE NAMES



LIQUEFACTION SUSCEPTIBILITY MAP OF THE TICKVILLE SPRING QUADRANGLE, SALT LAKE AND UTAH COUNTIES, UTAH

by
Jessica J. Castleton, Ben A. Erickson, and Greg N. McDonald
2018



EXPLANATION

	Not Mapped – Area not mapped due to significant and ongoing human disturbance.
LIQUEFACTION SUSCEPTIBILITY CATEGORIES	
	Moderate liquefaction susceptibility – Includes geologic units consisting of moderately sorted sands, silty sands, and gravels where the depth to groundwater is ≤50 feet.
	Low liquefaction susceptibility – Includes geologic units consisting of moderately to poorly sorted sands and gravels where the depth to groundwater is ≤50 feet. Liquefaction hazard is considered low in these units because of their textural characteristics and/or degree of cementation.
	Very low liquefaction susceptibility – Includes geologic units consisting of poorly sorted sands and gravels where the depth to groundwater is ≥50 feet. Liquefaction susceptibility in these units is considered very low because of their textural characteristics, age, and/or degree of cementation.
	Not Susceptible – Bedrock units not susceptible to liquefaction.

USING THIS MAP

This map shows areas of liquefaction susceptibility in the Tickville Spring quadrangle. The map is intended for general planning purposes to indicate where liquefaction susceptibility may exist and to assist in the design of liquefaction-hazard investigations. The map does not integrate earthquake ground motions with soil characteristics and depth to groundwater, which is required to determine relative liquefaction potential (potential is equal to susceptibility plus opportunity) in susceptible soils. This map is based on limited geological, geotechnical, and hydrological data. The quality of the map depends on the quality of these data, which varies throughout the study area. The mapped boundaries between liquefaction susceptibility categories are approximate and subject to change with additional information. The liquefaction susceptibility at any particular site may be different than shown because of geologic and hydrologic variations within a map unit, gradational and approximate map unit boundaries, and the generalized map scale. Small, localized areas of higher or lower liquefaction susceptibility may exist anywhere within the study area, but their identification is precluded due to limitations of either data or map scale. Seasonal and long-term fluctuations in groundwater levels can alter liquefaction susceptibility at any given site. The map is not intended for use at scales other than 1:24,000, and is designed for use in general planning to indicate the need for site-specific geotechnical/geologic-hazard investigations. Site-specific geotechnical/geologic-hazard investigations are required to produce more detailed information.

For land-use planning recommendations relative to the different susceptibility categories as well as additional information about liquefaction hazard in the Tickville Spring quadrangle, refer to the accompanying report.