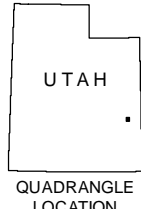
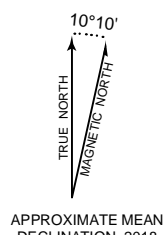


CORROSIVE SOIL AND ROCK POTENTIAL MAP OF THE MOAB QUADRANGLE, GRAND COUNTY, UTAH

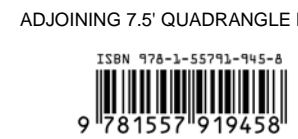
by

Jessica J. Castleton, Ben A. Erickson, and Emily J. Kleber 2018



1	2	3
4	5	6
7	8	9

1. Merrimac Butte
2. The Windows Section
3. Big Bend
4. Gold Bar Canyon
5. Rill Creek
6. Shafter Basin
7. Trough Springs Canyon
8. Kane Springs

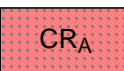


EXPLANATION



Not Mapped – Area not mapped due to significant and ongoing human disturbance.

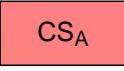
Corrosive Soil and Rock Categories



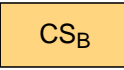
Corrosive Rock A – Bedrock units identified as having a high potential for corrosion of concrete and metals. High content of gypsum and other sulfate minerals, as well as low pH values, have been observed during geotechnical testing and/or as indicated by Natural Resources Conservation Service (NRCS) data. Considerable damage may be caused to concrete, and pH levels may be corrosive to metals.



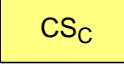
Corrosive Rock B – Bedrock units identified as having a moderate potential for corrosion of concrete and metals. Moderate content of gypsum and other sulfate minerals, as well as low to moderate pH values, have been observed during geotechnical testing and/or as indicated by NRCS data. Considerable damage may be caused to concrete, and pH levels may be corrosive to metals.



Corrosive Soil A – Units identified as having a high potential for corrosion of concrete and metals. High content of gypsum and other sulfate minerals, as well as low pH values, have been observed during geotechnical testing and/or as indicated by NRCS data. Considerable damage may be caused to concrete, and pH levels may be corrosive to metals.



Corrosive Soil B – Units identified as having a moderate potential for corrosion of concrete and metals. Moderate content of gypsum and other sulfate minerals, as well as moderate pH values, have been observed during geotechnical testing and/or as indicated by NRCS data. Considerable damage may be caused to concrete, and pH levels may be corrosive to metals.



Corrosive Soil C – Buried or embedded corrosive soil or rock. Areas where talus, colluvium, alluvium, or pediment mantle deposits make up a thin layer above units with high sulfate mineral content and/or the potential for low pH.



Limited potential for corrosive soil and rock.

USING THE MAP

This map shows the location of known and possible areas of corrosive soil and rock in the Moab quadrangle. The map is intended for general planning purposes to indicate where the potential for corrosion of concrete and metals may be present and where site-specific geotechnical/geologic-hazard investigations may be required. The UGS recommends a site-specific geotechnical/geologic-hazard investigation for development at all locations in the Moab quadrangle. Site-specific geotechnical/geologic-hazard investigations can resolve uncertainties inherent in generalized hazard mapping and help ensure safety by identifying the need for special engineering design, mitigation, and/or construction techniques. These investigations are particularly important for areas within the Moab quadrangle because local areas of damaging corrosive material too small to show at the map scale (1:24,000) may be present anywhere within the quadrangle. This map is intended for use at a scale of 1:24,000, and is designed for use in general planning to indicate the need for site-specific geotechnical/geologic-hazard investigations.

For additional information about the corrosive soil and rock potential in the Moab quadrangle, refer to the accompanying report.