Name: David Matthew Sublett Jr
Job Title: Graduate Student
Institution: Virginia Tech
Title of Work Used: Phase diagram from Sterner et al. (1988) and Hall et al. (1988)
Copyright Holder: Sterner et al. (1988) and Hall et al. (1988)
Publication Status: Published
Publisher: Geochimica et Cosmochimica Acta
Place of Publication: Geochimica et Cosmochimica Acta
Publication Year: 1988
Description of Work: January 8, 2020
Date of Evaluation: January 8, 2020
Date of Intended Use: January 8, 2020

Describe the **Purpose** and Character of Your Intended Use:

I am modifying the phase diagram for the H2O-NaCl-KCl system and the ice stable region of this phase diagram from Sterner et al (1988) and Hall et al. (1988), respectively. [+ Use is for “criticism, comment, news reporting, teaching, (including multiple print copies for classroom use), scholarship or research”]
[+] Use is transformative, i.e. it uses the existing work in a new way (creates an index to the work) or for a new purpose (parody, pastiche, instructional materials, etc.) Transformative works are favored because the purpose of U.S. Copyright Law is to encourage the development and dissemination of new knowledge to benefit the public and thereby advance learning.
[+] Use is not-for-profit
[+] Use is clearly defined and is restricted in scope (limited duration, not iterative, restricted access, etc.)
Describe the **Nature** of Your Intended Use of the Copyrighted Work:

<table>
<thead>
<tr>
<th>Fair</th>
<th>Unfair</th>
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- Work to be used has been previously PUBLISHED
- Work to be used is primarily of a factual nature (non-fiction, collection of facts, etc.)
- Original work was not created and/or has not been marketed for the stated purpose of the proposed use

Describe the **Amount** of Your Intended Use in Relation to the Copyrighted Work as a Whole:

<table>
<thead>
<tr>
<th>Fair</th>
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<tr>
<td>✓</td>
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- Only limited and reasonable portions will be used
- The portion used is not the "heart" of the work (the portion considered most central to the work as a whole)
- Only the amount required to achieve the stated, socially-beneficial purpose or objective will be used (be that educational, artistic, scholarly, journalistic, etc.)
- The amount used falls within widely recognized fair use guidelines* vetted by key stakeholder groups [reference guidelines]

Describe the **Effect** of Your Intended Use on the Potential Market or Value of the Copyrighted Work:

<table>
<thead>
<tr>
<th>Fair</th>
<th>Unfair</th>
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- The work is NOT currently under commercial exploitation (out of print, no licensing available, etc.)
- A market for the work as it will be used is absent or is negligible & use of the work will have little or no negative impact on its value or potential value
- Use of the work minimizes the potential for unauthorized use that could impact its value (i.e. steps are taken to ensure the content is not used outside of the stated purpose or audience)
- Proper attribution will be given with the intended use
The Average "Fairness Level," Based on Your Rating of Each of the 4 Factors, Is:

[see tool disclaimer for important clarifying information]:

Fair | | | | | | Unfair
✔️ | | | | | |

Other Important Criteria:

Only the phase diagrams were used from the sources, and then modified to make them applicable to the study. All sources are clearly cited in the text and figure captions.

Based on the information and justification I have provided above, I, David Matthew Sublett Jr, am asserting this use is FAIR under Section 107 of the U.S. Copyright Code.

Signature:  
Date of Signature: 1/8/2020

*Disclaimer: This document is intended to help you collect, organize & archive the information you might need to support your fair use evaluation. It is not a source of legal advice or assistance. The results are only as good as the input you have provided by are intended to suggest next steps, and not to provide a final judgment. It is recommended that you share this evaluation with a copyright specialist before proceeding with your intended use.*