**Table S1:**

**Salinity and pH of brine sample.**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | A-Pb | B-Pb | C-Pb | E-Pb | D-Sb | F-Sb | G-Sb | H-Sb |
| Salinity (%) | 4.0 | 7.8 | 5.8 | 3.4 | 18 | 18 | 18 | 17 |
| pH | 5.90 | 7.80 | 6.55 | 7.80 | 7.51 | 5.95 | 4.80 | 7.52 |

Sample names are defined as Manufacture ID (A-H) - process ID (P, S) [ sample type (b)]. Process ID: P, pretreatment; S, salt stock preparation. Sample type: b, brine.