10/1/19

Brett Stoddard

3:14pm

Old Soils room, Gilbert 103

Goal here is to conduct RFID calibration experiments with dioxane.

Will use kickstand for all experiments.

Using glass container for containing liquid 320mL

Distance from reader: few cm less than height of graduated cylinder used for measuring

Running low on dioxane so diluted existing mix instead of creating new one

25 db wasn’t working for D3, tried 26,

DATA

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Name | Medium | Vol. med. | Vol. h20 | % Media | % H20 | eref | VWC eq |
| D1 | Dioxane | 320 | 0 | 1.0 | 0 | 2.2 | 0.009 |
| D2 | Dioxane | 288 | 32 | 0.9 | 0.1 | 6.65 | 0.113 |
| D3 | Dioxane | 288 | 96 (+66) | 0.75 | 0.25 | ? |  |
| D4 | Dioxane |  |  | 0.5 | 0.5 | ? |  |
| D5 | Dioxane |  |  | 0.25 | 0.75 |  |  |
| ~~I4~~ | ~~i-c3e1~~ |  |  | ~~0.25~~ | ~~0.75~~ | ~~?~~ |  |
| L1 | limonene | 320 | 0 | 1.0 | 0 | [2.37](https://pubs.acs.org/doi/abs/10.1021/ja01648a026?journalCode=jacsat) |  |
| L2 | limonene | 240 | 80 | 0.75 | 0.25 | ? |  |
| L3 | limonene | 160 | 160 | 0.5 | 0.5 | ? |  |
| L4 | limonene | 80 | 240 | 0.25 | 0.75 | ? |  |
| W | water |  |  | 0 | 1 |  | 01 |

|  |  |  |  |
| --- | --- | --- | --- |
| Trial | Media | Tags omitted | Notes |
| A\_B | Air |  | Plastic bin base, tags facing antenna, |
| A\_F | air |  | Foam base , tags facing antenna |
| A\_B2 | air | V, B | Plastic bin base, tags facing antenna, had to restart |
| A\_B\_far | air |  | Bin base, tags facing, 2x distance from antenna |
| A\_B\_lid | air |  | Bin base, tags facing, 2x distance, lid off |
| A\_f\_lid | Air |  | Foam base, tags facing, 2x, lid off |
| D2\_b | D2 |  | Bin, facing, 1x, lid off |
| D3\_b | D3 |  | Bin, facing, 1x, lid off |

Trial names correspond to a file name containing the data