

pH-metric high logP Assay name: Analyst: Pion Assay ID: 18C-01012 Instrument ID: T312060

Filename: C:\Sirius\_T3\Mehtap\20180228\_exp28\_logP\_T3-2\18C-01012\_M12\_octanol\_pH-metric high logP.t3r

### pH-metric Result

logP (XH +) 1.02 ±0.07 (n=50) logP (neutral X) 3.79 ±0.02 (n=50)

#### 18C-01012 Points 1 to 21

M12 octanol concentration factor 0.790 Carbonate 0.0885 mM Acidity error -0.75786 mM

#### 18C-01012 Points 22 to 45

M12\_octanol concentration factor 0.666 Carbonate 0.1221 mM -0.39695 mM Acidity error

#### 18C-01012 Points 46 to 87

M12 octanol concentration factor 0.461 Carbonate 1.9011 mM Acidity error -0.34659 mM

# Warnings and errors

Errors None

Warnings Excessive carbonate concentration present

# Sample logD and percent species

| рН     | M12_octanol | M12_octanol  | M12_octanol | M12_octanol   | M12_octanol  | Comment    |
|--------|-------------|--------------|-------------|---------------|--------------|------------|
|        | logD        | M12_octanolH | M12_octanol | M12_octanolH* | M12_octanol* |            |
| 1.000  | 1.04        | 8.40 %       | 0.00 %      | 88.90 %       | 2.71 %       |            |
| 1.200  | 1.05        | 8.26 %       | 0.00 %      | 87.51 %       | 4.23 %       | Stomach pH |
| 2.000  | 1.14        | 6.75 %       | 0.00 %      | 71.47 %       | 21.78 %      |            |
| 3.000  | 1.63        | 2.28 %       | 0.01 %      | 24.14 %       | 73.56 %      |            |
| 4.000  | 2.50        | 0.30 %       | 0.02 %      | 3.17 %        | 96.52 %      |            |
| 5.000  | 3.33        | 0.03 %       | 0.02 %      | 0.33 %        | 99.63 %      |            |
| 6.000  | 3.71        | 0.00 %       | 0.02 %      | 0.03 %        | 99.95 %      |            |
| 6.500  | 3.76        | 0.00 %       | 0.02 %      | 0.01 %        | 99.97 %      |            |
| 7.000  | 3.78        | 0.00 %       | 0.02 %      | 0.00 %        | 99.98 %      |            |
| 7.400  | 3.79        | 0.00 %       | 0.02 %      | 0.00 %        | 99.98 %      | Blood pH   |
| 8.000  | 3.79        | 0.00 %       | 0.02 %      | 0.00 %        | 99.98 %      |            |
| 9.000  | 3.79        | 0.00 %       | 0.02 %      | 0.00 %        | 99.98 %      |            |
| 10.000 | 3.79        | 0.00 %       | 0.02 %      | 0.00 %        | 99.98 %      |            |
| 11.000 | 3.79        | 0.00 %       | 0.02 %      | 0.00 %        | 99.98 %      |            |
| 12.000 | 3.79        | 0.00 %       | 0.02 %      | 0.00 %        | 99.98 %      |            |



Sample name: M12\_octanol Assay name:

pH-metric high logP

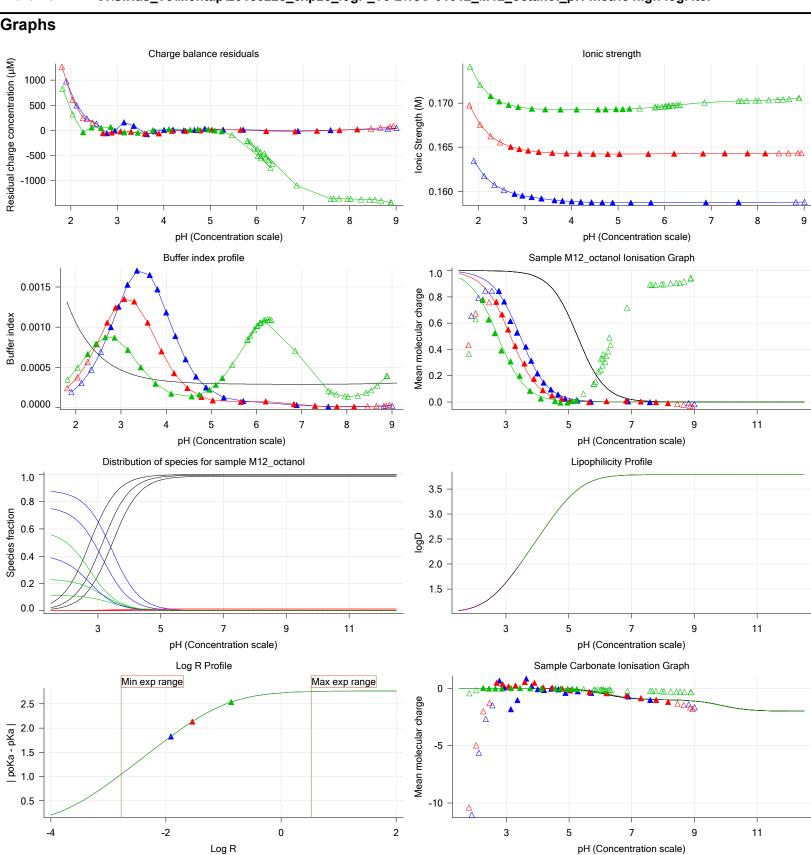
Assay ID: 18C-01012 Filename:

Experiment start time: 3/1/2018 3:28:52 PM

Analyst: **Pion** Instrument ID:

T312060

C:\Sirius\_T3\Mehtap\20180228\_exp28\_logP\_T3-2\18C-01012\_M12\_octanol\_pH-metric high logP.t3r

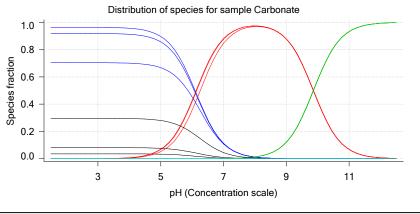




Assay name: pH-metric high logP Analyst: Pion
Assay ID: 18C-01012 Instrument ID: T312060

Filename: C:\Sirius\_T3\Mehtap\20180228\_exp28\_logP\_T3-2\18C-01012\_M12\_octanol\_pH-metric high logP.t3r

# **Graphs** (continued)





Assay name: pH-metric high logP Analyst: Pion
Assay ID: 18C-01012 Instrument ID: T312060

Filename: C:\Sirius\_T3\Mehtap\20180228\_exp28\_logP\_T3-2\18C-01012\_M12\_octanol\_pH-metric high logP.t3r

# pH-metric high logP Titration 1 of 3 18C-01012 Points 1 to 21

#### Overall results

RMSD 0.175
Average ionic strength 0.159 M
Average temperature 25.0°C
Partition ratio 0.0122 : 1

Analyte concentration range 3733.6 µM to 3842.7 µM

Total points considered 15 of 21

### Warnings and errors

Errors None Warnings None

# Four-Plus parameters

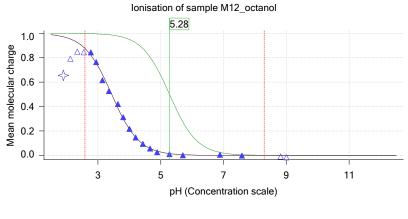
#### Titrants

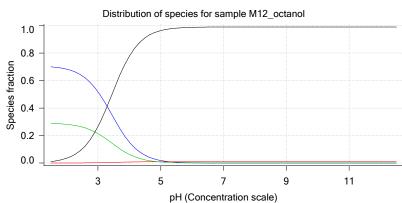
0.50 M HCI 0.993513 3/1/2018 3:28:52 PM C:\Sirius\_T3\HCl18B27.t3r 0.50 M KOH 0.999845 3/1/2018 3:28:52 PM C:\Sirius\_T3\KOH18B27.t3r

#### Sample

M12\_octanol concentration factor
 M12\_octanol stoichiometry
 Chloride stoichiometry
 Base pKa 1
 logP (XH +)
 logP (neutral X)
 0.790
 1.000
 5.28
 1.53
 3.90

#### Sample graphs



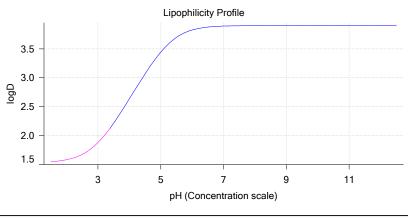




Assay name: pH-metric high logP Analyst: Pion
Assay ID: 18C-01012 Instrument ID: T312060

Filename: C:\Sirius\_T3\Mehtap\20180228\_exp28\_logP\_T3-2\18C-01012\_M12\_octanol\_pH-metric high logP.t3r

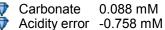
# Sample graphs (continued)



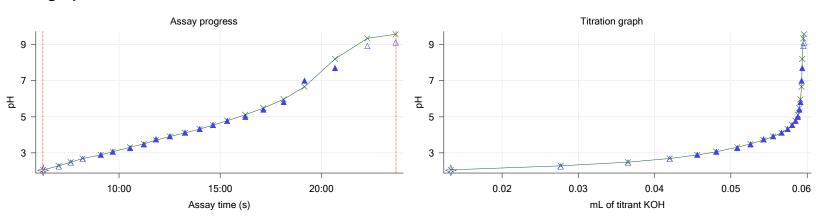
### Sample logD and percent species

| рН     | M12_octanol | M12_octanol  | M12_octanol | M12_octanol   | M12_octanol  | Comment    |
|--------|-------------|--------------|-------------|---------------|--------------|------------|
|        | logD        | M12_octanolH | M12_octanol | M12_octanolH* | M12_octanol* |            |
| 1.000  | 1.54        | 70.54 %      | 0.00 %      | 29.09 %       | 0.36 %       |            |
| 1.200  | 1.54        | 70.39 %      | 0.01 %      | 29.03 %       | 0.57 %       | Stomach pH |
| 2.000  | 1.58        | 68.31 %      | 0.04 %      | 28.17 %       | 3.48 %       |            |
| 3.000  | 1.88        | 51.88 %      | 0.27 %      | 21.40 %       | 26.45 %      |            |
| 4.000  | 2.63        | 15.23 %      | 0.80 %      | 6.28 %        | 77.68 %      |            |
| 5.000  | 3.44        | 1.89 %       | 0.99 %      | 0.78 %        | 96.34 %      |            |
| 6.000  | 3.83        | 0.19 %       | 1.02 %      | 0.08 %        | 98.71 %      |            |
| 6.500  | 3.88        | 0.06 %       | 1.02 %      | 0.03 %        | 98.90 %      |            |
| 7.000  | 3.89        | 0.02 %       | 1.02 %      | 0.01 %        | 98.95 %      |            |
| 7.400  | 3.90        | 0.01 %       | 1.02 %      | 0.00 %        | 98.97 %      | Blood pH   |
| 8.000  | 3.90        | 0.00 %       | 1.02 %      | 0.00 %        | 98.98 %      |            |
| 9.000  | 3.90        | 0.00 %       | 1.02 %      | 0.00 %        | 98.98 %      |            |
| 10.000 | 3.90        | 0.00 %       | 1.02 %      | 0.00 %        | 98.98 %      |            |
| 11.000 | 3.90        | 0.00 %       | 1.02 %      | 0.00 %        | 98.98 %      |            |
| 12.000 | 3.90        | 0.00 %       | 1.02 %      | 0.00 %        | 98.98 %      |            |

# Carbonate and acidity



# Other graphs





Assay ID: Filename:

Sample name: M12\_octanol Assay name:

pH-metric high logP

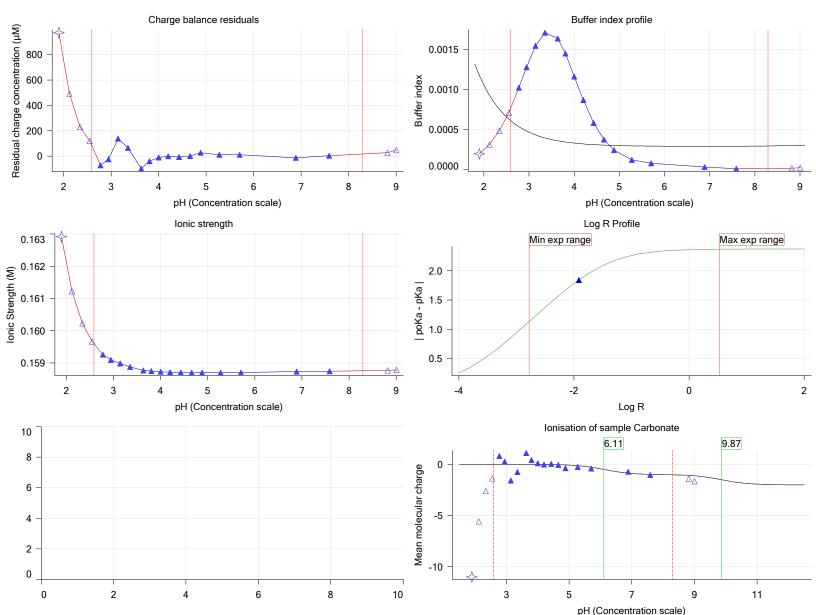
18C-01012

Experiment start time: 3/1/2018 3:28:52 PM

Analyst: **Pion** Instrument ID: T312060

C:\Sirius\_T3\Mehtap\20180228\_exp28\_logP\_T3-2\18C-01012\_M12\_octanol\_pH-metric high logP.t3r

# Other graphs (continued)





Assay name: pH-metric high logP Analyst: Pion
Assay ID: 18C-01012 Instrument ID: T312060

Filename: C:\Sirius\_T3\Mehtap\20180228\_exp28\_logP\_T3-2\18C-01012\_M12\_octanol\_pH-metric high logP.t3r

# pH-metric high logP Titration 2 of 3 18C-01012 Points 22 to 45

# Overall results

RMSD 0.444
Average ionic strength 0.164 M
Average temperature 25.0°C
Partition ratio 0.0288 : 1

Analyte concentration range 3433.0 µM to 3545.2 µM

Total points considered 16 of 24

### Warnings and errors

Errors None

Warnings Sample concentration factor out of range

# Four-Plus parameters

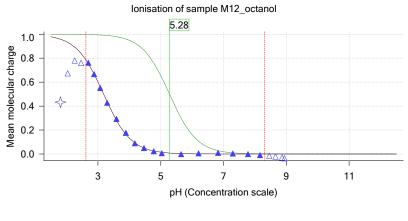
| à | Alpha | 0.130  | 3/1/2018 3:28:52 PM | C:\Sirius_T3\HCl18B27.t3r |
|---|-------|--------|---------------------|---------------------------|
| à | S     | 0.9970 | 3/1/2018 3:28:52 PM | C:\Sirius T3\HCl18B27.t3r |
| à | jΗ    | 8.0    | 3/1/2018 3:28:52 PM | C:\Sirius_T3\HCl18B27.t3r |
|   | jОН   | -0.4   | 3/1/2018 3:28:52 PM | C:\Sirius_T3\HCl18B27.t3r |

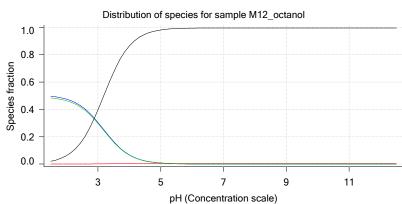
#### **Titrants**

#### Sample

| $\nabla$          | M12_octanol concentration factor | 0.666 |
|-------------------|----------------------------------|-------|
|                   | M12_octanol stoichiometry        | 1.000 |
|                   | Chloride stoichiometry           | 1.000 |
| <b>⊕</b>          | Base pKa 1                       | 5.28  |
|                   | logP (XH +)                      | 1.53  |
| $\mathbf{\nabla}$ | logP (neutral X)                 | 3.93  |

#### Sample graphs



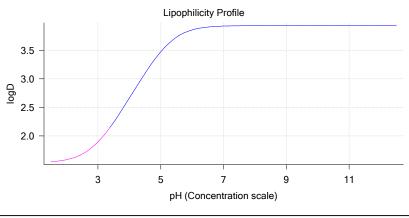




Assay name: pH-metric high logP Analyst: Pion Instrument ID: T312060 Assay ID: 18C-01012

Filename: C:\Sirius\_T3\Mehtap\20180228\_exp28\_logP\_T3-2\18C-01012\_M12\_octanol\_pH-metric high logP.t3r

# Sample graphs (continued)



## Sample logD and percent species

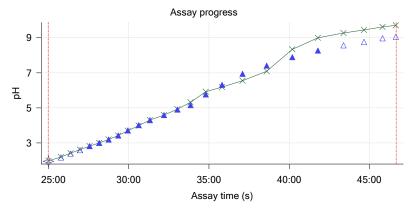
| рН     | M12_octanol | M12_octanol  | M12_octanol | M12_octanol   | M12_octanol  | Comment    |
|--------|-------------|--------------|-------------|---------------|--------------|------------|
|        | logD        | M12_octanolH | M12_octanol | M12_octanolH* | M12_octanol* |            |
| 1.000  | 1.54        | 50.30 %      | 0.00 %      | 49.05 %       | 0.65 %       |            |
| 1.200  | 1.54        | 50.10 %      | 0.00 %      | 48.86 %       | 1.03 %       | Stomach pH |
| 2.000  | 1.58        | 47.50 %      | 0.02 %      | 46.32 %       | 6.15 %       |            |
| 3.000  | 1.89        | 30.53 %      | 0.16 %      | 29.77 %       | 39.54 %      |            |
| 4.000  | 2.66        | 6.68 %       | 0.35 %      | 6.51 %        | 86.46 %      |            |
| 5.000  | 3.47        | 0.76 %       | 0.40 %      | 0.74 %        | 98.11 %      |            |
| 6.000  | 3.86        | 0.08 %       | 0.40 %      | 0.07 %        | 99.45 %      |            |
| 6.500  | 3.91        | 0.02 %       | 0.40 %      | 0.02 %        | 99.55 %      |            |
| 7.000  | 3.92        | 0.01 %       | 0.40 %      | 0.01 %        | 99.58 %      |            |
| 7.400  | 3.93        | 0.00 %       | 0.40 %      | 0.00 %        | 99.59 %      | Blood pH   |
| 8.000  | 3.93        | 0.00 %       | 0.40 %      | 0.00 %        | 99.59 %      |            |
| 9.000  | 3.93        | 0.00 %       | 0.40 %      | 0.00 %        | 99.60 %      |            |
| 10.000 | 3.93        | 0.00 %       | 0.40 %      | 0.00 %        | 99.60 %      |            |
| 11.000 | 3.93        | 0.00 %       | 0.40 %      | 0.00 %        | 99.60 %      |            |
| 12.000 | 3.93        | 0.00 %       | 0.40 %      | 0.00 %        | 99.60 %      |            |

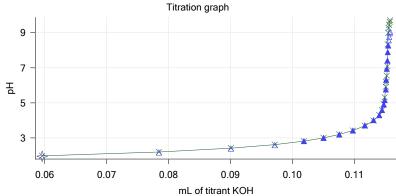
# Carbonate and acidity



Carbonate 0.122 mM Acidity error -0.397 mM

# Other graphs



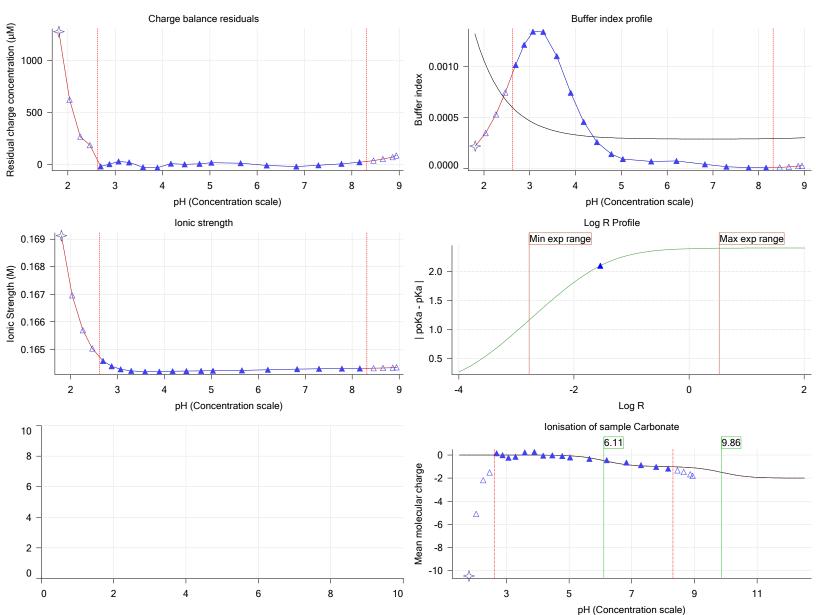




Assay name: pH-metric high logP Analyst: **Pion** 18C-01012 Instrument ID: T312060 Assay ID: Filename:

C:\Sirius\_T3\Mehtap\20180228\_exp28\_logP\_T3-2\18C-01012\_M12\_octanol\_pH-metric high logP.t3r

# Other graphs (continued)





Assay name: pH-metric high logP Analyst: Pion
Assay ID: 18C-01012 Instrument ID: T312060

Filename: C:\Sirius\_T3\Mehtap\20180228\_exp28\_logP\_T3-2\18C-01012\_M12\_octanol\_pH-metric high logP.t3r

# pH-metric high logP Titration 3 of 3 18C-01012 Points 46 to 87

#### Overall results

RMSD 0.047
Average ionic strength 0.169 M
Average temperature 25.0°C
Partition ratio 0.1359 : 1

Analyte concentration range 2911.0 µM to 2994.8 µM

Total points considered 13 of 42

### Warnings and errors

Errors None

Warnings Sample concentration factor out of range

Excessive carbonate concentration present

### Four-Plus parameters

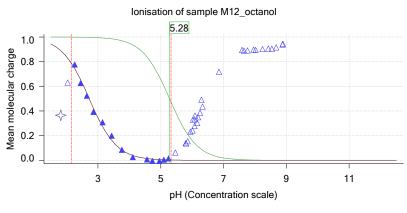
Alpha 0.130 3/1/2018 3:28:52 PM C:\Sirius\_T3\HCl18B27.t3r S 0.9970 3/1/2018 3:28:52 PM C:\Sirius\_T3\HCl18B27.t3r jH 0.8 3/1/2018 3:28:52 PM C:\Sirius\_T3\HCl18B27.t3r jOH -0.4 3/1/2018 3:28:52 PM C:\Sirius\_T3\HCl18B27.t3r

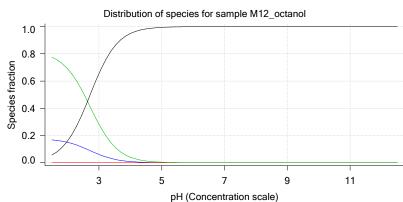
#### Titrants

#### Sample

M12\_octanol concentration factor M12\_octanol stoichiometry 1.000 Chloride stoichiometry 1.000 Base pKa 1 5.28 logP (XH +) 1.53 logP (neutral X) 4.17

#### Sample graphs







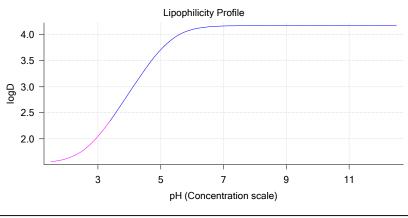
Assay ID:

Sample name: M12\_octanol Experiment start time: 3/1/2018 3:28:52 PM

Assay name: pH-metric high logP Analyst: Pion Instrument ID: T312060 18C-01012

Filename: C:\Sirius\_T3\Mehtap\20180228\_exp28\_logP\_T3-2\18C-01012\_M12\_octanol\_pH-metric high logP.t3r

# Sample graphs (continued)



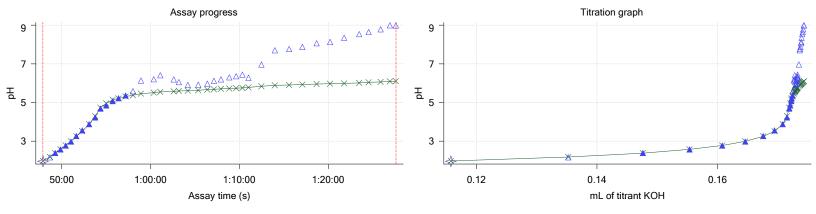
### Sample logD and percent species

| рН     | M12_octanol | M12_octanol  | M12_octanol | M12_octanol   | M12_octanol  | Comment    |
|--------|-------------|--------------|-------------|---------------|--------------|------------|
|        | logD        | M12_octanolH | M12_octanol | M12_octanolH* | M12_octanol* |            |
| 1.000  | 1.54        | 17.51 %      | 0.00 %      | 80.63 %       | 1.86 %       |            |
| 1.200  | 1.55        | 17.32 %      | 0.00 %      | 79.76 %       | 2.92 %       | Stomach pH |
| 2.000  | 1.62        | 15.00 %      | 0.01 %      | 69.06 %       | 15.93 %      |            |
| 3.000  | 2.05        | 6.16 %       | 0.03 %      | 28.37 %       | 65.44 %      |            |
| 4.000  | 2.89        | 0.89 %       | 0.05 %      | 4.12 %        | 94.94 %      |            |
| 5.000  | 3.71        | 0.09 %       | 0.05 %      | 0.43 %        | 99.43 %      |            |
| 6.000  | 4.10        | 0.01 %       | 0.05 %      | 0.04 %        | 99.90 %      |            |
| 6.500  | 4.15        | 0.00 %       | 0.05 %      | 0.01 %        | 99.93 %      |            |
| 7.000  | 4.16        | 0.00 %       | 0.05 %      | 0.00 %        | 99.95 %      |            |
| 7.400  | 4.17        | 0.00 %       | 0.05 %      | 0.00 %        | 99.95 %      | Blood pH   |
| 8.000  | 4.17        | 0.00 %       | 0.05 %      | 0.00 %        | 99.95 %      |            |
| 9.000  | 4.17        | 0.00 %       | 0.05 %      | 0.00 %        | 99.95 %      |            |
| 10.000 | 4.17        | 0.00 %       | 0.05 %      | 0.00 %        | 99.95 %      |            |
| 11.000 | 4.17        | 0.00 %       | 0.05 %      | 0.00 %        | 99.95 %      |            |
| 12.000 | 4.17        | 0.00 %       | 0.05 %      | 0.00 %        | 99.95 %      |            |

# Carbonate and acidity

Carbonate 1.901 mM Acidity error -0.347 mM

# Other graphs



**Pion** 

T312060



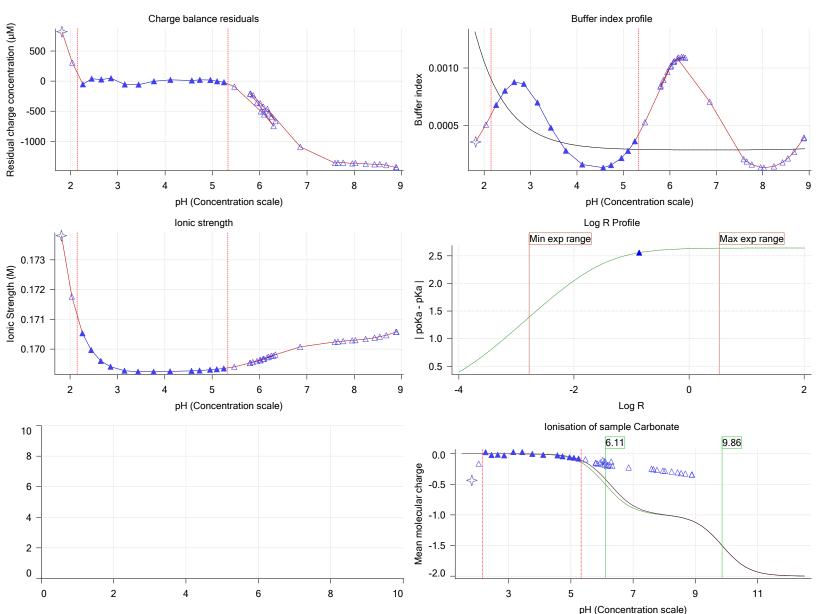
Assay ID:

Sample name: M12\_octanol Experiment start time: 3/1/2018 3:28:52 PM

Assay name: pH-metric high logP Analyst: 18C-01012 Instrument ID:

Filename: C:\Sirius\_T3\Mehtap\20180228\_exp28\_logP\_T3-2\18C-01012\_M12\_octanol\_pH-metric high logP.t3r

# Other graphs (continued)





Assay name: pH-metric high logP Analyst: Pion
Assay ID: 18C-01012 Instrument ID: T312060

Filename: C:\Sirius\_T3\Mehtap\20180228\_exp28\_logP\_T3-2\18C-01012\_M12\_octanol\_pH-metric high logP.t3r

### Assay Model

| Settings                          | Value        | Date/Time changed    | Imported from           |
|-----------------------------------|--------------|----------------------|-------------------------|
| Sample name                       | M12_octanol  | 2/28/2018 2:58:36 PM | User entered value      |
| Sample by                         | Weight       |                      | Default value           |
| Sample weight                     | 0.001780 g   | 2/28/2018 4:51:40 PM | User entered value      |
| Formula weight                    | 292.16 g/mol | 2/28/2018 2:58:36 PM | User entered value      |
| Solubility                        | Unknown      |                      | Default value           |
| Molecular weight                  | 255.70       | 2/28/2018 2:58:36 PM | User entered value      |
| Individual pKa ionic environments | No           |                      | Default value           |
| Number of pKas                    | 1            | 2/28/2018 2:58:36 PM | User entered value      |
| Sample is a                       | Base         | 2/28/2018 2:58:36 PM | User entered value      |
| pKa 1                             | 5.28         | 2/28/2018 2:58:36 PM | User entered value      |
| logp (XH +)                       | 1.53         | 2/28/2018 2:59:16 PM | User entered value      |
| logP (neutral X)                  | 3.50         | 2/28/2018 2:59:06 PM | User entered value      |
| Stoichiometry                     | 1.00000      |                      | Default value           |
| Aprotic counterion name           | Chloride     |                      | From standards.xml file |
| Stoichiometry                     | 1.00         |                      | From standards.xml file |
| Charge per counterion             | -1           |                      | From standards.xml file |

# **Events**

| <b>4_</b> . | _ ,                        |            |             | _             |            |       |          |              |         |              |
|-------------|----------------------------|------------|-------------|---------------|------------|-------|----------|--------------|---------|--------------|
| Time        | Event<br>Initial pH = 4.96 | Water      | Acid        | Base          | Octanol    | рН    | dpH/dt   | pH R-squared | pH SD   | dpH/dt time  |
| 3:15.3      | •                          | 1 E0000 ml | 0.05004!    | 0.04220       | 0.04000!   | 2 022 | 0.00445  | 0.40540      | 0.00045 | 10.0 -       |
| 6:15.1      | Data point 1               |            | 0.05221 mL  |               |            |       |          |              | 0.00015 |              |
| 7:01.4      | Data point 2               |            | 0.05221 mL  |               |            |       |          | 0.19272      | 0.00012 |              |
| 7:37.0      | Data point 3               |            | 0.05221 mL  |               |            |       |          |              | 0.00086 |              |
| 8:12.5      | Data point 4               |            | 0.05221 mL  |               |            |       |          |              | 0.00093 |              |
| 9:06.1      | Data point 5               |            | 0.05221 mL  |               |            |       |          |              | 0.00067 |              |
| 9:41.6      | Data point 6               |            | 0.05221 mL  |               |            |       |          |              | 0.00046 |              |
| 10:32.6     |                            |            | 0.05221 mL  |               |            |       |          |              | 0.00032 |              |
| 11:13.7     | •                          |            | 0.05221 mL  |               |            |       |          |              | 0.00095 |              |
| 11:49.7     | •                          |            | 0.05221 mL  |               |            |       |          |              | 0.00088 |              |
|             |                            |            | 0.05221 mL  |               |            |       |          |              | 0.00094 |              |
|             | Data point 11              |            | 0.05221 mL  |               |            |       |          |              | 0.00098 |              |
| 13:59.1     |                            |            | 0.05221 mL  |               |            |       |          |              | 0.00087 |              |
|             | Data point 13              |            | 0.05221 mL  |               |            |       |          |              | 0.00100 |              |
|             | Data point 14              |            | 0.05221 mL  |               |            |       |          |              | 0.00093 | 23.0 s       |
|             | Data point 15              |            | 0.05221 mL  |               |            |       |          | 0.93024      | 0.00093 | 28.0 s       |
|             | Data point 16              | 1.50000 mL | 0.05221 mL  | 0.05898 mL    | 0.01999 mL | 5.391 | -0.01937 | 0.94705      | 0.00098 | 29.5 s       |
| 18:08.0     | Data point 17              | 1.50000 mL | 0.05221 mL  | 0.05913 mL    | 0.01999 mL | 5.819 | -0.01888 | 0.96763      | 0.00095 | 31.5 s       |
| 19:10.1     | Data point 18              | 1.50000 mL | 0.05221 mL  | 0.05927 mL    | 0.01999 mL | 6.996 | -0.07112 | 0.99199      | 0.00353 | Timed out at |
| i           | •                          |            |             |               |            |       |          |              |         | 59.5 s       |
| 20:40.6     | Data point 19              | 1.50000 mL | 0.05221 mL  | 0.05936 mL    | 0.01999 mL | 7.695 | -0.08201 | 0.99679      | 0.00406 | Timed out at |
|             | •                          |            |             |               |            |       |          |              |         | 59.5 s       |
| 22:16.3     | Data point 20              | 1.50000 mL | 0.05221 mL  | 0.05950 mL    | 0.01999 mL | 8.922 | -0.00844 | 0.17826      | 0.00099 |              |
| 23:40.4     |                            | 1.50000 mL | 0.05221 mL  | 0.05960 mL    | 0.01999 mL | 9.107 | -0.02002 | 0.98651      | 0.00100 | 26.0 s       |
| 25:00.1     | Data point 22              |            | 0.10891 mL  |               |            |       |          |              | 0.00025 |              |
| 25:46.8     |                            |            | 0.10891 mL  |               |            |       |          | 0.60390      | 0.00024 |              |
| 26:22.5     |                            |            | 0.10891 mL  |               |            |       |          | 0.03650      | 0.00068 | 10.0 s       |
| 26:58.0     |                            |            | 0.10891 mL  |               |            |       |          | 0.23852      | 0.00079 |              |
| 27:34.1     | Data point 26              |            | 0.10891 mL  |               |            |       |          | 0.20428      | 0.00056 |              |
| 28:09.6     |                            |            | 0.10891 mL  |               |            |       | -0.00273 |              | 0.00021 |              |
| 28:45.1     |                            |            | 0.10891 mL  |               |            |       | -0.00242 |              | 0.00019 |              |
| 29:21.2     | •                          |            | 0.10891 mL  |               |            |       |          |              | 0.00030 |              |
| 29:56.7     |                            |            | 0.10891 mL  |               |            |       | -0.00838 |              | 0.00057 |              |
| 30:37.3     |                            |            | 0.10891 mL  |               |            |       |          |              | 0.00088 |              |
| 31:19.4     | •                          |            | 0.10891 mL  |               |            |       |          |              | 0.00096 |              |
|             | Data point 33              |            | 0.10891 mL  |               |            |       |          |              | 0.00098 |              |
| 00.00.0     | Data point oo              | 1.00000    | 0.100011112 | 0.11.170.1112 | 0.00000    | 4.000 | 0.01000  | 0.00010      | 0.00000 | 10.5         |

1.50000 mL 0.10891 mL 0.11475 mL 0.05000 mL 4.896 -0.01935 0.95587

Reported at: 3/2/2018 3:16:49 PM

33:02.3 Data point 34

0.00098 18.5 s



pH-metric high logP Assay name: Analyst: Pion Assay ID: 18C-01012 Instrument ID: T312060

Filename:  $C:\Sirius\_T3\Mehtap\20180228\_exp28\_logP\_T3-2\18C-01012\_M12\_octanol\_pH-metric\ high\ logP.t3r$ 

# **Events (continued)**

| <i>1</i>           |                             |            |                |             |                |       |           |         |              |              |
|--------------------|-----------------------------|------------|----------------|-------------|----------------|-------|-----------|---------|--------------|--------------|
| Time               | Event                       | Water      | Acid           | Base        | Octanol        | рН    | dpH/dt    |         |              | dpH/dt time  |
| 33:51.3            | Data point 35               |            |                |             |                |       |           |         | 0.00093      |              |
| 34:48.4            | Data point 36               |            |                |             |                |       |           |         | 0.00100      | 30.0 s       |
| 35:49.0            | Data point 37               |            |                |             |                |       |           |         | 0.00089      | 46.0 s       |
| 37:05.6            | Data point 38               |            |                |             |                |       |           |         |              | Timed out at |
|                    |                             |            | -              | <u> </u>    | 2.0.0          | -     | •         |         |              | 59.5 s       |
| 38:36.1            | Data point 39               | 1.50000 mL | 0.10891 mL     | 0.11533 mL  | 0.05000 mL     | 7.403 | -0.05091  | 0.98174 | 0.00254      | Timed out at |
|                    | <sub> </sub> -              |            | <b>C.</b> 122. |             | <b>C.</b> C.C. | • •   | ****      |         | •            | 59.5 s       |
| 40:11.7            | Data point 40               | 1.50000 mL | 0.10891 mL     | 0.11540 mL  | 0.05000 mL     | 7.887 | -0.07516  | 0.99257 | 0.00373      | Timed out at |
|                    | •                           |            |                |             |                |       |           |         |              | 59.5 s       |
| 41:47.3            | Data point 41               | 1.50000 mL | 0.10891 mL     | 0.11547 mL  | 0.05000 mL     | 8.267 | -0.03226  | 0.96652 | 0.00162      | Timed out at |
|                    | •                           |            |                |             |                |       |           |         | •            | 59.5 s       |
| 43:22.8            | Data point 42               | 1.50000 mL | 0.10891 mL     | 0.11555 mL  | 0.05000 mL     | 8.561 | -0.01882  | 0.90027 | 0.00098      | 41.0 s       |
| 44:39.5            | Data point 43               | 1.50000 mL | 0.10891 mL     | 0.11562 mL  | 0.05000 mL     | 8.761 | -0.02011  | 0.98771 | 0.00100      | 33.5 s       |
| 45:48.7            | Data point 44               |            |                |             |                |       |           |         | 0.00091      |              |
| 46:38.8            | Data point 45               |            |                |             |                |       |           |         | 0.00099      |              |
| 47:53.5            | Data point 46               |            |                |             |                |       |           |         | 0.00040      |              |
| 48:40.3            | Data point 47               |            |                |             |                |       |           | 0.01980 | 0.00051      |              |
| 49:16.0            | Data point 48               |            |                |             |                |       |           | 0.79013 | 0.00087      |              |
| 49:51.7            | Data point 49               |            |                |             |                |       |           |         | 0.00075      |              |
| 50:27.2            | Data point 50               |            |                |             |                |       |           | 0.06451 | 0.00077      |              |
| 50.27.2<br>51:02.7 | Data point 51               |            |                |             |                |       |           |         | 0.00063      |              |
| 51:38.2            | Data point 51               |            |                |             |                |       |           | 0.26107 | 0.00038      |              |
| 51:36.2<br>52:18.8 | Data point 52               |            |                |             |                |       |           | 0.64793 | 0.00030      |              |
| 52.16.8<br>53:05.0 | Data point 54               |            |                |             |                |       |           | 0.49641 | 0.00100      |              |
| 53:46.1            | Data point 55               |            |                |             |                |       |           |         | 0.00094      |              |
| 53.46.1<br>54:22.0 | Data point 56               |            |                |             |                |       |           |         | 0.00079      |              |
| 54.22.0<br>55:00.4 | Data point 57               |            |                |             |                |       |           |         | 0.00095      |              |
| 55:00.4<br>55:43.9 | Data point 57 Data point 58 |            |                |             |                |       |           |         |              |              |
|                    |                             |            |                |             |                |       |           |         | 0.00086      |              |
| 56:23.8            | Data point 59               |            |                |             |                |       |           | 0.44826 | 0.00098      |              |
| 57:11.9            | Data point 60               |            |                |             |                |       |           |         | 0.00090      |              |
| 58:01.0            | Data point 61               |            |                |             |                |       |           | 0.60856 | 0.00092      |              |
| 58:55.6            | Data point 62               |            |                |             |                |       |           |         | 0.00097      |              |
| 1:00:21.7          |                             |            |                |             |                |       |           |         | 0.00096      |              |
| 1:01:05.7          | Data point 64               | 1.50000 mL | 0.16860 mL     | 0.1/2// MIL | 0.25000 mL     | 6.406 | -0.02142  | 0.96918 | 0.00107      | Timed out at |
| 1 00:06 0          | Data asint GE               | 1 50000 ml | 0.40060 ml     | 0 47004 ml  | 0.05000 ml     | 0 402 | 2 22201   | 0.00075 | 2 22074      | 59.5 s       |
|                    | Data point 65               |            |                |             |                |       |           | 0.28675 | 0.00074      |              |
|                    | •                           |            |                |             |                |       |           | 0.24043 | 0.00098      |              |
|                    |                             |            |                |             |                |       |           | 0.92962 | 0.00099      |              |
|                    | Data point 68               |            |                |             |                |       |           | 0.56025 | 0.00096      |              |
|                    | Data point 69               |            |                |             |                |       |           |         | 0.00085      |              |
|                    | Data point 70               |            |                |             |                |       |           |         | 0.00098      |              |
|                    | Data point 71               |            |                |             |                |       |           |         | 0.00099      |              |
|                    | Data point 72               |            |                |             |                |       |           |         | 0.00054      |              |
|                    | Data point 73               |            |                |             |                |       |           |         | 0.00092      |              |
|                    | Data point 74               |            |                |             |                |       |           |         | 0.00099      |              |
|                    | Data point 75               |            |                |             |                |       |           | 0.96509 | 0.00098      |              |
| 1:12:28.9          | Data point 76               | 1.50000 mL | 0.16860 mL     | 0.17345 mL  | 0.25000 mL     | 6.967 | -0.09221  | 0.98961 |              | Timed out at |
|                    | •                           |            |                |             |                |       |           |         |              | 59.5 s       |
| 1:13:59.4          | Data point 77               | 1.50000 mL | 0.16860 mL     | 0.17359 mL  | 0.25000 mL     | 7.698 | -0.10796  | 0.99667 | 0.00535      | Timed out at |
|                    |                             |            |                |             | <b>V</b> :     | -     | -         |         | <del>-</del> | 59.5 s       |
| 1:15:35.0          | Data point 78               | 1.50000 mL | 0.16860 mL     | 0.17366 mL  | 0.25000 mL     | 7.761 | -0.05693  | 0.98901 | 0.00283      | Timed out at |
| 1.10.5             | Data p                      | 1.0000     | 0              | 0           | 0.2000         |       | 0.000     | 0.0000  | 0.00_        | 59.5 s       |
| 1.17.05,5          | Data point 79               | 1 50000 mL | ባ 16860 mL     | ∩ 17373 mL  | 0 25000 mL     | 7 873 | -∩ ∩4996  | n 97617 | 0 00250      | Timed out at |
| 1.17.00.0          | Data point . 5              | 1.00000    | 0.10000        | 0.17070     | 0.20000        | 7.0.0 | -0.0 1000 | 0.07017 | 0.00200      | 59.5 s       |
| 1.18.41.2          | Data point 80               | 1 50000 mL | 0 16860 mL     | 0 17380 mL  | 0 25000 mL     | 8 062 | -∩ 05264  | n 96602 | ი იი265      | Timed out at |
| 1.10.1             | Data point Co               | 1.00000    | 0.10000        | 0.17000     | 0.20000        | 0.002 | -0.0020.  | 0.0002  | 0.00200      | 59.5 s       |
|                    |                             |            |                |             |                |       |           |         |              | J8.J 3       |





Assay name: pH-metric high logP Analyst: Pion
Assay ID: 18C-01012 Instrument ID: T312060

Filename: C:\Sirius\_T3\Mehtap\20180228\_exp28\_logP\_T3-2\18C-01012\_M12\_octanol\_pH-metric high logP.t3r

# **Events (continued)**

| Time      | Event         | Water      | Acid       | Base       | Octanol    | рН    | dpH/dt   | pH R-squared | pH SD   | dpH/dt<br>time      |
|-----------|---------------|------------|------------|------------|------------|-------|----------|--------------|---------|---------------------|
| 1:20:11.7 | Data point 81 | 1.50000 mL | 0.16860 mL | 0.17385 mL | 0.25000 mL | 8.128 | -0.04768 | 0.99488      | 0.00236 | Timed out at 59.5 s |
| 1:21:47.4 | Data point 82 | 1.50000 mL | 0.16860 mL | 0.17392 mL | 0.25000 mL | 8.346 | -0.02426 | 0.96191      | 0.00122 | Timed out at 59.5 s |
| 1:23:28.3 | Data point 83 | 1.50000 mL | 0.16860 mL | 0.17401 mL | 0.25000 mL | 8.532 | -0.01603 | 0.65257      | 0.00098 | 28.0 s              |
| 1:24:32.0 | Data point 84 | 1.50000 mL | 0.16860 mL | 0.17411 mL | 0.25000 mL | 8.645 | -0.01972 | 0.96650      | 0.00099 | 46.0 s              |
| 1:25:53.8 | Data point 85 | 1.50000 mL | 0.16860 mL | 0.17418 mL | 0.25000 mL | 8.779 | -0.01801 | 0.80706      | 0.00099 | 22.0 s              |
| 1:26:56.6 | Data point 86 | 1.50000 mL | 0.16860 mL | 0.17429 mL | 0.25000 mL | 8.994 | -0.01105 | 0.30301      | 0.00099 | 14.5 s              |
| 1:27:36.5 | Data point 87 | 1.50000 mL | 0.16860 mL | 0.17432 mL | 0.25000 mL | 8.985 | -0.01268 | 0.48445      | 0.00090 | 22.5 s              |
| 1:28:08.1 | Assay volumes | 1.50000 mL | 0.16860 mL | 0.17432 mL | 0.25000 mL |       |          |              |         |                     |



Assay name: pH-metric high logP Analyst: Pion
Assay ID: 18C-01012 Instrument ID: T312060

Filename: C:\Sirius\_T3\Mehtap\20180228\_exp28\_logP\_T3-2\18C-01012\_M12\_octanol\_pH-metric high logP.t3r

| Filename: C:\Sirius_T3\Meh                      | tap\20180228_exp2  | 8_logP_T3-2\180 | C-01012_M12_octano | I_pH-metric high log |
|---|--------------------|-----------------|--------------------|----------------------|
| Assay Settings                                  |                    |                 |                    |                      |
| Setting   | Value              | Original Value  | Date/Time changed  | Imported from        |
| General Settings                                | D'                 |                 |                    |                      |
| Analyst name                                    | Pion               |                 |                    |                      |
| Standard Experiment Settings                    |                    |                 |                    |                      |
| Number of titrations                            | 3                  |                 |                    |                      |
| Minimum pH                                      | 2.000              |                 |                    |                      |
| Maximum pH                                      | 9.000              |                 |                    |                      |
| pH step between points of                       | 0.200              |                 |                    |                      |
| Minimum titrant addition                        | 0.00002 mL         |                 |                    |                      |
| Maximum titrant addition                        | 0.10000 mL         |                 |                    |                      |
| Argon flow rate                                 | 100%               |                 |                    |                      |
| Start titration using                           | Cautious pH adjust |                 |                    |                      |
| Advanced General Settings                       |                    |                 |                    |                      |
| Detect turbidity using                          | None               |                 |                    |                      |
| Collect turbidity sensor data                   | No                 |                 |                    |                      |
| Collect UV spectra                              | No                 |                 |                    |                      |
| Stir after titrant addition for                 | 5 seconds          |                 |                    |                      |
| For titrant addition, stir at                   | 10%                |                 |                    |                      |
| Titrant Pre-Dose                                |                    |                 |                    |                      |
| Titrant pre-dose                                | None               |                 |                    |                      |
| Assay Medium                                    |                    |                 |                    |                      |
| ISA water volume                                | 1.50 mL            |                 |                    |                      |
| Water added                                     | Automatic          |                 |                    |                      |
| After water addition, stir for                  | 5 seconds          |                 |                    |                      |
| At a speed of                                   | 10%                |                 |                    |                      |
| Partition solvent type                          | Octanol            |                 |                    |                      |
| Partition volume                                | 0.020 mL           |                 |                    |                      |
| Partition solvent added                         | Automatic          |                 |                    |                      |
| After partition addition, stir for              | 1 seconds          |                 |                    |                      |
| Sample Sonication                               |                    |                 |                    |                      |
| Sonicate  | No                 |                 |                    |                      |
| Sample Dissolution                              |                    |                 |                    |                      |
| Perform a dissolution stage                     | Yes                |                 |                    |                      |
| Adjust and hold pH for dissolution              |                    |                 |                    |                      |
| Stir to dissolve for                            | 120 seconds        |                 |                    |                      |
| For dissolution, stir at                        | 10%                |                 |                    |                      |
| Carbonate purge                                 | 1070               |                 |                    |                      |
| Perform a carbonate purge                       | No                 |                 |                    |                      |
| Temperature Control                             | 110                |                 |                    |                      |
| Wait for temperature                            | Yes                |                 |                    |                      |
| Required start temperature                      | 25.0°C             |                 |                    |                      |
| Acceptable deviation                            | 0.5°C              |                 |                    |                      |
| Time to wait                                    | 60 seconds         |                 |                    |                      |
| Stir speed of                                   | 50%                |                 |                    |                      |
| Titration 1                                     | 30 /0              |                 |                    |                      |
| Titration T                                     | Low to high pH     |                 |                    |                      |
| Adjust to start pH                              | Yes                |                 |                    |                      |
| Adjust to start pri<br>After pH adjust stir for | 30 seconds         |                 |                    |                      |
| Stir to allow partitioning for                  | 15 seconds         |                 |                    |                      |
|   |                    |                 |                    |                      |
| Stirrer speed for partitioning                  | 50%                |                 |                    |                      |
| Titration 2                                     | Lourto biob!!      |                 |                    |                      |
| Titrate from                                    | Low to high pH     |                 |                    |                      |
| Add additional water                            | 0.00 mL            |                 |                    |                      |
| Additional partition solvent volume             |                    |                 |                    |                      |
| Additional partition solvent added              | Automatic          |                 |                    |                      |
| After nH adjust stir for                        | 30 seconds         |                 |                    |                      |

Reported at: 3/2/2018 3:16:49 PM

30 seconds

15 seconds 55%

After pH adjust stir for

Titration 3

Stir to allow partitioning for Stirrer speed for partitioning



Assay name: pH-metric high logP Analyst: Pion
Assay ID: 18C-01012 Instrument ID: T312060

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Filename: C:\Sirius\_T3\Mehtap\20180228\_exp28\_logP\_T3-2\18C-01012\_M12\_octanol\_pH-metric high logP.t3r

# Assay Settings (continued)

| Setting      | value          | Originai value | Date/Time changed | imported from |
|--------------|----------------|----------------|-------------------|---------------|
| Titrate from | Low to high pH |                |                   |               |
|              |                |                |                   |               |

Add additional water

Additional partition solvent volume

Additional partition solvent added

Automatic

After pH adjust stir for

Stir to allow partitioning for

Stirrer speed for partitioning

20.00 mL

Automatic

30 seconds

15 seconds

60%

Data Point Stability

Stir during data point collection No

Delay before data point collection 0 seconds
Number of points to average 20 points
Time interval between points 0.50 seconds
Required maximum standard deviation Stability timeout after 60 seconds

## Calibration Settings

| Setting                   | Value  | Date/Time changed   | Imported from             |
|---------------------------|--------|---------------------|---------------------------|
| Four-Plus alpha           | 0.130  | 3/1/2018 3:28:52 PM | C:\Sirius_T3\HCl18B27.t3r |
| Four-Plus S               | 0.9970 | 3/1/2018 3:28:52 PM | C:\Sirius_T3\HCl18B27.t3r |
| Four-Plus jH              | 0.8    | 3/1/2018 3:28:52 PM | C:\Sirius_T3\HCl18B27.t3r |
| Four-Plus jOH             | -0.4   | 3/1/2018 3:28:52 PM | C:\Sirius_T3\HCl18B27.t3r |
| Base concentration factor | 1.000  | 3/1/2018 3:28:52 PM | C:\Sirius_T3\KOH18B27.t3r |
| Acid concentration factor | 0.994  | 3/1/2018 3:28:52 PM | C:\Sirius T3\HCl18B27.t3r |

# Instrument Settings

| mistrament Setting  | js –   |                      |   |
|---|--|----------------------|---|
| Setting Instrument owner Instrument ID Instrument type Software version | Value<br>Merck<br>T312060<br>T3 Simulator<br>1.1.3.0 | Batch Id             | Install date  |
| Dispenser module<br>Dispenser 0<br>Syringe volume                       | Water<br>2.5 mL                                      | T3DM1200361          | 3/31/2009 5:24:52 AM<br>3/31/2009 5:25:05 AM                        |
| Firmware version<br>Titrant<br>Dispenser 2<br>Syringe volume            | 1.2.1(r2)<br>Water (0.15 M KCI)<br>Acid<br>0.5 mL    | 02-06-2018           | 2/27/2018 10:05:59 AM<br>3/31/2009 5:25:11 AM                       |
| Firmware version<br>Titrant<br>Dispenser 1<br>Syringe volume            | 1.2.1(r2)<br>Acid (0.5 M HCI)<br>Base<br>0.5 mL      | 02-27-2018           | 2/27/2018 10:27:22 AM<br>3/31/2009 5:25:21 AM                       |
| Firmware version<br>Titrant<br>Dispenser 5<br>Syringe volume            | 1.2.1(r2) Base (0.5 M KOH) Cosolvent 2.5 mL          | 9/22/2017            | 2/27/2018 10:21:22 AM<br>3/31/2009 5:26:24 AM                       |
| Firmware version Distribution valve 5 Firmware version                  | 1.2.1(r2) Distribution Valve 1.1.3                   |                      | 3/31/2009 5:28:19 AM  |
| Port A Port B Dispenser 3   | Methanol (80%, 0.15 M KCI)<br>Cyclohexane<br>Buffer  | 09-26-17<br>11-01-17 | 2/7/2018 9:42:01 AM<br>2/27/2018 10:37:57 AM<br>8/3/2010 5:05:16 AM |
| Syringe volume<br>Firmware version<br>Titrant<br>Dispenser 6            | 0.5 mL<br>1.2.1(r2)<br>Dodecane<br>Octanol           | 2018/01/31           | 2/28/2018 10:18:04 AM<br>10/22/2010 10:52:43 AM                     |

Reported at: 3/2/2018 3:16:49 PM

0.5 mL

Syringe volume



Assay name: pH-metric high logP Analyst: Pion
Assay ID: 18C-01012 Instrument ID: T312060

Filename: C:\Sirius\_T3\Mehtap\20180228\_exp28\_logP\_T3-2\18C-01012\_M12\_octanol\_pH-metric high logP.t3r

# Instrument Settings (continued)

| Setting   | Value   | Batch Id      | Install date                                |
|---|---|---------------|---|
| Firmware version<br>Titrant   | 1.2.1(r2)<br>Octanol  | 01-31-2018    | 2/27/2018 9:59:35 AM                        |
| Titrator  | Octanoi   |               | 3/31/2009 5:24:17 AM                        |
| Horizontal axis firmware version Vertical axis firmware version Chassis I/O firmware version Probe I/O firmware version | 1.17 Al1Dl2DO2 Stepper 2<br>1.17 Al1Dl2DO2 Stepper 2<br>1.11 Al1Dl0DO4 Norgren I/O<br>1.1.1 | 1011111200101 | 0,01,2000 0.21.11 7111                      |
| Electrode   | T3 Electrode  | T3E0923       | 1/23/2018 2:01:00 PM                        |
| E0 calibration<br>Filling solution<br>Liquids   | +2.90 mV<br>3M KCI  | KCL097        | 3/1/2018 3:29:20 PM<br>2/27/2018 9:49:43 AM |
| Wash 1  | 50% IPA:50% Water   |               | 2/28/2018 10:23:32 AM                       |
| Wash 2  | 0.5% Trition X-100 in H20   |               | 2/28/2018 10:23:34 AM                       |
| Buffer position 1   | pH7 Wash  |               | 2/28/2018 10:24:06 AM                       |
| Buffer position 2   | pH 7  |               | 2/28/2018 10:24:08 AM                       |
| Storage position  |   |               | 2/28/2018 10:21:14 AM                       |
| Wash water  | 8.1e+003 mL   | 02-27-2018    | 2/27/2018 9:54:39 AM                        |
| Waste   | 7.4e+003 mL   |               | 11/28/2017 10:36:29 AM                      |
| Temperature controller  |   |               | 8/5/2010 6:35:13 AM                         |
| Turbidity detector  |   | 074044        | 3/31/2009 5:24:45 AM                        |
| Spectrometer  |   | 074811        | 11/23/2010 11:22:28 AM                      |
| Dip probe<br>Wavelength coefficient A0  | 183.333   | 10196         |   |
| Wavelength coefficient A1   | 2.21568   |               |   |
| Wavelength coefficient A2   | -0.000289308  |               |   |
| Total lamp lit time   | 112:08:55   |               | 11/23/2010 11:22:28 AM                      |
| Calibrated on   | 2/27/2018 10:40:38 AM   |               |   |
| Integration time  | 40  |               |   |
| Scans averaged  | 10  |               |   |
| Autoloader  |   | T3AL1200345   | 11/10/2015 9:34:13 AM                       |
| Left-right axis firmware version<br>Front-back axis firmware version  | 1.17 Al1Dl2DO2 Stepper 2<br>1.17 Al1Dl2DO2 Stepper 2  |               |   |
| Vertical axis firmware version  | 1.17 Al1Dl2DO2 Stepper 2  |               |   |
| Chassis I/O firmware version  | 1.11 Al1Dl0DO4 Norgren I/O  |               |   |
| Configuration   | Ğ   |               |   |
| Alternate titration position  | Titration position  |               |   |
| Alternate reference position  | Reference position  |               |   |
| Maximum standard vial volume  | 3.50 mL   |               |   |
| Maximum alternate vial volume   | 25.00 mL  |               |   |
| Automatic action idle period  | 5 minute(s)   |               |   |
| Titrant tube volume<br>Syringe flush count  | 1.3 mL<br>3.50  |               |   |
| Flowing wash pump volume  | 20.0 mL   |               |   |
| Flowing wash stir duration  | 5 s   |               |   |
| Flowing wash stir speed   | 30%   |               |   |
| Solvent wash stir duration  | 5 s   |               |   |
| Solvent wash stir speed   | 30%   |               |   |
| Surfactant wash stir duration   | 5 s   |               |   |
| Surfactant wash stir speed  | 30%   |               |   |
| E0 calibration minimum number of points   | 10  |               |   |
| E0 calibration maximum standard deviation   |   |               |   |
| E0 calibration timeout period   | 60 s  |               |   |
| E0 calibration stir duration  | 5 s   |               |   |
| E0 calibration preparation stir speed   | 30%   |               |   |
| E0 calibration buffer wash stir duration E0 calibration buffer wash stir speed  | 5 s<br>30%  |               |   |
| E0 calibration reading stir speed   | 0%  |               |   |
| Spectrometer calibration stir duration  | 5 s   |               |   |
| Specifical dalibration our duration   |   |               |   |



pH-metric high logP Assay name: Analyst: Pion Assay ID: 18C-01012 Instrument ID: T312060

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# Instrument Settings (continued)

| Setting                                     | Value   | Batch Id | d Install date |  |
|---|---------|----------|----------------|--|
| Spectrometer calibration stir speed         | 30%     |          |                |  |
| Spectrometer calibration wash pump volume   | 20.0 mL |          |                |  |
| Spectrometer calibration wash stir duration | 5 s     |          |                |  |
| Spectrometer calibration wash stir speed    | 30%     |          |                |  |
| Overhead dispense height                    | 10000   |          |                |  |
|   |         |          |                |  |

## Refinement Settings

| Setting                        | Value    | Default value |
|--------------------------------|----------|---------------|
| Turbidity detection method     | None     | None          |
| Turbidity wavelength to assess | 500.0 nm | 500.0 nm      |
| Turbidity maximum absorbance   | 0.100    | 0.100         |
| Turbidity probe threshold      | 50.00    | 50.00         |

## Experiment Log

- [2:38] Air gap created for Water (0.15 M KCI)
- [2:38] Air gap created for Acid (0.5 M HCI)
- [2:38] Air gap created for Base (0.5 M KOH) [2:39] Air gap released for Water (0.15 M KCl)
- [2:44] Titrator arm moved to Titration position
- [2:44] Argon flow rate set to 100
- [2:44] Titration 1 of 3
- [2:44] Adding initial titrants
- [2:44] Automatically add 1.50000 mL of water
- [3:09] Dispensed 1.500000 mL of Water (0.15 M KCI)
- [3:09] Stirrer speed set to 10
- [3:14] Automatically add 0.02000 mL of Octanol
- [3:15] Dispensed 0.019991 mL of Octanol
- [3:16] Initial pH = 4.96
- [3:16] Iterative adjust 4.96 -> 2.00
- [3:16] pH 4.96 -> 2.00
- [3:18] Air gap released for Acid (0.5 M HCI)
- [3:18] Dispensed 0.052211 mL of Acid (0.5 M HCl)
- [3:23] Holding pH 2.00
- [5:23] Stirrer speed set to 0
- [5:23] Stirrer speed set to 50
- [5:23] Iterative adjust 1.89 -> 2.00
- [5:23] pH 1.89 -> 2.00
- [5:24] Air gap released for Base (0.5 M KOH)
- [5:25] Dispensed 0.013288 mL of Base (0.5 M KOH)
- [6:15] Stirrer speed set to 0
- [6:26] Datapoint id 1 collected
- [6:26] Stirrer speed set to 50
- [6:31] pH 2.04 -> 2.24
- [6:31] Using cautious pH adjust
- [6:31] Dispensed 0.007314 mL of Base (0.5 M KOH)
- [6:36] Stepping pH = 2.12
- [6:36] Dispensed 0.005974 mL of Base (0.5 M KOH)
- [6:41] Stepping pH = 2.22
- [6:42] Dispensed 0.001105 mL of Base (0.5 M KOH)
- [6:47] Stepping pH = 2.24
- [7:02] Stirrer speed set to 0
- [7:12] Datapoint id 2 collected
- [7:12] Charge balance equation is out by 1.6%
- [7:12] Stirrer speed set to 50
- [7:17] pH 2.26 -> 2.46
- [7:17] Using charge balance adjust
- [7:17] Dispensed 0.008843 mL of Base (0.5 M KOH)



pH-metric high logP Assay name: Analyst: Pion Assay ID: 18C-01012 Instrument ID: T312060

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- [7:37] Stirrer speed set to 0
- [7:47] Datapoint id 3 collected
- [7:47] Charge balance equation is out by 4.9%
- [7:47] Stirrer speed set to 50
- [7:53] pH 2.48 -> 2.68
- [7:53] Using charge balance adjust
- [7:53] Dispensed 0.005456 mL of Base (0.5 M KOH)
- [8:13] Stirrer speed set to 0
- [8:41] Datapoint id 4 collected
- [8:41] Charge balance equation is out by -2.2%
- [8:41] Stirrer speed set to 50
- [8:46] pH 2.68 -> 2.88
- [8:46] Using charge balance adjust
- [8:46] Dispensed 0.003622 mL of Base (0.5 M KOH)
- [9:07] Stirrer speed set to 0
- [9:17] Datapoint id 5 collected
- [9:17] Charge balance equation is out by 9.1%
- [9:17] Stirrer speed set to 50
- [9:22] pH 2.90 -> 3.10
- [9:22] Using charge balance adjust
- [9:22] Dispensed 0.002493 mL of Base (0.5 M KOH)
- [9:42] Stirrer speed set to 0
- [9:52] Datapoint id 6 collected
- [9:52] Charge balance equation is out by -16.5%
- [9:52] Stirrer speed set to 50
- [9:57] pH 3.07 -> 3.27
- [9:57] Using cautious pH adjust
- [9:57] Dispensed 0.001011 mL of Base (0.5 M KOH)
- [10:02] Stepping pH = 3.12
- [10:02] Dispensed 0.001317 mL of Base (0.5 M KOH)
- [10:08] Stepping pH = 3.24
- [10:08] Dispensed 0.000212 mL of Base (0.5 M KOH)
- [10:13] Stepping pH = 3.25
- [10:13] Dispensed 0.000212 mL of Base (0.5 M KOH)
- [10:18] Stepping pH = 3.27
- [10:33] Stirrer speed set to 0
- [10:44] Datapoint id 7 collected
- [10:44] Charge balance equation is out by -36.5%
- [10:44] Stirrer speed set to 50
- [10:49] pH 3.27 -> 3.47
- [10:49] Using cautious pH adjust
- [10:49] Dispensed 0.000894 mL of Base (0.5 M KOH)
- [10:54] Stepping pH = 3.35
- [10:54] Dispensed 0.000847 mL of Base (0.5 M KOH)
- [10:59] Stepping pH = 3.46 [11:14] Stirrer speed set to 0
- [11:25] Datapoint id 8 collected
- [11:25] Charge balance equation is out by 2.1%
- [11:25] Stirrer speed set to 50
- [11:30] pH 3.48 -> 3.68
- [11:30] Using charge balance adjust
- [11:30] Dispensed 0.001693 mL of Base (0.5 M KOH)
- [11:50] Stirrer speed set to 0
- [12:01] Datapoint id 9 collected
- [12:01] Charge balance equation is out by 39.1%
- [12:01] Stirrer speed set to 50
- [12:06] pH 3.73 -> 3.93
- [12:06] Using cautious pH adjust
- [12:06] Dispensed 0.000823 mL of Base (0.5 M KOH)



pH-metric high logP Assay name: Analyst: Pion Assay ID: 18C-01012 Instrument ID: T312060

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- [12:11] Stepping pH = 3.85
- [12:11] Dispensed 0.000447 mL of Base (0.5 M KOH)
- [12:16] Stepping pH = 3.94
- [12:31] Stirrer speed set to 0
- [12:45] Datapoint id 10 collected
- [12:45] Charge balance equation is out by 22.7%
- [12:45] Stirrer speed set to 50
- [12:50] pH 3.90 -> 4.10
- [12:50] Using cautious pH adjust
- [12:51] Dispensed 0.000800 mL of Base (0.5 M KOH)
- [12:56] Stepping pH = 4.04
- [12:56] Dispensed 0.000306 mL of Base (0.5 M KOH)
- [13:01] Stepping pH = 4.12
- [13:16] Stirrer speed set to 0
- [13:29] Datapoint id 11 collected
- [13:29] Charge balance equation is out by 30.8%
- [13:29] Stirrer speed set to 50
- [13:34] pH 4.13 -> 4.33
- [13:34] Using cautious pH adjust
- [13:34] Dispensed 0.000706 mL of Base (0.5 M KOH)
- [13:39] Stepping pH = 4.30
- [13:39] Dispensed 0.000094 mL of Base (0.5 M KOH)
- [13:44] Stepping pH = 4.35
- [14:00] Stirrer speed set to 0
- [14:14] Datapoint id 12 collected
- [14:14] Charge balance equation is out by 42.4%
- [14:14] Stirrer speed set to 50
- [14:19] pH 4.31 -> 4.51
- [14:19] Using cautious pH adjust
- [14:19] Dispensed 0.000588 mL of Base (0.5 M KOH)
- [14:24] Stepping pH = 4.55
- [14:39] Stirrer speed set to 0
- [14:56] Datapoint id 13 collected
- [14:56] Charge balance equation is out by 50.0%
- [14:56] Stirrer speed set to 50
- [15:01] pH 4.55 -> 4.75
- [15:01] Using cautious pH adjust
- [15:01] Dispensed 0.000423 mL of Base (0.5 M KOH)
- [15:06] Stepping pH = 4.83
- [15:21] Stirrer speed set to 0
- [15:44] Datapoint id 14 collected
- [15:44] Charge balance equation is out by 50.0%
- [15:44] Stirrer speed set to 50
- [15:50] pH 4.82 -> 5.02
- [15:50] Using cautious pH adjust
- [15:50] Dispensed 0.000259 mL of Base (0.5 M KOH)
- [15:55] Stepping pH = 4.97
- [15:55] Dispensed 0.000071 mL of Base (0.5 M KOH)
- [16:00] Stepping pH = 5.06
- [16:15] Stirrer speed set to 0
- [16:43] Datapoint id 15 collected
- [16:43] Charge balance equation is out by 38.3%
- [16:43] Stirrer speed set to 50
- [16:48] pH 5.02 -> 5.22
- [16:48] Using cautious pH adjust
- [16:48] Dispensed 0.000188 mL of Base (0.5 M KOH)
- [16:53] Stepping pH = 5.44
- [17:08] Stirrer speed set to 0
- [17:38] Datapoint id 16 collected



Assay name: pH-metric high logP Analyst: Pion
Assay ID: 18C-01012 Instrument ID: T312060

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- [17:38] Charge balance equation is out by 50.0%
- [17:38] Stirrer speed set to 50
- [17:43] pH 5.43 -> 5.63
- [17:43] Using cautious pH adjust
- [17:43] Dispensed 0.000094 mL of Base (0.5 M KOH)
- [17:48] Stepping pH = 5.54
- [17:48] Dispensed 0.000047 mL of Base (0.5 M KOH)
- [17:53] Stepping pH = 5.77
- [18:08] Stirrer speed set to 0
- [18:40] Datapoint id 17 collected
- [18:40] Charge balance equation is out by 18.4%
- [18:40] Stirrer speed set to 50
- [18:45] pH 5.84 -> 6.04
- [18:45] Using cautious pH adjust
- [18:45] Dispensed 0.000047 mL of Base (0.5 M KOH)
- [18:50] Stepping pH = 5.88
- [18:50] Dispensed 0.000094 mL of Base (0.5 M KOH)
- [18:55] Stepping pH = 6.68
- [19:11] Stirrer speed set to 0
- [20:11] Datapoint id 18 collected
- [20:11] Charge balance equation is out by -44.4%
- [20:11] Stirrer speed set to 50
- [20:16] pH 6.88 -> 7.08
- [20:16] Using cautious pH adjust
- [20:16] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [20:21] Stepping pH = 6.87
- [20:21] Dispensed 0.000071 mL of Base (0.5 M KOH)
- [20:26] Stepping pH = 7.48
- [20:41] Stirrer speed set to 0
- [21:41] Datapoint id 19 collected
- [21:41] Charge balance equation is out by -232.0%
- [21:41] Stirrer speed set to 50
- [21:46] pH 7.52 -> 7.72
- [21:46] Using cautious pH adjust
- [21:46] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [21:51] Stepping pH = 7.42
- [21:51] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [21:56] Stepping pH = 7.45
- [21:57] Dispensed 0.000094 mL of Base (0.5 M KOH)
- [22:02] Stepping pH = 8.76
- [22:17] Stirrer speed set to 0
- [23:10] Datapoint id 20 collected
- [23:10] Charge balance equation is out by -1,588.8%
- [23:10] Stirrer speed set to 50
- [23:15] pH 8.90 -> 9.05
- [23:15] Using cautious pH adjust
- [23:15] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [23:21] Stepping pH = 8.90
- [23:21] Dispensed 0.000071 mL of Base (0.5 M KOH)
- [23:26] Stepping pH = 9.05
- [23:41] Stirrer speed set to 0
- [24:07] Datapoint id 21 collected
- [24:07] Charge balance equation is out by -237.3%
- [24:07] Titration 2 of 3
- [24:07] Adding initial titrants
- [24:07] Automatically add 0.03000 mL of Octanol
- [24:08] Dispensed 0.030009 mL of Octanol
- [24:08] Stirrer speed set to 10
- [24:09] Stirrer speed set to 55



pH-metric high logP Assay name: Analyst: Pion Assay ID: 18C-01012 Instrument ID: T312060

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- [24:09] Iterative adjust 9.11 -> 2.00
- [24:09] pH 9.11 -> 2.00
- [24:10] Dispensed 0.056703 mL of Acid (0.5 M HCI)
- [25:01] Stirrer speed set to 0
- [25:11] Datapoint id 22 collected
- [25:11] Stirrer speed set to 55
- [25:16] pH 1.96 -> 2.16
- [25:16] Using cautious pH adjust
- [25:16] Dispensed 0.009572 mL of Base (0.5 M KOH)
- [25:22] Stepping pH = 2.04
- [25:22] Dispensed 0.007832 mL of Base (0.5 M KOH)
- [25:27] Stepping pH = 2.13
- [25:27] Dispensed 0.001458 mL of Base (0.5 M KOH)
- [25:32] Stepping pH = 2.16
- [25:47] Stirrer speed set to 0
- [25:57] Datapoint id 23 collected
- [25:57] Charge balance equation is out by 1.5%
- [25:57] Stirrer speed set to 55
- [26:02] pH 2.17 -> 2.37
- [26:02] Using charge balance adjust
- [26:03] Dispensed 0.011618 mL of Base (0.5 M KOH)
- [26:23] Stirrer speed set to 0
- [26:33] Datapoint id 24 collected
- [26:33] Charge balance equation is out by 8.1%
- [26:33] Stirrer speed set to 55
- [26:38] pH 2.40 -> 2.60
- [26:38] Using charge balance adjust
- [26:38] Dispensed 0.007079 mL of Base (0.5 M KOH)
- [26:58] Stirrer speed set to 0
- [27:09] Datapoint id 25 collected
- [27:09] Charge balance equation is out by -3.0%
- [27:09] Stirrer speed set to 55
- [27:14] pH 2.60 -> 2.80
- [27:14] Using charge balance adjust
- [27:14] Dispensed 0.004704 mL of Base (0.5 M KOH)
- [27:35] Stirrer speed set to 0
- [27:45] Datapoint id 26 collected
- [27:45] Charge balance equation is out by 9.3%
- [27:45] Stirrer speed set to 55
- [27:50] pH 2.82 -> 3.02
- [27:50] Using charge balance adjust
- [27:50] Dispensed 0.003175 mL of Base (0.5 M KOH)
- [28:10] Stirrer speed set to 0
- [28:20] Datapoint id 27 collected
- [28:20] Charge balance equation is out by -11.4%
- [28:20] Stirrer speed set to 55
- [28:25] pH 3.00 -> 3.20
- [28:25] Using charge balance adjust
- [28:25] Dispensed 0.002540 mL of Base (0.5 M KOH)
- [28:46] Stirrer speed set to 0
- [28:56] Datapoint id 28 collected
- [28:56] Charge balance equation is out by -6.4%
- [28:56] Stirrer speed set to 55
- [29:01] pH 3.19 -> 3.39
- [29:01] Using charge balance adjust
- [29:01] Dispensed 0.002187 mL of Base (0.5 M KOH)
- [29:22] Stirrer speed set to 0
- [29:32] Datapoint id 29 collected
- [29:32] Charge balance equation is out by 13.7%



pH-metric high logP Assay name: Analyst: Pion Assay ID: 18C-01012 Instrument ID: T312060

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- [29:32] Stirrer speed set to 55
- [29:37] pH 3.42 -> 3.62
- [29:37] Using charge balance adjust
- [29:37] Dispensed 0.001952 mL of Base (0.5 M KOH)
- [29:57] Stirrer speed set to 0
- [30:07] Datapoint id 30 collected
- [30:07] Charge balance equation is out by 46.6%
- [30:07] Stirrer speed set to 55
- [30:12] pH 3.71 -> 3.91
- [30:12] Using cautious pH adjust
- [30:12] Dispensed 0.000870 mL of Base (0.5 M KOH)
- [30:17] Stepping pH = 3.82
- [30:18] Dispensed 0.000517 mL of Base (0.5 M KOH)
- [30:23] Stepping pH = 3.94
- [30:38] Stirrer speed set to 0
- [30:49] Datapoint id 31 collected
- [30:49] Charge balance equation is out by 20.1%
- [30:49] Stirrer speed set to 55
- [30:54] pH 4.01 -> 4.21
- [30:54] Using cautious pH adjust [30:55] Dispensed 0.000659 mL of Base (0.5 M KOH)
- [31:00] Stepping pH = 4.14
- [31:00] Dispensed 0.000259 mL of Base (0.5 M KOH)
- [31:05] Stepping pH = 4.27
- [31:20] Stirrer speed set to 0
- [31:47] Datapoint id 32 collected
- [31:47] Charge balance equation is out by 30.0%
- [31:47] Stirrer speed set to 55
- [31:52] pH 4.31 -> 4.51
- [31:52] Using cautious pH adjust
- [31:52] Dispensed 0.000447 mL of Base (0.5 M KOH)
- [31:57] Stepping pH = 4.55
- [32:12] Stirrer speed set to 0
- [32:37] Datapoint id 33 collected
- [32:37] Charge balance equation is out by 50.0%
- [32:37] Stirrer speed set to 55
- [32:42] pH 4.60 -> 4.80
- [32:42] Using cautious pH adjust
- [32:43] Dispensed 0.000282 mL of Base (0.5 M KOH)
- [32:48] Stepping pH = 4.90
- [33:03] Stirrer speed set to 0
- [33:21] Datapoint id 34 collected
- [33:21] Charge balance equation is out by 50.0%
- [33:21] Stirrer speed set to 55
- [33:26] pH 4.92 -> 5.12
- [33:26] Using cautious pH adjust
- [33:26] Dispensed 0.000141 mL of Base (0.5 M KOH)
- [33:32] Stepping pH = 5.08
- [33:32] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [33:37] Stepping pH = 5.15
- [33:52] Stirrer speed set to 0
- [34:18] Datapoint id 35 collected
- [34:18] Charge balance equation is out by 40.7%
- [34:18] Stirrer speed set to 55
- [34:23] pH 5.16 -> 5.36
- [34:23] Using cautious pH adjust
- [34:23] Dispensed 0.000094 mL of Base (0.5 M KOH)
- [34:29] Stepping pH = 5.26
- [34:29] Dispensed 0.000071 mL of Base (0.5 M KOH)



Assay name: pH-metric high logP Analyst: Pion
Assay ID: 18C-01012 Instrument ID: T312060

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- [34:34] Stepping pH = 5.69
- [34:49] Stirrer speed set to 0
- [35:19] Datapoint id 36 collected
- [35:19] Charge balance equation is out by 17.2%
- [35:19] Stirrer speed set to 55
- [35:24] pH 5.79 -> 5.99
- [35:24] Using cautious pH adjust
- [35:24] Dispensed 0.000047 mL of Base (0.5 M KOH)
- [35:29] Stepping pH = 5.93
- [35:29] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [35:34] Stepping pH = 6.19
- [35:49] Stirrer speed set to 0
- 00.49] Stiller speed set to 0
- [36:36] Datapoint id 37 collected
- [36:36] Charge balance equation is out by 23.2%
- [36:36] Stirrer speed set to 55
- [36:41] pH 6.24 -> 6.44
- [36:41] Using cautious pH adjust
- [36:41] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [36:46] Stepping pH = 6.26
- [36:46] Dispensed 0.000071 mL of Base (0.5 M KOH)
- [36:51] Stepping pH = 6.71
- [37:06] Stirrer speed set to 0
- [38:06] Datapoint id 38 collected
- [38:06] Charge balance equation is out by -67.6%
- [38:06] Stirrer speed set to 55
- [38:11] pH 6.80 -> 7.00
- [38:11] Using cautious pH adjust
- [38:11] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [38:16] Stepping pH = 6.78
- [38:16] Dispensed 0.000071 mL of Base (0.5 M KOH)
- [38:21] Stepping pH = 7.04
- [38:37] Stirrer speed set to 0
- [39:37] Datapoint id 39 collected
- 59.57] Datapoint id 59 collected
- [39:37] Charge balance equation is out by -246.2%
- [39:37] Stirrer speed set to 55
- [39:42] pH 7.29 -> 7.49
- [39:42] Using cautious pH adjust
- [39:42] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [39:47] Stepping pH = 7.29
- [39:47] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [39:52] Stepping pH = 7.41
- [39:52] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [39:57] Stepping pH = 7.70
- [40:12] Stirrer speed set to 0
- [41:12] Datapoint id 40 collected
- [41:12] Charge balance equation is out by -384.4%
- [41:12] Stirrer speed set to 55
- [41:17] pH 7.79 -> 7.99
- [41:17] Using cautious pH adjust
- [41:17] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [41:22] Stepping pH = 7.81
- [41:22] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [41:28] Stepping pH = 7.95
- [41:28] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [41:33] Stepping pH = 8.17
- [41:48] Stirrer speed set to 0
- [42:48] Datapoint id 41 collected
- [42:48] Charge balance equation is out by -765.5%
- [42:48] Stirrer speed set to 55



Assay name: pH-metric high logP Analyst: Pion
Assay ID: 18C-01012 Instrument ID: T312060

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- [42:53] pH 8.18 -> 8.38
- [42:53] Using cautious pH adjust
- [42:53] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [42:58] Stepping pH = 8.17
- [42:58] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [43:03] Stepping pH = 8.32
- [43:03] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [43:08] Stepping pH = 8.51
- [43:23] Stirrer speed set to 0
- [44:04] Datapoint id 42 collected
- [44:04] Charge balance equation is out by -611.1%
- [44:04] Stirrer speed set to 55
- [44:09] pH 8.54 -> 8.74
- [44:09] Using cautious pH adjust
- [44:10] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [44:15] Stepping pH = 8.56
- [44:15] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [44:20] Stepping pH = 8.64
- [44:20] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [44:25] Stepping pH = 8.75
- [44:40] Stirrer speed set to 0
- [45:14] Datapoint id 43 collected
- [45:14] Charge balance equation is out by -275.0%
- [45:14] Stirrer speed set to 55
- [45:19] pH 8.74 -> 8.94
- [45:19] Using cautious pH adjust
- [45:19] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [45:24] Stepping pH = 8.74
- [45:24] Dispensed 0.000047 mL of Base (0.5 M KOH)
- [45:29] Stepping pH = 8.86
- [45:29] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [45:34] Stepping pH = 8.97
- [45:49] Stirrer speed set to 0
- [46:09] Datapoint id 44 collected
- [46:09] Charge balance equation is out by -212.1%
- [46:09] Stirrer speed set to 55
- [46:14] pH 8.94 -> 9.05
- [46:14] Using cautious pH adjust
- [46:14] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [46:19] Stepping pH = 8.94
- [46:19] Dispensed 0.000047 mL of Base (0.5 M KOH)
- [46:24] Stepping pH = 9.01
- [46:39] Stirrer speed set to 0
- [46:56] Datapoint id 45 collected
- [46:56] Charge balance equation is out by -261.0%
- [46:56] Titration 3 of 3
- [46:56] Adding initial titrants
- [46:56] Automatically add 0.20000 mL of Octanol
- [47:01] Dispensed 0.200000 mL of Octanol
- [47:01] Stirrer speed set to 10
- [47:02] Stirrer speed set to 60
- [47:02] Iterative adjust 9.05 -> 2.00
- [47:02] pH 9.05 -> 2.00
- [47:04] Dispensed 0.059690 mL of Acid (0.5 M HCl)
- [47:54] Stirrer speed set to 0
- [48:04] Datapoint id 46 collected
- [48:04] Stirrer speed set to 60
- [48:10] pH 1.96 -> 2.16
- [48:10] Using cautious pH adjust



Assay name: pH-metric high logP Analyst: Pion
Assay ID: 18C-01012 Instrument ID: T312060

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- [48:10] Dispensed 0.010113 mL of Base (0.5 M KOH)
- [48:15] Stepping pH = 2.05
- [48:15] Dispensed 0.007361 mL of Base (0.5 M KOH)
- [48:20] Stepping pH = 2.13
- [48:21] Dispensed 0.001999 mL of Base (0.5 M KOH)
- [48:26] Stepping pH = 2.16
- [48:41] Stirrer speed set to 0
- [48:51] Datapoint id 47 collected
- [48:51] Charge balance equation is out by 3.8%
- [48:51] Stirrer speed set to 60
- [48:56] pH 2.18 -> 2.38
- [48:56] Using charge balance adjust
- [48:56] Dispensed 0.012347 mL of Base (0.5 M KOH)
- [49:16] Stirrer speed set to 0
- [49:27] Datapoint id 48 collected
- [49:27] Charge balance equation is out by 4.8%
- [49:27] Stirrer speed set to 60
- [49:32] pH 2.39 -> 2.59
- [49:32] Using charge balance adjust
- [49:32] Dispensed 0.007738 mL of Base (0.5 M KOH)
- [49:52] Stirrer speed set to 0
- [50:02] Datapoint id 49 collected
- [50:02] Charge balance equation is out by -10.9%
- [50:02] Stirrer speed set to 60
- [50:07] pH 2.58 -> 2.78
- [50:07] Using charge balance adjust
- [50:07] Dispensed 0.005409 mL of Base (0.5 M KOH)
- [50:28] Stirrer speed set to 0
- [50:38] Datapoint id 50 collected
- [50:38] Charge balance equation is out by -1.8%
- [50:38] Stirrer speed set to 60
- [50:43] pH 2.78 -> 2.98
- [50:43] Using charge balance adjust
- [50:43] Dispensed 0.003833 mL of Base (0.5 M KOH)
- [51:03] Stirrer speed set to 0
- [51:13] Datapoint id 51 collected
- [51:13] Charge balance equation is out by -0.7%
- [51:13] Stirrer speed set to 60
- [51:18] pH 2.99 -> 3.19
- [51:18] Using charge balance adjust
- [51:18] Dispensed 0.002963 mL of Base (0.5 M KOH)
- [51:39] Stirrer speed set to 0
- [51:49] Datapoint id 52 collected
- [51:49] Charge balance equation is out by 41.2%
- [51:49] Stirrer speed set to 60
- [51:54] pH 3.28 -> 3.48
- [51:54] Using cautious pH adjust
- [51:54] Dispensed 0.001152 mL of Base (0.5 M KOH)
- [51:59] Stepping pH = 3.38
- [51:59] Dispensed 0.000729 mL of Base (0.5 M KOH)
- [52:04] Stepping pH = 3.51
- [52:19] Stirrer speed set to 0
- [52:35] Datapoint id 53 collected
- [52:35] Charge balance equation is out by 18.3%
- [52:35] Stirrer speed set to 60
- [52:40] pH 3.56 -> 3.76
- [52:40] Using cautious pH adjust
- [52:40] Dispensed 0.000917 mL of Base (0.5 M KOH)
- [52:45] Stepping pH = 3.68



Assay name: pH-metric high logP Analyst: Pion
Assay ID: 18C-01012 Instrument ID: T312060

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- [52:45] Dispensed 0.000447 mL of Base (0.5 M KOH)
- [52:50] Stepping pH = 3.81
- [53:05] Stirrer speed set to 0
- [53:16] Datapoint id 54 collected
- [53:16] Charge balance equation is out by 25.4%
- [53:16] Stirrer speed set to 60
- [53:21] pH 3.89 -> 4.09
- [53:21] Using cautious pH adjust
- [53:21] Dispensed 0.000659 mL of Base (0.5 M KOH)
- [53:26] Stepping pH = 4.07
- [53:26] Dispensed 0.000047 mL of Base (0.5 M KOH)
- [53:31] Stepping pH = 4.21
- [53:47] Stirrer speed set to 0
- [53:57] Datapoint id 55 collected
- [53:57] Charge balance equation is out by 45.6%
- [53:57] Stirrer speed set to 60
- [54:02] pH 4.23 -> 4.43
- [54:02] Using cautious pH adjust
- [54:02] Dispensed 0.000376 mL of Base (0.5 M KOH)
- [54:07] Stepping pH = 4.66
- [54:22] Stirrer speed set to 0
- [54:35] Datapoint id 56 collected
- [54:35] Charge balance equation is out by 50.0%
- [54:35] Stirrer speed set to 60
- [54:41] pH 4.69 -> 4.89
- [54:41] Using cautious pH adjust
- [54:41] Dispensed 0.000165 mL of Base (0.5 M KOH)
- [54:46] Stepping pH = 4.90
- [55:01] Stirrer speed set to 0
- [55:14] Datapoint id 57 collected
- [55:14] Charge balance equation is out by 50.0%
- [55:14] Stirrer speed set to 60
- [55:19] pH 4.82 -> 5.02
- [55:19] Using cautious pH adjust
- [55:19] Dispensed 0.000118 mL of Base (0.5 M KOH)
- [55:24] Stepping pH = 4.96
- [55:24] Dispensed 0.000047 mL of Base (0.5 M KOH)
- [55:29] Stepping pH = 5.07
- [55:44] Stirrer speed set to 0
- [55:59] Datapoint id 58 collected
- [55:59] Charge balance equation is out by 35.4%
- [55:59] Stirrer speed set to 60
- [56:04] pH 5.04 -> 5.24
- [56:04] Using cautious pH adjust
- [56:04] Dispensed 0.000071 mL of Base (0.5 M KOH)
- [56:09] Stepping pH = 5.24
- [56:24] Stirrer speed set to 0
- [56:42] Datapoint id 59 collected
- [56:42] Charge balance equation is out by 50.0%
- [56:42] Stirrer speed set to 60
- [56:47] pH 5.18 -> 5.38
- [56:47] Using cautious pH adjust
- [56:47] Dispensed 0.000071 mL of Base (0.5 M KOH)
- [56:52] Stepping pH = 5.28
- [56:52] Dispensed 0.000047 mL of Base (0.5 M KOH)
- [56:57] Stepping pH = 5.44
- [57:12] Stirrer speed set to 0
- [57:26] Datapoint id 60 collected
- [57:26] Charge balance equation is out by 17.2%
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- [57:26] Stirrer speed set to 60
- [57:31] pH 5.44 -> 5.64
- [57:31] Using cautious pH adjust
- [57:31] Dispensed 0.000047 mL of Base (0.5 M KOH)
- [57:36] Stepping pH = 5.52
- [57:36] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [57:41] Stepping pH = 5.57
- [57:41] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [57:46] Stepping pH = 5.67
- [58:01] Stirrer speed set to 0
- [58:26] Datapoint id 61 collected
- [58:26] Charge balance equation is out by -31.4%
- [58:26] Stirrer speed set to 60
- [58:31] pH 5.57 -> 5.77
- [58:31] Using cautious pH adjust
- [58:31] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [58:36] Stepping pH = 5.60
- [58:36] Dispensed 0.000094 mL of Base (0.5 M KOH)
- [58:41] Stepping pH = 6.29
- [58:56] Stirrer speed set to 0
- [59:52] Datapoint id 62 collected
- [59:52] Charge balance equation is out by -71.8%
- [59:52] Stirrer speed set to 60
- [59:57] pH 5.94 -> 6.14
- [59:57] Using cautious pH adjust
- [59:57] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [1:00:02] Stepping pH = 5.95
- [1:00:02] Dispensed 0.000071 mL of Base (0.5 M KOH)
- [1:00:07] Stepping pH = 6.30
- [1:00:22] Stirrer speed set to 0
- [1:00:36] Datapoint id 63 collected
- [1:00:36] Charge balance equation is out by -89.9%
- [1:00:36] Stirrer speed set to 60
- [1:00:41] pH 6.12 -> 6.32
- [1:00:41] Using cautious pH adjust
- [1:00:41] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [1:00:46] Stepping pH = 6.16
- [1:00:46] Dispensed 0.000047 mL of Base (0.5 M KOH)
- [1:00:51] Stepping pH = 6.48
- [1:01:06] Stirrer speed set to 0
- [1:02:06] Datapoint id 64 collected
- [1:02:06] Charge balance equation is out by -38.2%
- [1:02:06] Stirrer speed set to 60
- [1:02:11] pH 6.11 -> 6.31
- [1:02:11] Using cautious pH adjust
- [1:02:11] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [1:02:16] Stepping pH = 6.18
- [1:02:16] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [1:02:22] Stepping pH = 6.34
- [1:02:37] Stirrer speed set to 0
- [1:02:47] Datapoint id 65 collected
- [1:02:47] Charge balance equation is out by -6.6%
- [1:02:47] Stirrer speed set to 60
- [1:02:52] pH 6.05 -> 6.25
- [1:02:52] Using charge balance adjust
- [1:02:52] Dispensed 0.000047 mL of Base (0.5 M KOH)
- [1:03:12] Stirrer speed set to 0
- [1:03:47] Datapoint id 66 collected
- [1:03:47] Charge balance equation is out by -98.3%



Assay name: pH-metric high logP Analyst: Pion
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- [1:03:47] Stirrer speed set to 60
- [1:03:52] pH 5.78 -> 5.98
- [1:03:52] Using cautious pH adjust
- [1:03:52] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [1:03:57] Stepping pH = 5.98
- [1:04:12] Stirrer speed set to 0
- [1:04:52] Datapoint id 67 collected
- [1:04:52] Charge balance equation is out by 50.0%
- [1:04:52] Stirrer speed set to 60
- [1:04:57] pH 5.76 -> 5.96
- [1:04:57] Using cautious pH adjust
- [1:04:57] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [1:05:02] Stepping pH = 5.85
- [1:05:02] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [1:05:07] Stepping pH = 6.07
- [1:05:22] Stirrer speed set to 0
- [1:05:59] Datapoint id 68 collected
- [1:05:59] Charge balance equation is out by 7.8%
- [1:05:59] Stirrer speed set to 60
- [1:06:04] pH 5.71 -> 5.91
- [1:06:04] Using charge balance adjust
- [1:06:04] Dispensed 0.000071 mL of Base (0.5 M KOH)
- [1:06:24] Stirrer speed set to 0
- [1:06:37] Datapoint id 69 collected
- [1:06:37] Charge balance equation is out by 33.1%
- [1:06:37] Stirrer speed set to 60
- [1:06:42] pH 5.84 -> 6.04
- [1:06:42] Using cautious pH adjust
- [1:06:43] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [1:06:48] Stepping pH = 5.96
- [1:06:48] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [1:06:53] Stepping pH = 6.21
- [1:07:08] Stirrer speed set to 0
- [1:07:25] Datapoint id 70 collected
- [1:07:25] Charge balance equation is out by 15.2%
- [1:07:25] Stirrer speed set to 60
- [1:07:30] pH 5.94 -> 6.14
- [1:07:30] Using cautious pH adjust
- [1:07:31] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [1:07:36] Stepping pH = 6.12
- [1:07:36] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [1:07:41] Stepping pH = 6.28
- [1:07:56] Stirrer speed set to 0
- [1:08:27] Datapoint id 71 collected
- [1:08:27] Charge balance equation is out by 14.3%
- [1:08:27] Stirrer speed set to 60
- [1:08:32] pH 6.04 -> 6.24
- [1:08:32] Using charge balance adjust
- [1:08:32] Dispensed 0.000047 mL of Base (0.5 M KOH)
- [1:08:52] Stirrer speed set to 0
- [1:09:08] Datapoint id 72 collected
- [1:09:08] Charge balance equation is out by 29.3%
- [1:09:08] Stirrer speed set to 60
- [1:09:13] pH 6.21 -> 6.41
- [1:09:13] Using cautious pH adjust
- [1:09:13] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [1:09:18] Stepping pH = 6.32
- [1:09:18] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [1:09:23] Stepping pH = 6.47



Assay name: pH-metric high logP Analyst: Pion
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- [1:09:38] Stirrer speed set to 0
- [1:09:55] Datapoint id 73 collected
- [1:09:55] Charge balance equation is out by 11.9%
- [1:09:55] Stirrer speed set to 60
- [1:10:01] pH 6.23 -> 6.43
- [1:10:01] Using charge balance adjust
- [1:10:01] Dispensed 0.000047 mL of Base (0.5 M KOH)
- [1:10:21] Stirrer speed set to 0
- [1:10:36] Datapoint id 74 collected
- [1:10:36] Charge balance equation is out by 6.5%
- [1:10:36] Stirrer speed set to 60
- [1:10:41] pH 6.39 -> 6.59
- [1:10:41] Using charge balance adjust
- [1:10:41] Dispensed 0.000047 mL of Base (0.5 M KOH)
- [1:11:01] Stirrer speed set to 0
- [1:11:59] Datapoint id 75 collected
- [1:11:59] Charge balance equation is out by -41.6%
- [1:11:59] Stirrer speed set to 60
- [1:12:04] pH 5.94 -> 6.14
- [1:12:04] Using cautious pH adjust
- [1:12:04] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [1:12:09] Stepping pH = 5.92
- [1:12:09] Dispensed 0.000141 mL of Base (0.5 M KOH)
- [1:12:14] Stepping pH = 7.15
- [1:12:29] Stirrer speed set to 0
- [1:13:29] Datapoint id 76 collected
- [1:13:29] Charge balance equation is out by -219.5%
- [1:13:29] Stirrer speed set to 60
- [1:13:34] pH 6.70 -> 6.90
- [1:13:34] Using cautious pH adjust
- [1:13:34] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [1:13:40] Stepping pH = 6.66
- [1:13:40] Dispensed 0.000118 mL of Base (0.5 M KOH)
- [1:13:45] Stepping pH = 7.66
- [1:14:00] Stirrer speed set to 0
- [1:15:00] Datapoint id 77 collected
- [1:15:00] Charge balance equation is out by -255.5%
- [1:15:00] Stirrer speed set to 60
- [1:15:05] pH 7.53 -> 7.73
- [1:15:05] Using cautious pH adjust
- [1:15:05] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [1:15:10] Stepping pH = 7.55
- [1:15:10] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [1:15:15] Stepping pH = 7.66
- [1:15:15] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [1:15:20] Stepping pH = 7.84
- [1:15:35] Stirrer speed set to 0
- [1:16:35] Datapoint id 78 collected
- [1:16:35] Charge balance equation is out by -467.5%
- [1:16:35] Stirrer speed set to 60
- [1:16:41] pH 7.53 -> 7.73
- [1:16:41] Using cautious pH adjust
- [1:16:41] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [1:16:46] Stepping pH = 7.43
- [1:16:46] Dispensed 0.000047 mL of Base (0.5 M KOH)
- [1:16:51] Stepping pH = 7.78
- [1:17:06] Stirrer speed set to 0
- [1:18:06] Datapoint id 79 collected
- [1:18:06] Charge balance equation is out by -479.6%



pH-metric high logP Assay name: Analyst: Pion Assay ID: 18C-01012 Instrument ID: T312060

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- [1:18:06] Stirrer speed set to 60
- [1:18:11] pH 7.85 -> 8.05
- [1:18:11] Using cautious pH adjust
- [1:18:11] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [1:18:16] Stepping pH = 7.94
- [1:18:16] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [1:18:21] Stepping pH = 8.03
- [1:18:21] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [1:18:27] Stepping pH = 8.07
- [1:18:42] Stirrer speed set to 0
- [1:19:42] Datapoint id 80 collected
- [1:19:42] Charge balance equation is out by -636.5%
- [1:19:42] Stirrer speed set to 60
- [1:19:47] pH 7.94 -> 8.14
- [1:19:47] Using cautious pH adjust
- [1:19:47] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [1:19:52] Stepping pH = 8.03
- [1:19:52] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [1:19:57] Stepping pH = 8.17 [1:20:12] Stirrer speed set to 0
- [1:21:12] Datapoint id 81 collected
- [1:21:12] Charge balance equation is out by -388.4%
- [1:21:12] Stirrer speed set to 60
- [1:21:17] pH 8.07 -> 8.27
- [1:21:17] Using cautious pH adjust
- [1:21:17] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [1:21:22] Stepping pH = 8.13
- [1:21:22] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [1:21:28] Stepping pH = 8.23
- [1:21:28] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [1:21:33] Stepping pH = 8.37
- [1:21:48] Stirrer speed set to 0
- [1:22:48] Datapoint id 82 collected
- [1:22:48] Charge balance equation is out by -583.2%
- [1:22:48] Stirrer speed set to 60
- [1:22:53] pH 8.38 -> 8.58
- [1:22:53] Using cautious pH adjust
- [1:22:53] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [1:22:58] Stepping pH = 8.43
- [1:22:58] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [1:23:03] Stepping pH = 8.46
- [1:23:03] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [1:23:08] Stepping pH = 8.54
- [1:23:09] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [1:23:14] Stepping pH = 8.63
- [1:23:29] Stirrer speed set to 0
- [1:23:57] Datapoint id 83 collected
- [1:23:57] Charge balance equation is out by -489.1%
- [1:23:57] Stirrer speed set to 60
- [1:24:02] pH 8.48 -> 8.68
- [1:24:02] Using cautious pH adjust
- [1:24:02] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [1:24:07] Stepping pH = 8.46
- [1:24:07] Dispensed 0.000047 mL of Base (0.5 M KOH)
- [1:24:12] Stepping pH = 8.59
- [1:24:12] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [1:24:17] Stepping pH = 8.68
- [1:24:32] Stirrer speed set to 0
- [1:25:19] Datapoint id 84 collected
- Reported at: 3/2/2018 3:16:49 PM



Assay name: pH-metric high logP Analyst: Pion
Assay ID: 18C-01012 Instrument ID: T312060

Filename: C:\Sirius\_T3\Mehtap\20180228\_exp28\_logP\_T3-2\18C-01012\_M12\_octanol\_pH-metric high logP.t3r

- [1:25:19] Charge balance equation is out by -472.3%
- [1:25:19] Stirrer speed set to 60
- [1:25:24] pH 8.61 -> 8.81
- [1:25:24] Using cautious pH adjust
- [1:25:24] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [1:25:29] Stepping pH = 8.65
- [1:25:29] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [1:25:34] Stepping pH = 8.72
- [1:25:34] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [1:25:39] Stepping pH = 8.80
- [1:25:54] Stirrer speed set to 0
- [1:26:16] Datapoint id 85 collected
- [1:26:16] Charge balance equation is out by -185.7%
- [1:26:16] Stirrer speed set to 60
- [1:26:21] pH 8.77 -> 8.97
- [1:26:21] Using cautious pH adjust
- [1:26:21] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [1:26:27] Stepping pH = 8.79
- [1:26:27] Dispensed 0.000047 mL of Base (0.5 M KOH)
- [1:26:32] Stepping pH = 8.90
- [1:26:32] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [1:26:37] Stepping pH = 8.95
- [1:26:37] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [1:26:42] Stepping pH = 9.00
- [1:26:57] Stirrer speed set to 0
- [1:27:12] Datapoint id 86 collected
- [1:27:12] Charge balance equation is out by -250.7%
- [1:27:12] Stirrer speed set to 60
- [1:27:17] pH 8.99 -> 9.05
- [1:27:17] Using cautious pH adjust
- [1:27:17] Dispensed 0.000024 mL of Base (0.5 M KOH)
- [1:27:22] Stepping pH = 9.00
- [1:27:37] Stirrer speed set to 0
- [1:27:59] Datapoint id 87 collected
- [1:27:59] Charge balance equation is out by -76.9%
- [1:27:59] Argon flow rate set to 0
- [1:28:03] Titrator arm moved over Titration position