

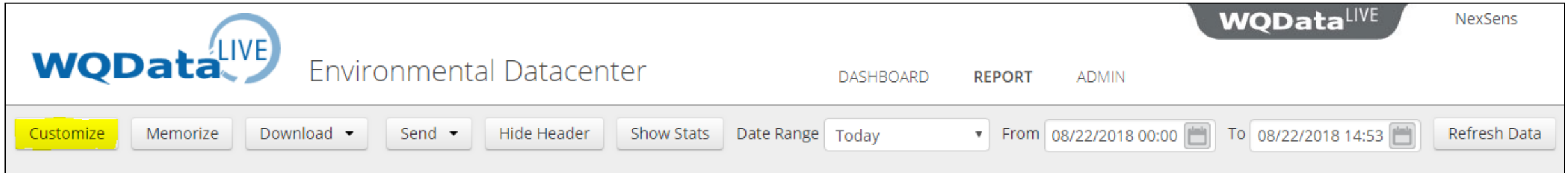
WQData Live– Creating Data Reports

From the Project Dashboard, select the **Site** option beneath the Report header

The screenshot displays the WQData LIVE Environmental Datacenter interface. At the top left is the WQData LIVE logo, and at the top right is the NexSens logo. Below the logo is the text "Environmental Datacenter". In the center, there are navigation tabs for "DASHBOARD", "REPORT", and "ADMIN". A map of the Fairborn, Ohio area is shown, with a green dot indicating a site location. A dropdown menu titled "Standard Report" is open over the map, with the "Site" option highlighted in yellow. Other options in the menu are "Multi-Site" and "Rain Event". On the right side of the interface, there is a sidebar with a search icon and a settings icon. The sidebar contains a list of reports: "Aquarium" (with a green dot icon), "Aquarium Test X2" (with a three-dot menu icon), and a blank space below.

WQData Live– Creating Data Reports

Select the **Customize** option in the header.



The screenshot shows the header of the WQData LIVE Environmental Datacenter interface. On the left is the WQData LIVE logo. To its right is the text "Environmental Datacenter". In the top right corner, there is a dark grey pill-shaped button with "WQData LIVE" in white and "NexSens" in a smaller font to its right. Below the logo and text are navigation links: "DASHBOARD", "REPORT", and "ADMIN". A horizontal toolbar contains several buttons: "Customize" (highlighted in yellow), "Memorize", "Download" (with a dropdown arrow), "Send" (with a dropdown arrow), "Hide Header", "Show Stats", "Date Range" (with a dropdown menu showing "Today"), "From" (with a date input field showing "08/22/2018 00:00" and a calendar icon), "To" (with a date input field showing "08/22/2018 14:53" and a calendar icon), and "Refresh Data".

WQData Live– Creating Data Reports

A set of parameters will automatically load for the 1st listed site and data logger .

Click the **Select Parameters** button to choose what available parameters, from which sites, will be displayed.

Customize Data Report

Display Condense Filter Header/Footer Settings

Date Range

Range Today

From 08/22/2018 00:00 To 08/22/2018 14:53

Parameters

Select Parameters

- Aquarium : Temperature
- Aquarium : Barometric Pressure
- Aquarium : ODOsat
- Aquarium : ODO
- Aquarium : Temperature

Sort By Timestamp

Order Ascending Descending

SAVE CLOSE

WQData Live– Creating Data Reports

Data from multiple loggers and sites can be added as desired. Clicking on a site will expand the list of available loggers followed by their associated parameters.

De-select the default parameters and check the ones needed in the report. Click **Save Parameters** when finished.

The screenshot shows a 'Select Parameters' dialog box with the following structure:

- Site #1** (indicated by an arrow) is expanded to show **Aquarium**.
- Site #2** (indicated by an arrow) is expanded to show **Pond**.
- Data Logger #1** (indicated by an arrow) is expanded to show:
 - X2 Spillway
 - Pressure
 - Water Temperature
 - Water Level
- Data Logger #2** (indicated by an arrow) is expanded to show:
 - X2-C-VZ3G-01002
 - Temp00
 - Temp01
 - Temp02
 - Temp03
 - Temp04

The **Selected Parameters** list on the right contains:

- Aquarium : ODO
- Pond : Water Level
- Pond : Temp00

At the bottom right, there are two buttons: **SAVE PARAMETERS** and **CLOSE**.

WQData Live– Creating Data Reports

Choose the desired **Data Range** for the report from the list of presets in the drop-down menu.

The start range of each preset assumes 12am local time according to the UTC Timezone set in the User's WQData LIVE Account Preferences.

Customize Data Report

Display Condense Filter Header/Footer Settings

Date Range

Range **Current Week**

From 08/19/2018 00:00 To 08/25/2018 23:59

Parameters

Select Parameters

- Aquarium : ODO
- Pond : Water Level
- Pond : Temp00

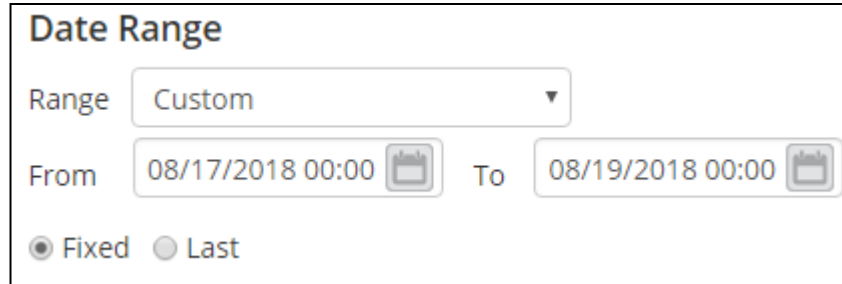
Sort By Timestamp

Order Ascending Descending

SAVE CLOSE

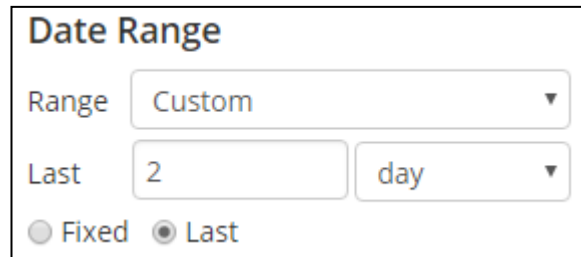
WQData Live– Creating Data Reports

Custom Ranges may also be set for reports .



The screenshot shows a 'Date Range' configuration panel. At the top, the title 'Date Range' is displayed. Below it, a 'Range' dropdown menu is set to 'Custom'. Underneath, there are two date-time input fields: 'From' with the value '08/17/2018 00:00' and 'To' with the value '08/19/2018 00:00'. Each input field has a calendar icon to its right. At the bottom of the panel, there are two radio buttons: 'Fixed' (which is selected) and 'Last'.

Custom reports saved with the **Fixed** setting will always load data from the specified interval .



The screenshot shows a 'Date Range' configuration panel. At the top, the title 'Date Range' is displayed. Below it, a 'Range' dropdown menu is set to 'Custom'. Underneath, there are two input fields: 'Last' with the value '2' and a unit dropdown menu set to 'day'. At the bottom of the panel, there are two radio buttons: 'Fixed' and 'Last' (which is selected).

Custom reports saved with the **Last** setting will always use the current time to conclude the report and will go back the specified interval of time to set the start of the report. This option is most often used to save profiles for sending data regularly via FTP.

In the screenshot above, if this report was loaded or sent at 8-23-2018 at 3:15pm local time, the report would contain data from 8-21-2018 at 3:15pm through 8-23-2018 at 3:15pm, a span of 2 days.

WQData Live– Customizing Data Reports

Data Condensing allows for basic statistical operations to be run on the raw data included in the loaded report.

Interval-based Averaging, Summation, and Display of Maximum/Minimum Values are supported options.

An example of 30 minute interval averaging is shown below.

	Aquarium
Timestamp	Temperature (C)
02-01-2018 00:00:00 (UTC-05:00)	25.80
02-01-2018 00:10:00 (UTC-05:00)	25.79
02-01-2018 00:20:00 (UTC-05:00)	25.78
02-01-2018 00:30:00 (UTC-05:00)	25.77
02-01-2018 00:40:00 (UTC-05:00)	25.75
02-01-2018 00:50:00 (UTC-05:00)	25.74
02-01-2018 01:00:00 (UTC-05:00)	25.73

Prior to Averaging

Customize Data Report

Display **Condense** Filter Header/Footer Settings

Condense Data

Condense Mode

Condense Interval

	Aquarium
Timestamp	Temperature (C)
02-01-2018 00:00 (UTC-05:00)	25.79
02-01-2018 00:30 (UTC-05:00)	25.75

Post Data Condensing

WQData Live– Customizing Data Reports

Filter allows for the entire dataset to be screened for particular values of a particular parameter.

In the example below, only data with recorded Saturation values between 90.0% and 90.2% are shown, all other data points are excluded.

	Aquarium	Aquarium	Aquarium
Timestamp	Temperature (C)	Barometric Pressure (mmHg)	ODOSat (%)
02-01-2018 03:30 (UTC-05:00)	25.53	736	89.7
02-01-2018 04:00 (UTC-05:00)	25.50	736	89.9
02-01-2018 04:30 (UTC-05:00)	25.46	736	90.1
02-01-2018 05:00 (UTC-05:00)	25.43	736	90.2
02-01-2018 05:30 (UTC-05:00)	25.40	736	90.3

Prior to Filter

Customize Data Report

Display Condense **Filter** Header/Footer Settings

Filter Parameters

Aquarium : Temperature
Aquarium : Barometric Pressure
Aquarium : ODO
Aquarium : Temperature
Aquarium : ODOSat
Aquarium : ODO

Filter Parameter
Min
Max

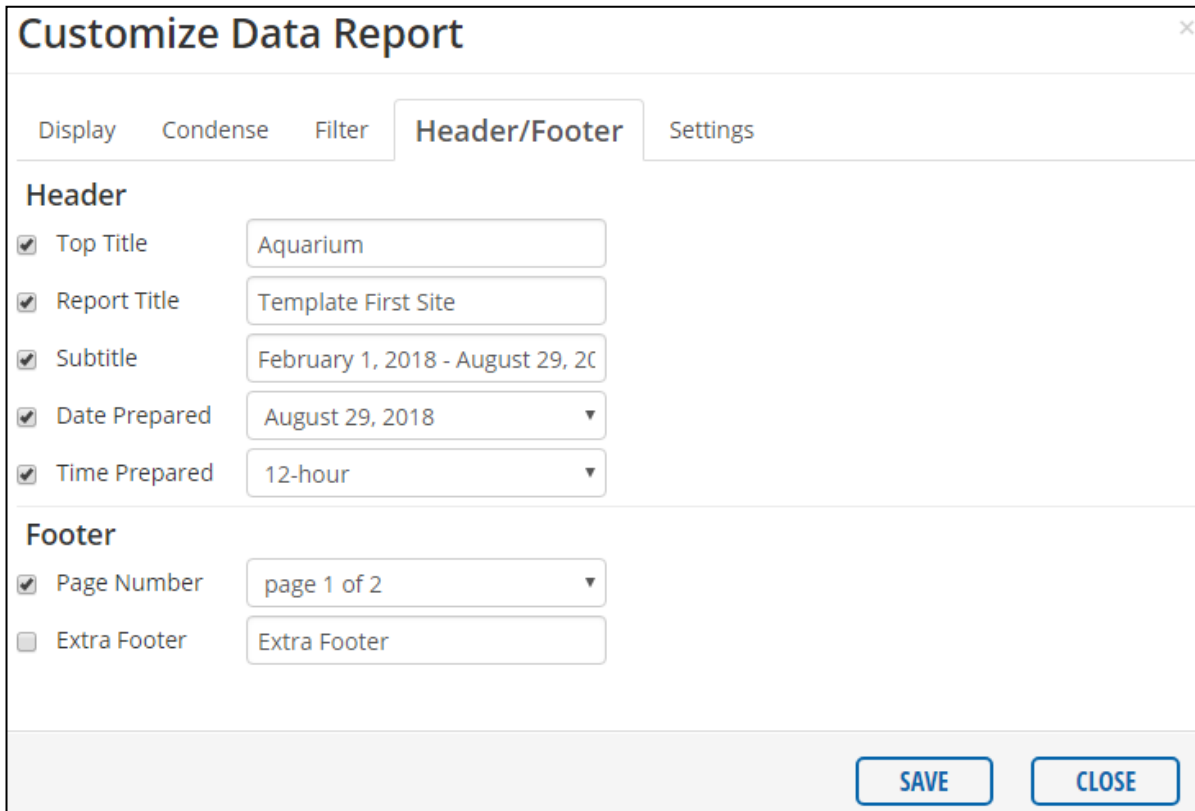
Aquarium : ODOSat

	Aquarium	Aquarium	Aquarium
Timestamp	Temperature (C)	Barometric Pressure (mmHg)	ODOSat (%)
02-01-2018 04:30 (UTC-05:00)	25.46	736	90.1
02-01-2018 05:00 (UTC-05:00)	25.43	736	90.2

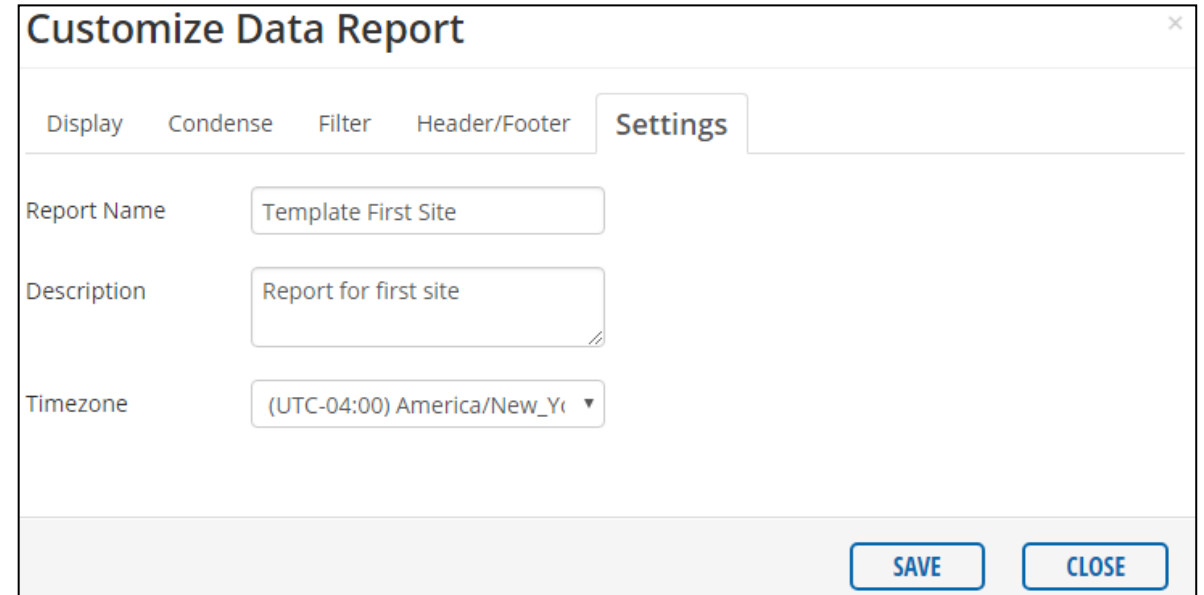
After Filter

WQData Live– Customizing Data Reports

The **Header/Footer and Settings Tab** allows for the adjustment of downloaded CSV and PDF file formatting.



The screenshot shows the 'Customize Data Report' dialog box with the 'Header/Footer' tab selected. The dialog has a title bar with a close button (X) and a tabbed interface with options: Display, Condense, Filter, Header/Footer (selected), and Settings. The 'Header' section includes five checked items: 'Top Title' (Aquarium), 'Report Title' (Template First Site), 'Subtitle' (February 1, 2018 - August 29, 2018), 'Date Prepared' (August 29, 2018), and 'Time Prepared' (12-hour). The 'Footer' section includes 'Page Number' (page 1 of 2) and 'Extra Footer' (Extra Footer). At the bottom right are 'SAVE' and 'CLOSE' buttons.



The screenshot shows the 'Customize Data Report' dialog box with the 'Settings' tab selected. The dialog has a title bar with a close button (X) and a tabbed interface with options: Display, Condense, Filter, Header/Footer, and Settings (selected). The 'Settings' section includes: 'Report Name' (Template First Site), 'Description' (Report for first site), and 'Timezone' ((UTC-04:00) America/New_York). At the bottom right are 'SAVE' and 'CLOSE' buttons.

Note that the Time-zone listed here will convert the time stamps of the data to the desired local time.

WQData Live– Customizing Data Reports

Once all preliminary report settings have been configured as desired click **SAVE** to load the report.

Customize Data Report

Display Condense Filter Header/Footer Settings

Date Range

Range Custom

From 02/01/2018 12:00 To 03/01/2018 14:56

Fixed Last

Parameters

Select Parameters

- Aquarium : Temperature
- Aquarium : Barometric Pressure
- Aquarium : ODOsat
- Aquarium : ODO
- Aquarium : Temperature

Sort By Timestamp

Order Ascending Descending

SAVE **CLOSE**

WQData Live– Customizing Data Reports

A basic statistical analysis table for any loaded data set can be toggled on/off by pressing the **Show/Hide Stats** heading.

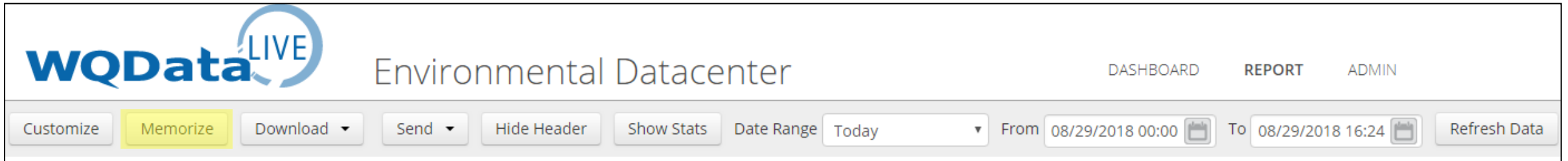
Note that this Stats table may only be exported via PDF, not CSV.

The screenshot shows the WQData LIVE Environmental Datacenter interface. At the top right, there is a 'WQData LIVE' logo. Below it, the navigation menu includes 'DASHBOARD', 'REPORT', and 'ADMIN'. A toolbar contains buttons for 'Customize', 'Memorize', 'Download', 'Send', 'Hide Header', and 'Hide Stats' (which is highlighted in yellow). To the right of these buttons are date range selectors: 'Date Range' set to 'Custom', 'From' set to '02/01/2018 12:00', and 'To' set to '03/01/2018 14:56', along with a 'Refresh Data' button. The main content area displays the date 'August 31, 2018 3:04 PM' and the site information: 'Aquarium Template First Site' for the period 'August 31, 2018 - August 31, 2018'. Below this is a 'Stats Table' with the following data:

Parameters	Samples	Min	Max	Mean	Median	Std
Temperature (C)	1006	24.96	26.02	25.40	25.38	0.26
Barometric Pressure (mmHg)	1006	733	752	745	745	5
ODOSat (%)	1006	88.1	94.1	91.4	91.4	1.1
ODO (mg/L)	1006	7.15	7.73	7.50	7.52	0.10
Temperature (C)	1006	24.98	26.02	25.41	25.39	0.26
ODOSat (%)	1006	87.7	94.0	91.1	91.1	1.1
ODO (mg/L)	1006	7.09	7.69	7.45	7.47	0.10

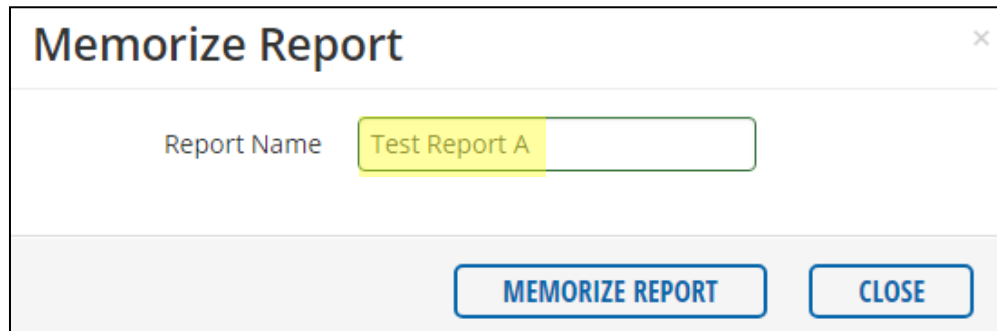
WQData Live– Saving Reports

If the format of a report is to be used more than once, it can be saved to the project by clicking the **Memorize** button in the header .



The screenshot shows the top navigation bar of the WQData Live Environmental Datacenter. On the left is the logo with 'WQData' in blue and 'LIVE' in a blue circle. To the right of the logo is the text 'Environmental Datacenter'. Further right are three tabs: 'DASHBOARD', 'REPORT', and 'ADMIN'. Below these tabs is a row of interactive elements: 'Customize', 'Memorize' (highlighted in yellow), 'Download' (with a dropdown arrow), 'Send' (with a dropdown arrow), 'Hide Header', 'Show Stats', 'Date Range' (set to 'Today'), 'From' (08/29/2018 00:00 with a calendar icon), 'To' (08/29/2018 16:24 with a calendar icon), and 'Refresh Data'.

After naming and memorizing the report it will appear in the drop down menu below the Report Tab.



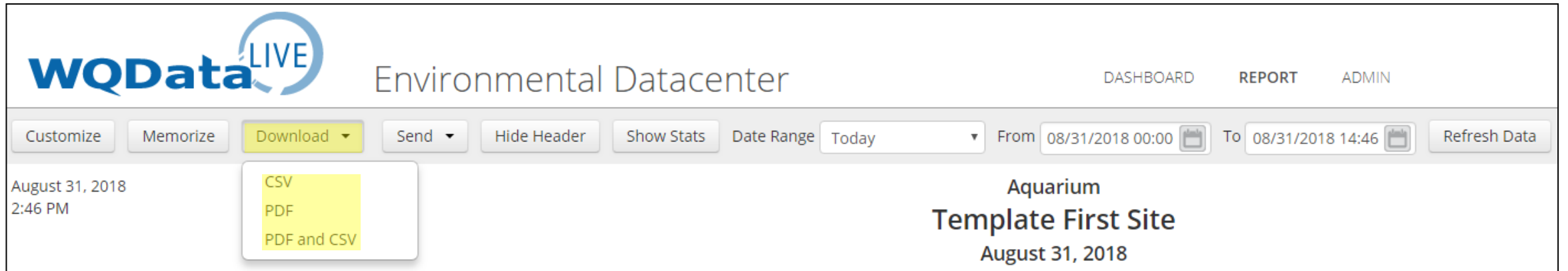
The 'Memorize Report' dialog box is shown. It has a title bar with 'Memorize Report' and a close button. Inside, there is a label 'Report Name' followed by a text input field containing 'Test Report A'. At the bottom, there are two buttons: 'MEMORIZE REPORT' and 'CLOSE'.



The 'REPORT' tab is active, showing a list of report types. The 'Memorized Report' section is expanded, showing 'Test Report A' as a single item in the list. Other report types include 'Standard Report', 'Site', 'Multi-Site', and 'Rain Event'.

WQData Live– Downloading Reports

To download the contents of a loaded report, select the **Download** header and choose either a CSV or PDF format for the data table.

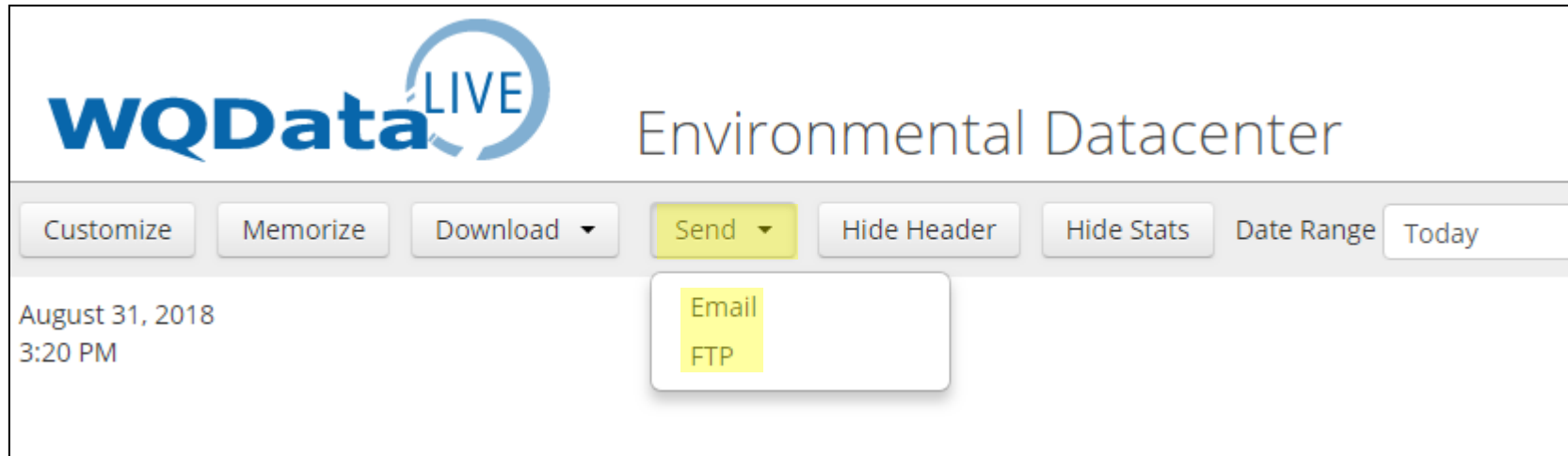


The screenshot displays the WQData LIVE Environmental Datacenter interface. At the top left is the WQData LIVE logo. To its right is the text "Environmental Datacenter". In the top right corner, there are navigation links for "DASHBOARD", "REPORT", and "ADMIN". Below the logo and text is a toolbar containing several buttons: "Customize", "Memorize", "Download" (which is highlighted in yellow and has a dropdown arrow), "Send", "Hide Header", "Show Stats", "Date Range" (set to "Today"), "From" (08/31/2018 00:00), "To" (08/31/2018 14:46), and "Refresh Data". A dropdown menu is open under the "Download" button, showing three options: "CSV", "PDF", and "PDF and CSV". On the left side of the main content area, the date and time "August 31, 2018 2:46 PM" are displayed. On the right side, the site name "Aquarium Template First Site" and the date "August 31, 2018" are shown.

WQData Live– Email/FTP Saved Reports

Report data can be configured to send automatically via Email or FTP (File Transfer Protocol) for a single instance or on a recurring schedule.

Once the desired report is loaded select the **Send** heading to reveal the **FTP** or **Email** options



WQData Live– FTP Saved Reports

For FTP Reports, enter in the appropriate Destination Server information. Contact your network administrator for this information if you are unsure.

The 'FTP Report' dialog box contains the following fields and options:

- Filename:
- Host:
- Port:
- Username:
- Password:
- Confirm Password:
- Directory:
- Transfer Mode: Passive, Active
- Send Report As: CSV, PDF, CSV & PDF
- Action: Send Now, Schedule

Buttons: DONE, CLOSE

The scheduling configuration section includes:

- Action: Send Now, Schedule
- Activate Schedule: Activate
- Days: Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday
- Schedule Type: Fixed Time, Every x minutes
- Every:
- Begin Date Time:
- Send Between: and

Buttons: DONE, CLOSE

To configure reports to send regularly, select the **Schedule** Action and specify the transfer frequency and start time.

Be sure the [Data Range](#) for the saved report is set to **Last**, otherwise the exact same data set will be sent every time.

WQData Live– Email Saved Reports

For Emailed Reports, enter in all desired recipients with one address per line and select the desired file type.

Just as with the FTP option, an automatic schedule can be configured to send the report at regular intervals.

Email Report

Filename

Emails

Send Report As CSV PDF CSV & PDF

Action Send Now Schedule

Activate Schedule Activate

Days Sunday Monday
 Tuesday Wednesday
 Thursday Friday
 Saturday

Schedule Type Fixed Time Every x minutes

Activate Schedule Activate

Days Sunday Monday
 Tuesday Wednesday
 Thursday Friday
 Saturday

Schedule Type Fixed Time Every x minutes

Every

Begin Date Time

Send Between and