

MCERTS - EDM Inspection Report

Llangaffo WwTW

11 February 2026

Report No. CFS/ 20290v1



Version No. 26.1

Site Name:	Llangaffo WwTW	
Consent/Permit Holder:	Dŵr Cymru Welsh Water	
Site Address:	Track Off B4419 Llangaffo Anglesey LL60 6NF	
Site Contact:	Statutory & Regulatory Maintenance Manager	
Contact Details:	mcerts@dwrcymru.com	
Site Ref or Postcode:	496	
Grid Ref (Sensor):	SH 44660 67748	
Consent/Permit No:	CG0019201	
Location of EDM Sensor:	Storm Overflow	
Number of EDMs:	1	
Instrument Type:	Type A (non contact) - R	
Instrument/Device(s):	Vega Vegapuls C22 with Vegamet 862	
Level Meter Serial Number:	73681599	
Sensor Serial Number:	73229955	
Date of Inspection:	11/02/2026	
Inspector:	MI 23 032/3	
Inspection Report No:	CFS/ 20290v1	
Survey Pack:	K	* Kit Inventory and calibration data recorded on central QMS database
Uncertainty:	± 3.1 mm	PASS
Site Compliance:	Following a site inspection, the measurement system was found to meet the requirements of the Environment Agency <i>MCERTS: requirements for installing and using event duration monitors - MCERTS Performance Standard</i> . Published 28th August 2024	

Site Details

Site Description

Llangaffo WwTW is a sewage treatment works with biological trickling filters (see process diagram).

Location of Event Monitor(s)

The EDM is located above the Dual sided storm weirs

Overflow Point(s) Requiring Event Monitoring

Storm Overflow (See Process Diagram.)

Verification / Calibration

The sensor was mounted on a rigid bracket with a removable datum plate to reference the sensor height relative to the hydraulic datum. The reference height of the datum plate has been set accurately and recorded.

Site Maintenance Arrangements, Evidence and Suitability

A routine maintenance schedule has not been confirmed but is required as part of the consent holders Quality Management System, as audited by CSA.
The level measurement system was found to be in a satisfactory condition at the time of the Inspection.

MCERTS Approved Product

The installed meter has a valid MCERTS Approved product certificate. Certificate number: CSA MC210360/01

System Observed in Operation

The EDM was observed in a storm condition at time of the inspection and the system meets the requirements of the scheme.

Indicated Discharge Status

The indicated discharge status can be observed on site by:
The level activation - Access to telemetry required.

Telemetry Arrangements

The Event Monitor data is collected on the SCADA system.
The data is transmitted using an analogue 4/20mA signal

Inspector's Judgements, Comments or Changes to the Setup

The A value was changed from 0 to 9. The B value was changed from 683 to 692 to calibrate the sensor. Keeping the same span of 683.

V1 report issued with the following amendments:
On/Off spill points adjusted.
Telemetry commissioned 18/02/2026



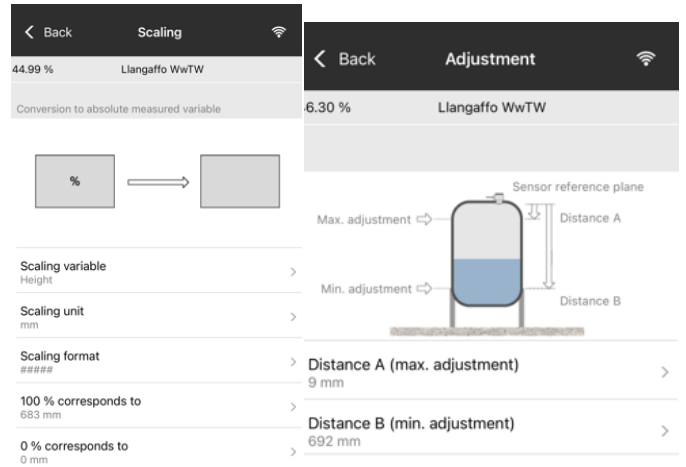
Sensor Location and Serial Number



Weir Overview



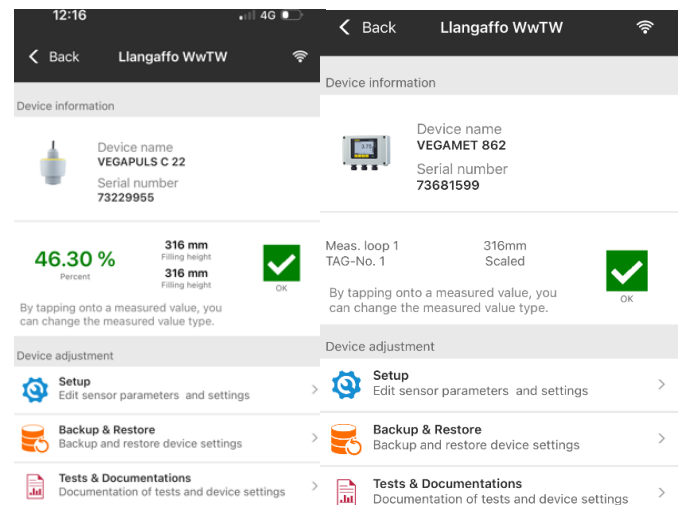
Level Meter Location



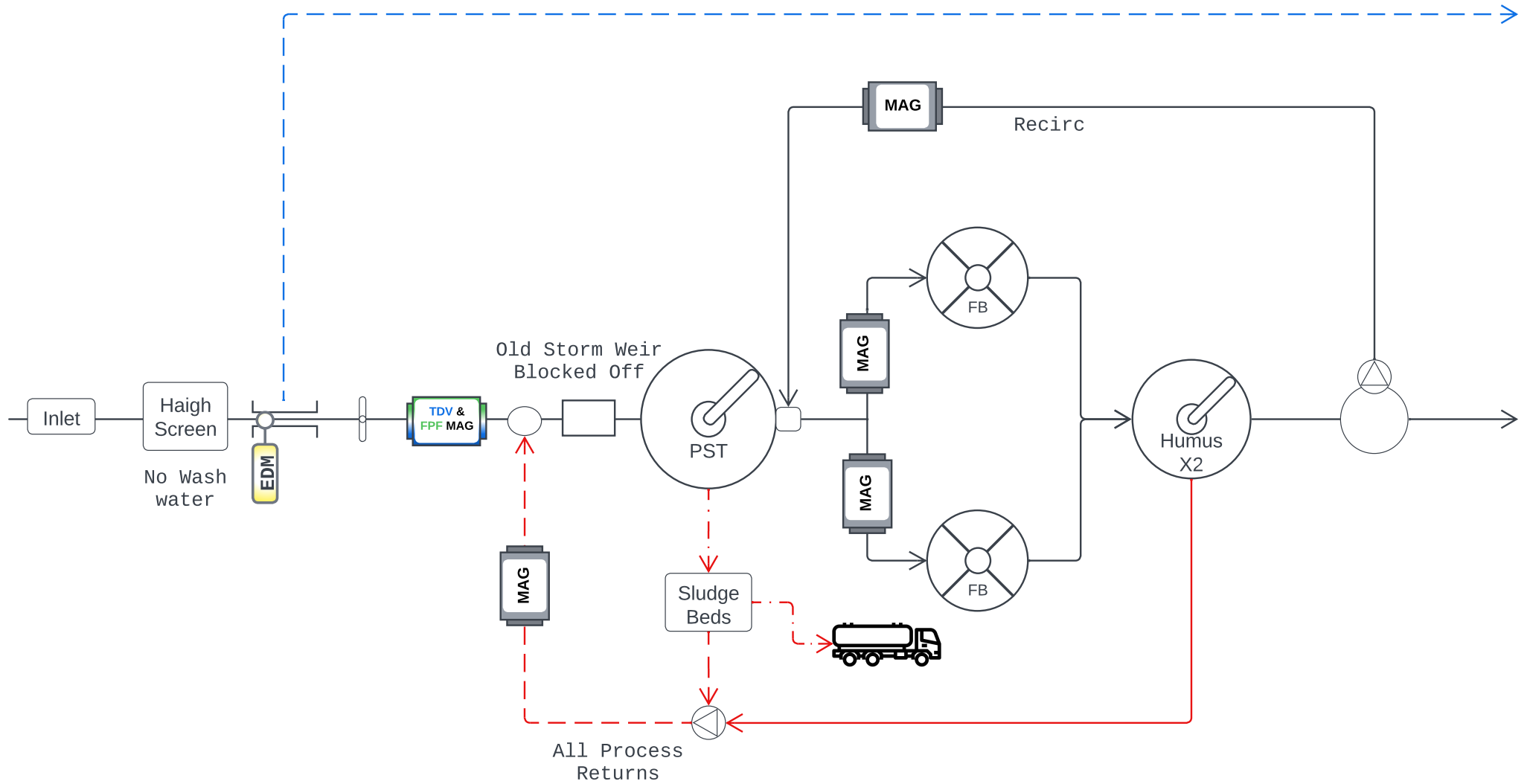
Adjustments



Level Meter and Serial Number



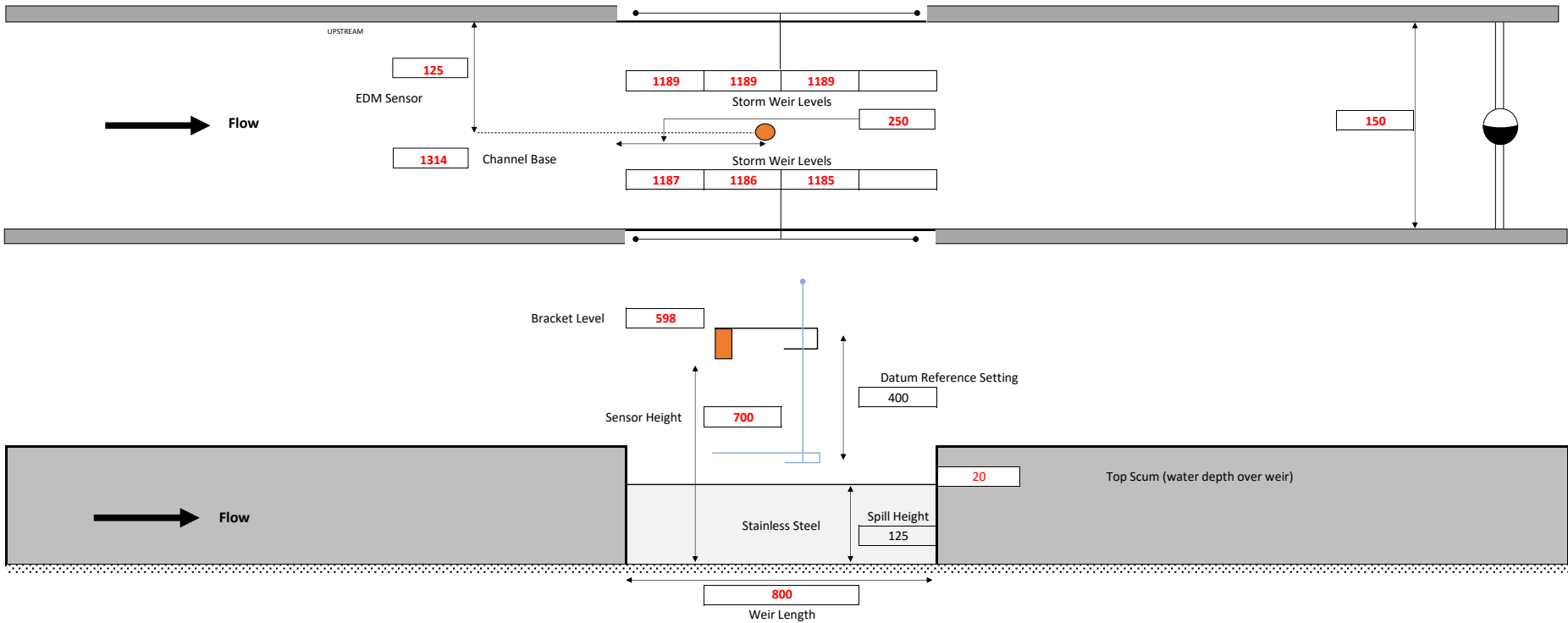
Calibration Point



<p>Treated Flow →</p> <p>Storm Flow →</p> <p>Storm Overflow →</p> <p>Humus Returns →</p> <p>Top Liquors →</p> <p>De-Sludge →</p> <p>Washwater →</p>	<p>Process interpreted from site visit and has not been confirmed</p> <p>Comments - A new inlet has been installed with flow measurement for MCERTS FPF.</p>		<p>Process Diagram - Llangaffo WwTW</p>	<p>Site Owner - Dŵr Cymru Welsh Water</p>	<p>Date - 11/02/2026</p>
		<p>Rev</p> <p>A</p> <p>B</p> <p>C</p>	<p>Date</p> <p>21/01/2025</p> <p>17/12/2025</p> <p>11/02/2026</p>	<p>Drawn By</p> <p>PDR</p> <p>CSP</p> <p>CSP</p>	<p>Notes</p> <p>MCERTS Inspection</p> <p>MCERTS FPF Inspection</p> <p>MCERTS EDM Inspection</p>

Site Name	Llangaffo WwTW	EDM Level Meter	Vega Vegapuls C22 with Vegamet 862	Location	Storm Overflow
Event Duration Monitor	Date	11 February 2026			
Total Uncertainty	3.1 mm				

DUAL SIDED STORM WEIRS



Depth Readings	
316	316
316	316
316	316
316	316
316	316
VAR +1	1.00

Measured Temp.	N/A °C
Instrument Temp.	N/A °C
Temp. Error	0.0 mm
Datum Level	316 mm
Instrument Level	316 mm
Calibration Error	0 mm
Survey Error	1 mm
Sensor height above spill	575 mm
Accuracy	0.09 %
Instrument Error	0.5 mm
Estimate of wave height	4 mm
Repeatability ^{#1}	0.4 mm
Telemetry Error	2 mm
Total Uncertainty	3.1 mm

Sensor Height	700 mm
Base Level	1314 mm (Staff Reading)
Lowest Weir Level	1189 mm (Staff Reading)
Spill Height	125 mm

Analogue Output	0 mm - 4mA
	683 mm - 20mA
Storm Event Activated	125 mm - 6.93 mA
Event De-Activated	124 mm - 6.9 mA

Bracket Level	598	Staff Reading
Bobbin	White	(400 mm)
Datum Reference Height	316	mm

Compliance Check	
Uncertainty < ±5mm	OK
Logging Intervals <2min	OK
Sensor location upstream from weir	Not applicable
Sensor distance to weir	OK
Sensor securely mounted	OK
Sensor Height	OK
Sunshade Required	No
Sunshade Installed	No
Sensor in channel centre	2 sensors required

Notes: #1 Repeatability uses IS4359 14.5.1
 Default Values: Telemetry Error for Relay = 0, for 4/20mA = 2mm
 Total Uncertainty uses Error items in 'bold'

All dimensions in mm, unless stated otherwise.