

Environmental Impact Assessment Report

Teindland Wind Farm

Volume 3

TA A9.1: Survey Record Sheets

Document prepared by Envams Ltd for: Teindland Wind Farm Ltd

April 2025

Project Number	0280	Project Name	Teindland Wind Farm
Location Number	1	Installed By	ET & AB
Grid Reference	328110, 856341	Location Name	Teindland Wells
Start Date	02/10/24	Start Time	11:50

Equipment Details	Make/Model	Serial No.
Sound Level Meter:	NL-52	00976188
Calibrator:	B&K Type 4231	3020922
Source of Equipment:	Metrica	
Meter Timestamp (Start/End, GMT/BST):	Start BST	

Description of Location	Northern point of amenity space as agreed with EHO. Away from variable noise sources but with direct line of site to the Development area
Distance from Façade	>10m
Noise Sources Observed	Birds in trees, resident activity, residents' animals (dog barks, chickens and ducks)
Notes	Weather during install: 6 oktas, dry, clear (not misty), still with slight breeze from various directions.

Set-Up / Visit 1

Date	02/10/24	Time	11:30
Filename	0101	Calibration Level	94.0
Range	20 - 130	Measurement Index	1
Frequency Weighting	A	Weather Monitoring?	N
Additional Notes			



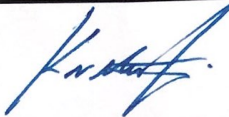
Date of Issue: 24 August 2023

Calibrated at & Certificate issued by:
ANV Measurement Systems

Beaufort Court
17 Roebuck Way
Milton Keynes MK5 8HL
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Acoustics Noise and Vibration Ltd trading as ANV Measurement Systems

Certificate Number: UCRT23/2106

Page 1 of 2 Pages
Approved Signatory

K. Mistry

Customer Metrica Environmental Consulting Ltd
Popeshead Court Offices
Peter Lane
York
North Yorkshire
YO1 8SU

Order No. NOISE/20230822

Description Sound Level Meter / Pre-amp / Microphone / Associated Calibrator

Identification	Manufacturer	Instrument	Type	Serial No. / Version
	Rion	Sound Level Meter	NL-52	00976188
	Rion	Firmware		2.0
	Rion	Pre Amplifier	NH-25	76305
	Rion	Microphone	UC-59	12082
	Rion	Calibrator	NC-75	34334830
		Calibrator adaptor type if applicable		NC-75-022

Performance Class 1

Test Procedure TP 10. SLM 61672-3:2013

Procedures from IEC 61672-3:2013 were used to perform the periodic tests.

Type Approved to IEC 61672-1:2013 Yes

If YES above there is public evidence that the SLM has successfully completed the applicable pattern evaluation tests of IEC 61672-2:2013

Date Received 23 August 2023

ANV Job No.

UKAS23/08589

Date Calibrated 24 August 2023

The sound level meter submitted for testing has successfully completed the periodic tests of IEC 61672-3:2013, for the environmental conditions under which the tests were performed. As evidence was publicly available, from an independent testing organisation responsible for approving the results of pattern-evaluation tests performed in accordance with IEC 61672-2:2013, to demonstrate that the model of sound level meter fully conformed to the class 1 specifications in IEC 61672-1:2013, the sound level meter submitted for testing conforms to the class 1 specifications of IEC 61672-1:2013.

Previous Certificate	Dated	Certificate No.	Laboratory
	07 February 2023	UCRT23/1167	0653

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Project Number	0280	Project Name	Teindland Wind Farm
Location Number	2	Installed By	ET & AB
Grid Reference	330257, 854535	Location Name	Hillhouse
Start Date	01/10/24	Start Time	15:20

Equipment Details	Make/Model	Serial No.
Sound Level Meter:	NL-52	00721026
Calibrator:	B&K Type 4231	3020922
Source of Equipment:	Metrica	
Meter Timestamp (Start/End, GMT/BST):	Start BST	

Description of Location	Eastern side of house on edge of amenity space as agreed with EHO. Away from variable noise sources such as boiler unit and water pump but with direct line of site to the Development area
Distance from Façade	>10m
Noise Sources Observed	Birds in trees, resident activity, distant traffic on road and occasional train pass – confirmed by residents to be indistinguishable from sound environment on western side during periods from 6pm – 7am.
Notes	Weather during install: 6 - 7 oktas, light drizzle, clear (not misty), wind less than 5 m/s from various directions.

Set-Up / Visit 1

Date	01/10/24	Time	15:00
Filename	0201	Calibration Level	94.0
Range	20 - 130	Measurement Index	1
Frequency Weighting	A	Weather Monitoring?	Y, rain gauge
Additional Notes			





CERTIFICATE OF CALIBRATION



0653

Date of Issue: 06 December 2022

Certificate Number: UCRT22/2443

Calibrated at & Certificate issued by:

ANV Measurement Systems

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Page 1 of 2 Pages
Approved Signatory

K. Mistry

Customer Metrica Environmental Consulting
 15 York Street
 Dunnington
 York
 YO19 5PN

Order No. 0141/MS/20221202

Description Sound Level Meter / Pre-amp / Microphone / Associated Calibrator

Identification	Manufacturer	Instrument	Type	Serial No. / Version
	Rion	Sound Level Meter	NL-52	00721026
	Rion	Firmware		2.1
	Rion	Pre Amplifier	NH-25	22132
	Rion	Microphone	UC-59	21976
	Rion	Calibrator	NC-75	35024443
		Calibrator adaptor type if applicable		NC-74-002

Performance Class 1

Test Procedure TP 10. SLM 61672-3:2013

Procedures from IEC 61672-3:2013 were used to perform the periodic tests.

Type Approved to IEC 61672-1:2013 Yes

If YES above there is public evidence that the SLM has successfully completed the applicable pattern evaluation tests of IEC 61672-2:2013

Date Received 05 December 2022

ANV Job No. UKAS22/12758

Date Calibrated 06 December 2022

The sound level meter submitted for testing has successfully completed the periodic tests of IEC 61672-3:2013, for the environmental conditions under which the tests were performed. As evidence was publicly available, from an independent testing organisation responsible for approving the results of pattern-evaluation tests performed in accordance with IEC 61672-2:2013, to demonstrate that the model of sound level meter fully conformed to the class 1 specifications in IEC 61672-1:2013, the sound level meter submitted for testing conforms to the class 1 specifications of IEC 61672-1:2013.

Previous Certificate	Dated	Certificate No.	Laboratory
	Initial Calibration		

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CERTIFICATE OF CALIBRATION

Certificate Number

UCRT22/2443

UKAS Accredited Calibration Laboratory No. 0653

Page 2 of 2 Pages

Sound Level Meter Instruction manual and data used to adjust the sound levels indicated.

SLM instruction manual title	NL-52/NL-42 Description for IEC 61672-1		
SLM instruction manual ref / issue	No. 56034 21-03	Source	Rion
Date provided or internet download date	19 March 2021		
	Case Corrections	Wind Shield Corrections	Mic Pressure to Free Field Corrections
Uncertainties provided	Yes	Yes	Yes
Total expanded uncertainties within the requirements of IEC 61672-1:2013			YES
Specified or equivalent Calibrator	Specified		
Customer or Lab Calibrator	Customers Calibrator		
Calibrator adaptor type if applicable	NC-74-002		
Calibrator cal. date	06 December 2022		
Calibrator cert. number	UCRT22/2441		
Calibrator cal cert issued by Lab	0653		
Calibrator SPL @ STP	93.97	dB	Calibration reference sound pressure level
Calibrator frequency	1000.00	Hz	Calibration check frequency
Reference level range	Single	dB	
Accessories used or corrected for during calibration - Extension Cable & Wind Shield WS-15			
Note - The Extension Cable was used between the SLM and the pre-amp for this calibration.			

Environmental conditions during tests	Start	End	
Temperature	22.01	23.74	± 0.30 °C
Humidity	37.3	50.4	± 3.00 %RH
Ambient Pressure	101.27	101.28	± 0.03 kPa

Indication at the Calibration Check Frequency			
Initial indicated level	94.0	dB	Adjusted indicated level 94.0 dB
Uncertainty of calibrator used for Indication at the Calibration Check Frequency ±			0.10 dB

Self Generated Noise													
Microphone installed -		Less Than		16.5		dB		A Weighting					
Microphone replaced with electrical input device -						UR = Under Range indicated							
Weighting		A			C			Z					
		10.4		dB	UR	14.0		dB	UR	19.4		dB	UR

Self Generated Noise reported for information only and not used to assess conformance to a requirement

The reported expanded uncertainty is based on a standard uncertainty multiplied by a coverage factor $k=2$, providing a coverage probability of approximately 95%. The uncertainty evaluation has been carried out in accordance with UKAS requirements.

Additional Comments The results on this certificate only relate to the items calibrated as identified above.

None

END

Calibrated by: C. Hirlav

R 3

Project Number	0280	Project Name	Teindland Wind Farm
Location Number	3	Installed By	ET & AB
Grid Reference	327322, 851790	Location Name	Sauchenbush
Start Date	02/10/24	Start Time	10:40

Equipment Details	Make/Model	Serial No.
Sound Level Meter:	NL-52	00586906
Calibrator:	B&K Type 4231	3020922
Source of Equipment:	Metrica	
Meter Timestamp (Start/End, GMT/BST):	Start BST	

Description of Location	North-western edge of amenity space as agreed with EHO. Away from variable noise sources such as boiler unit with direct line of site to the Development area
Distance from Façade	>10m
Noise Sources Observed	Birds in trees, resident activity, distant traffic on road, sheep in fields nearby, dogs barking
Notes	Weather during install: 8 oktas, dry, not misty, still with slight breeze from various directions.

Set-Up / Visit 1

Date	02/10/24	Time	10:30
Filename	0301	Calibration Level	94.0
Range	20 - 130	Measurement Index	1
Frequency Weighting	A	Weather Monitoring?	Y, rain gauge
Additional Notes			





CERTIFICATE OF CALIBRATION



0653

Date of Issue: 24 August 2023

Certificate Number: UCRT23/2104

Calibrated at & Certificate issued by:

ANV Measurement Systems

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Approved Signatory
K. Mistry

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Popeshead Court Offices
Peter Lane
York
North Yorkshire
YO1 8SU

Order No. NOISE/20230822

Description Sound Level Meter / Pre-amp / Microphone / Associated Calibrator

Identification	Manufacturer	Instrument	Type	Serial No. / Version
	Rion	Sound Level Meter	NL-52	00586906
	Rion	Firmware		2.0
	Rion	Pre Amplifier	NH-25	87025
	Rion	Microphone	UC-59	13364
	Rion	Calibrator	NC-75	34334830
		Calibrator adaptor type if applicable		NC-75-022

Performance Class 1

Test Procedure TP 10. SLM 61672-3:2013

Procedures from IEC 61672-3:2013 were used to perform the periodic tests.

Type Approved to IEC 61672-1:2013 Yes

If YES above there is public evidence that the SLM has successfully completed the applicable pattern evaluation tests of IEC 61672-2:2013

Date Received 23 August 2023

ANV Job No. UKAS23/08589

Date Calibrated 24 August 2023

The sound level meter submitted for testing has successfully completed the periodic tests of IEC 61672-3:2013, for the environmental conditions under which the tests were performed. As evidence was publicly available, from an independent testing organisation responsible for approving the results of pattern-evaluation tests performed in accordance with IEC 61672-2:2013, to demonstrate that the model of sound level meter fully conformed to the class 1 specifications in IEC 61672-1:2013, the sound level meter submitted for testing conforms to the class 1 specifications of IEC 61672-1:2013.

Previous Certificate	Dated	Certificate No.	Laboratory
	26 May 2023	UCRT23/1713	0653

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