



HUSH  
CORE®

# Vetting Your Sound Data

What You Need to Know in  
Understanding Your  
Project Sound Data

[www.hushcore.net](http://www.hushcore.net)



**BRD** | HUSH  
Noise and Vibration Control, Inc. | CORE®

A VMC GROUP COMPANY

# Environmental Context and Reading Conditions are Everything!



 **BRD** | HUSH  
Noise and Vibration Control, Inc. | CORE<sup>®</sup>

A VMC GROUP COMPANY

## Not All Data is Created Equal

It's important to understand the contributing factors at play during the time your sound readings were recorded. Environmental variables as well as the equipment operational load conditions all have an affect on final data.

Proper documentation should make note of the following critical items that could be at play.

---

# Environment

## Weather

Variables such as air temperature, humidity, precipitation and wind speed affect the sound path and how we hear it, thus contributing to (sometimes unknowingly) unwanted factors that impact results.

## Structure Reflection

Was the sound data taken inside of a chiller pit? Was there a nearby building wall close to the source or receiver? Your physical environment can adversely affect and amplify the noise.

## Location

The equipment proximity and surroundings also play a role, as well as the position of the receiver during testing. Knowing if your unit is close to things like a highway or major roadway is just as important to vetting your data.

## Wildlife

Less obvious variables can also be a factor - like a chirping birds nest, a barking dog, or the presence of emerging cicadas during their in-season cycle (depending on your region), etc.

---

# Unit Conditions

## Equipment Load

Was the equipment running at full load? How do you know what time of day the readings were taken? This too should accompany your data. Depending on the season, your unit may be working harder during the day than at night, or vice versa, and influencing your unit output. Confirmation of the unit load can make a significant difference in your acoustic needs.

Below is an example of comparative OEM data of unit performance and it's associated Octave Band data at different loads.

25% Load ARI 370 Sound Power

Hz	63	125	250	500	1000	2000	4000	8000	dBA
dB	73	81	89	86	87	85	80	70	91

100% Load ARI 370 Sound Power

Hz	63	125	250	500	1000	2000	4000	8000	dBA
dB	91	93	94	97	99	96	84	77	103

## Nearby Equipment

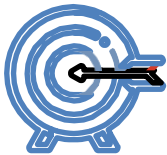
Knowing if your unit is located within proximity of other equipment or machinery is also crucial.

# Your Sound Data is Only as Good as Your Context!

All too often, project sound data lacks the true and complete context of the readings as well as the time and place they were taken. Documentation of the above variables is key to understanding the validity of your testing.

At BRD, we're all too aware of the importance in documenting these factors in order to properly vet your data. Let BRD help you review and understand the information provided and/or collected.

Who's managing your data and the associated risks? Contact a Hushcore expert and start a conversation to learn how we can support your next application and provide risk management associated with understanding noise criteria and the solution needed.



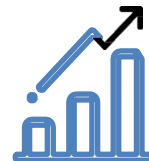
## Ensured Accuracy

Get it right. Get it properly vetted. The first time.



## Documented Context

Expert review and trusted data.



## Good Data

Peace of mind and confidence in your data.