

UNGS

Annular Gas Monitoring

May 16, 2023

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Regulatory Language

- Annular Gas API RP 1171 9.3.2
 - The operator **shall** monitor for presence of annular gas by measuring and recording annular pressure and/or annular gas flow.
 - The operator **shall** evaluate each annular gas occurrence that exceeds operator- or regulatory-defined threshold levels determined from well integrity evaluation and from risk assessment.
 - The operator **should** test wellhead seals when annulus pressure is detected and where injectable packing and/or test ports are present.



Annular Gas Common Findings

Why monitor for Annular Gas?

This may indicate an integrity issue with the well.



Annular Gas Common Findings

- **Not monitoring for the presence of annular gas or not documenting every visit.**
 - Operators are not visiting their wells and testing for pressures or flows or not documenting that they are doing so.
- **Not establishing threshold pressure at which action must be taken**
 - Operators have not documented that a threshold was established, or provided what it was set at.
- **Not evaluating each occurrence that exceeds operator-defined threshold**
 - Operators do not have procedures that require exceedances be investigated. Some procedures state that the Storage Engineer or Department be notified but do not require any further action.
- **Not documenting every visit.**



Best Practices

Annular Gas

- Monitoring for flow



Best Practices

Annular Gas

- Monitoring for pressure



Questions??

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