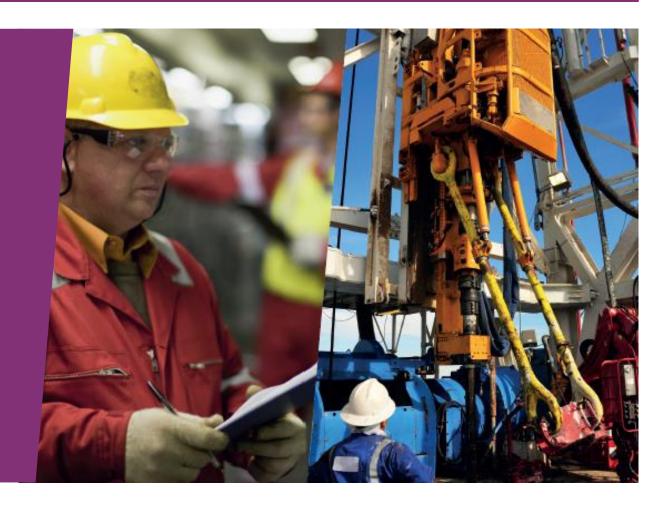


# IOGP Report 637: Review of Well Control Incidents

Andrew Parkinson

IWCF Workshop 22 – 23<sup>rd</sup> November 2023



# Report IOGP 637R – Review of Well Control Incidents

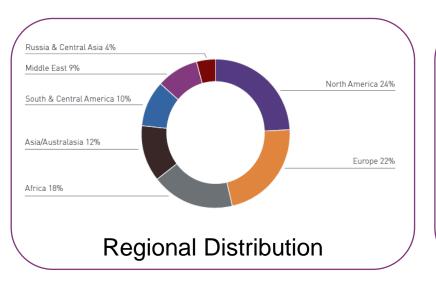
- The Well Control Incident Subcommittee reviewed 172 WCI reports submitted prior to 2020.
- The report presents the results of the review and the key findings, to help identify areas of improvement based on these submissions, provide focus areas for the Wells Expert Committee (WEC), and draw attention to issues that may warrant industry focus.

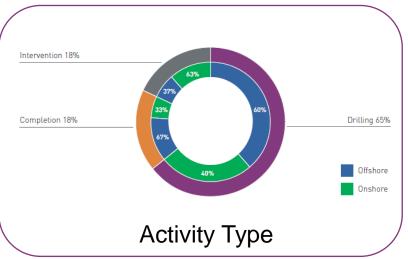
	Pre 2015	2015	2016	2017	2018	2019
WCI reports	43	5	31	23	45	25

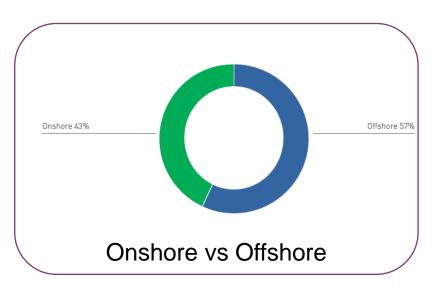




# IOGP 637R – The Input Data







- The 172 WCI submissions are provided by a limited number of participating companies.
- IOGP does not maintain records of total activity conducted, e.g. rig count or number of wells, hence the overview of region, environment and operation type cannot be interpreted as a frequency based indicator.
- BUT incidents are happening in all areas in all types of well operations.



# Report IOGP 637R - Methodology

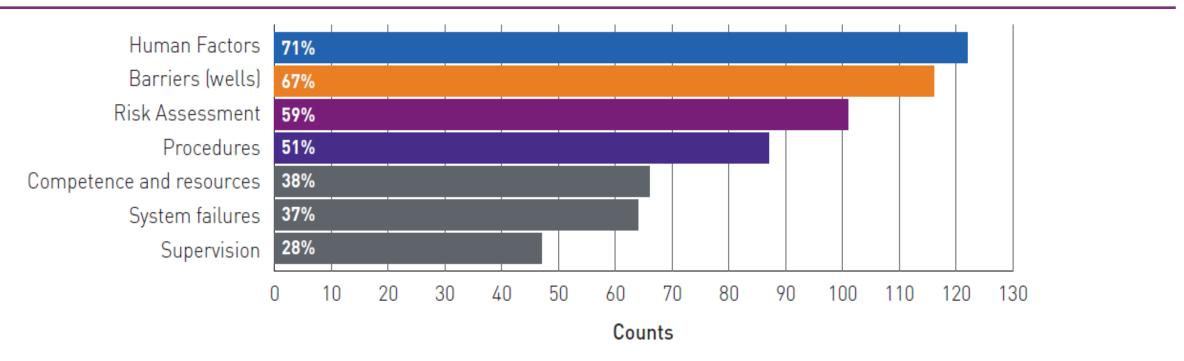
- All submissions were assessed to identify the incident's main contributing factors.
- The main contributing factors considered were:
  - Risk assessment flaws
  - System failures
  - Supervision failures
  - Human factors
  - Competence and resources

- Barrier failures
- Procedural gaps
- Technical Operational Issues
- Equipment

Main contributing factors were not deemed mutually exclusive for each incident; therefore, multiple categories
may apply for a single well control event.



# Report 637R - Main Contributing Factors



• The most common contributing factor, identified in almost three-quarters of all incidents (71%), is *Human Factors*.



## **IOGP 637 - Conclusions**

- Human Factors is seen to be the leading cause across all WCI reports submitted.
- Management of Barriers and Risk Assessments are identified as the next most common causes the influence of Human Factors on these and other causes is recognised.
- The analysis is derived from only 172 well control incidents reported to IOGP submissions are received from all areas and all types of well operations but the data is not comprehensive.
- Only through industry sharing well control incident data, can the lessons be analysed and incorporated into industry-wide guidelines and training.



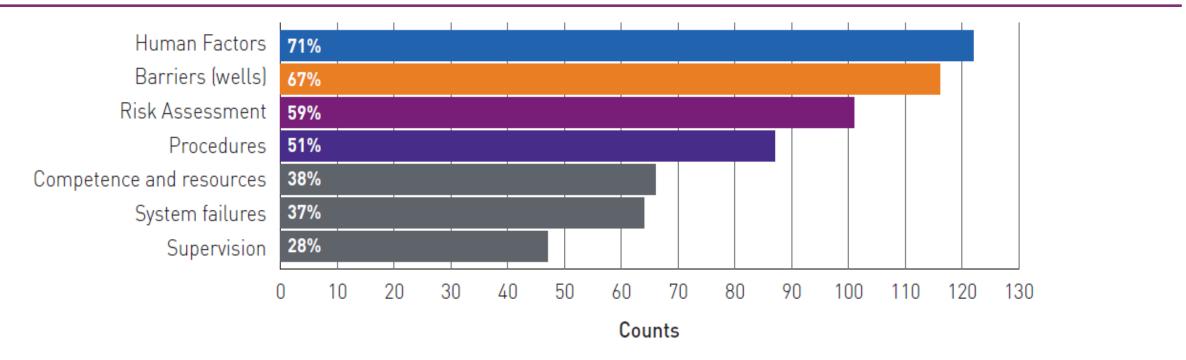
# Any new info?

## PSA (Norway) Report, November 2023

- Four areas stand out as challenges for the industry:
  - Well control expertise must be strengthened. There is a need for more systematic training and for experience transfer across the companies.
  - The industry must improve its learning and experience transfer in the wake of incidents. Knowledge must be shared across the organisations.
  - Risk management must be improved. More thorough risk assessments must be made of technical, operational and organisational factors.
  - The industry must improve at managing changes that may affect risk, such as new technology, new procedures or restructuring.



# Report 637R - Main Contributing Factors



• The most common contributing factor, identified in almost three-quarters of all incidents (71%), is *Human Factors*.





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