

**Using Data to Improve Well Integrity**  
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# **The Well Examiner's Perspective on Improving the Management of Production-Phase Well Integrity**



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# The Well Examiner's Perspective on Improving the Management of Production-Phase Well Integrity

- Developments in Technical Standards for Production Well Integrity Management.
- The type of Production-Phase integrity records that are now being compiled.
- Different approaches to record-keeping and data manipulation.
- The Role of the Independent Well Examiner.

## Developments in Technical Standards for Production Well Integrity Management

- American Petroleum Institute Recommended Practice.
- Montara Oil Spill (August 2009).
- Oil & Gas UK; Well Integrity Guidelines (Issue 1; 2012); Section 9 – ‘Operate & Maintain’.
- ISO 16530 (Under Development); Well Integrity; Part 2 – Well Integrity for the Operational Phase

## The type of Production-phase integrity records that are now being compiled

- **Core (SCE) Records**
  - ‘API 14’ test results
  - Risk Assessments
- **Additional Records**
  - Multiple SCE Standards
  - ‘Other Barrier’ Standards
  - ‘Well Categories’ (Suspended; LTSI, etc.)
  - ‘Ageing Infrastructure’ Standards

## Record-keeping and Data Manipulation

'Manumatic'  $\longleftrightarrow$  Automatic

Well-specific Analysis

Well Type Analysis

Component-specific Analysis

Risk Ranking



## Record-keeping and Data Manipulation

**i-WIT** (Wood Group – Intetech)

**SafeWells** (Expro)

**WellMaster** (Expro-Soft)

In-house

## The Role of the Independent Well Examiner

The Offshore Installations and Wells (Design and Construction, etc. Regulations 1996) - DCR

Regulation 18 (Arrangements for Examination) requires that an independent & competent examiner ensures that wells are operated and maintained in such repair and condition that:

- so far as is reasonably practicable, there can be no unplanned escapes of fluids from the well; and
- risks to the health and safety of persons from the well, or in strata to which it is connected, are as low as is reasonably practicable.

## The Perspective of the Independent Well Examiner

- Well Integrity (i.e. not productivity).
- Increasing focus on ‘Production-phase’.
- Increasing range & sophistication of Standards.
- Increasing sophistication of Data Analysis.
- Increasing International buy-in.
- The Future?