

Revision of the POF Recommended Practice for ILI Field Verification

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- Background to POF
- Scope of the Recommended Practice
- Requirements for update
- Current status & forward plan
- Request for input





- Association of pipeline operating companies, currently with 29 members
- A forum enabling pipeline integrity engineers to share and build best practice thereby raising the standard of pipeline integrity management globally...
- Objectives include "support of the international pipeline community with technical guidelines and specifications for pipeline inspection equipment, inspection procedures, inspection guidelines and any relevant information that may contribute to pipeline inspection and/or integrity".





 In support of this objective, POF maintains several standards, recommended practices and technical reports that are freely available to the pipeline industry via

www.pipelineoperators.org/documents

- All POF documents were re-issued in November 2021 with a standard format and a new numbering scheme
  - e.g. the well-known *Specifications and requirements for in-line inspection of pipelines* now has the reference number POF 100



# POF Documents pipelineoperators.org/documents

	POF 100	Specifications and requirements for in-line inspection of pipelines
	POF 110	Specifications and requirements for Universal POF Template (UPT) data format for in-line inspection of pipelines
	POF 300	Achieving successful in-line inspection
	POF 301	ILI pipeline questionnaire
	POF 302	ILI checklists
	POF 303	ILI data feedback form
	POF 310	Field verification procedures for in-line inspection
	POF 311	ILI field verification feedback form
	POF 320	In-line inspection contractor compliance check
	POF 321	ILI contractor compliance check tables
	POF 322	ILI contractor compliance check extra table
Ý	POF 510	Integrity management of CRA pipelines



#### **POF Documents**

- POF 310 Field verification procedures for ILI identified as oldest legacy document (published 2012) and due for technical revision
- Revision initiated February 2022 by a small working group of POF members



#### Scope of POF 310

#### Field verification procedures for in-line inspection

Recommended Practice

POF 310

Version December 2012 Amended November 202



- Addresses field activities
- Location, exposure and inspection of ILI reported anomalies
- Basic descriptions of applicable in-field NDE methods
- Subsequent ILI system performance verification is beyond the scope
- Addresses limited number of anomaly types
- Implicitly applicable to buried onshore pipelines only



## Areas Requiring Update - Editorial

- Reformat in latest POF template
  - Foreword, Introduction, Definitions & Abbreviations...
- Use of appropriate verbal forms for a Recommended Practice
  - "Should", not "shall", "must", "needs to"
- Consistent terminology with latest version of POF 100 (2021 revision)
  - "Anomaly" not "feature" or "defect"
- Remove feedback form to separate document (POF 311)



## Areas Requiring Update - Technical

- Inclusion of the full range of anomaly types specified in POF 100
  - e.g. dents, wrinkles, hard spots
- Review of applicable NDE methods and inclusion of new technology
- Use of GPS for initial location of dig sites
- Addition of high-level recommendations for subsea feature verification





- Reviewed related industry standards & guidance documents
  - CEPA, UKOPA, API, NACE
  - Many focus on statistical demonstration of performance (cf API 1163)
  - Several refer back to POF for in-field activities
- Reviewed guidance provided in ILI reports to POF members
  - Several ILI contractors include field verification guidance as an Annex to their final report
  - Two-way information exchange between POF and ILI contractors is evident



#### **Revision Process**

- Approached a small number of ILI contractors for discussion
  - Obtained more detailed internal procedures
  - Data useful to the ILI contractor
  - Lessons learned from experience
  - Recommended NDE methods for different anomaly types
  - Specific comments on 2012 version





- Revision still ongoing
- First draft reviewed by working group members
- Some technical gaps remain
  - Latest NDE technologies e.g. TECA
  - Typical accuracy of NDE methods
  - Subsea verification techniques



- Additional information gathering
  - IPC
  - PRCI NDE summit
- Input from wider list of ILI & NDE contractors
  - Include final comments round
  - Any NDE/ILI contractors, or operators who are not members of POF, who wish
    to contribute or comment are welcome to contact POF via the website
    www.pipelineoperators.org or by email to documents@pipelineoperators.org
- Target publication Q3 2023





### Thank you to:

- POF for supporting the work described in this paper
- POF field verification working group members for contributing operating company procedures, reviewing draft documents and providing links to ILI contractors
- ILI contractors for providing detailed comments and example internal procedures for consideration in development of the revised document



Thank you for your attention

www.pipelineoperators.org
documents@pipelineoperators.org