

ISO 17348:2016-02 (E)

Petroleum and natural gas industries - Materials selection for high content CO₂ for casing, tubing and downhole equipment

Contents		Page
Foreword		iv
Introduction		v
1	Scope	1
2	Normative references	1
3	Terms, definitions and abbreviated terms	2
3.1	Terms and definitions	2
3.2	Abbreviated terms	5
4	Guidelines for corrosion evaluation	5
4.1	General	5
4.2	Corrosion by produced or injected fluids -- Corrosion likelihood	6
4.2.1	Gas production wells	7
4.2.2	Injection wells	7
5	Materials selection	7
5.1	Gas injection with high CO₂ content	8
5.2	Water alternating gas with high CO₂ content (WAG) injection systems	8
5.3	Gas production wells with high CO₂ content	9
5.4	Production casing	9
5.5	Sealing and packers	10
5.5.1	General	10
5.5.2	Non-metallic seals and packing elements	10
5.6	Liners	11
6	Corrosion control	12
6.1	Corrosion prevention	12
6.1.1	Completion with CRA and cladding	12
6.1.2	Completion with GRE liners	12
6.2	Corrosion management	12
6.3	Internal corrosion allowance	12
Annex A (informative) Example of material selection for gas production		13
Bibliography		16