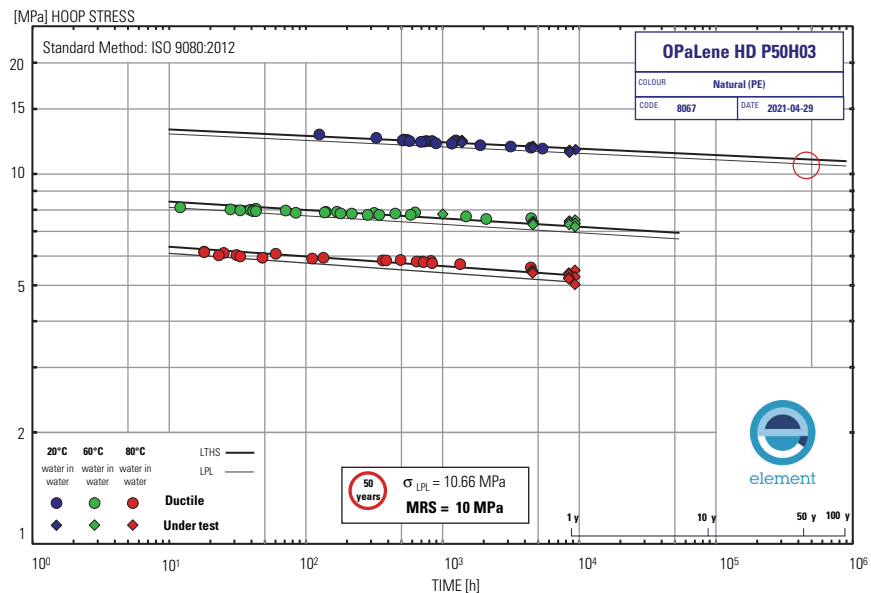


CLIENT: ONGC PETRO ADDITIONS LTD.

REGRESSION ANALYSIS ACCORDING TO EN ISO 9080 OF THE NATURAL PE PIPE GRADE OPALENE HD P50H03



INTRODUCTION

Element offers accredited testing and evaluation according to EN ISO 9080, i.e. hydrostatic pressure testing followed by evaluation of the long-term hydrostatic strength and MRS-classification according to ISO 12162.

TASK

The aim was to evaluate the pipe compound according to EN ISO 9080:2012, in order to obtain a MRS-classification according to ISO 12162:2009 of the natural PE pipe grade OPALENE HD P50H03 from ONGC PETRO ADDITIONS.

RESULTS OBTAINED

The evaluation was performed in accordance with EN ISO 9080:2012. More information can be found in Element Report P-20/88-v1.

EXTRAPOLATED STRENGTH VALUES

T	Time	σ_{LPL}	σ_{LTHS}
[°C]	[Yrs]	[MPa]	[MPa]
20	50.0	10.66	10.98
20	100	10.52	10.85
60	6.10	6.68	6.94
80	1.02	5.11	5.33

CLASSIFICATION

MRS = 10 MPa

As the MRS value equals 10 MPa the material is designated PE 100 according to ISO 12162:2009.

Please note!

This only covers the EN ISO 9080-evaluation, MRS classification and material designation. Additional requirements for PE 100 pipe materials are given in the relevant product standards.

