Implementation of underwater image enhancement for corrosion pipeline inspection (UIECPI)

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ABSTRACT
The corrosion penetration rate (CPR) during crude oil transportation procedures or gas transportation by carbon steel pipelines is one of the most important critical issue problems for any oil and gas sector today. Several studies have been conducted on these topics using various methods. The major purpose of this research is to use computer vision concepts which is underwater image enhancement for corrosion pipeline inspection to develop a robust and capable model that can accurately detect corrosion using certain algorithms and operating parameters. A reliable algorithm is developed to enhance the input images. The results from this detection model showed that, with small set of examples image, the underwater image enhancement for corrosion pipeline inspection (UIECPI) was able readily distinguished.

KEYWORDS
Color correction; Filtration color image; Image inspection; Thresholding image; Underwater image

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