



CASE STUDY

ADVANCED SIGNAL PROCESSING

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1. INTRODUCTION

Sonomatic performed a subsea inspection where, in addition to areas of wall loss, laminations were discovered in the material with some of these laminations very close to the indications identified as wall loss. Sonomatic needed to perform additional advanced analysis to determine definitively which signal responses were generated by laminations and whether laminations were interacting with corrosion.



2. PROCESS

The corrosion mapping results were reprocessed into 'midwall' maps that illustrated responses from laminations and corrosion. These midwall maps were then processed further to only include indications with a backwall response, examples of both of these maps are shown below.



3. OUTCOME

Comparing these maps allowed Sonomatic to determine fully which indications were laminations and which were consistent with corrosion. In addition, we were able to determine that some laminations were close to interacting with corrosion, creating a risk of increased corrosion rates. We were able to highlight these areas to the client to allow them to better plan future inspection campaigns.

