

Failure Mechanism of 21 Main Transformer and Extent of Condition
CR: IP2-2010-6801 CA: 15

Summary:

Outside of Scope

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scope

At 18:39 on 11/7/10, with the plant at approximately 100% power, a fault occurred on 21 Main Transformer which resulted in a Unit 2 automatic trip. An Alert was declared, in accordance with EAL 8.2.3, due to the subsequent 21 Main Transformer explosion.

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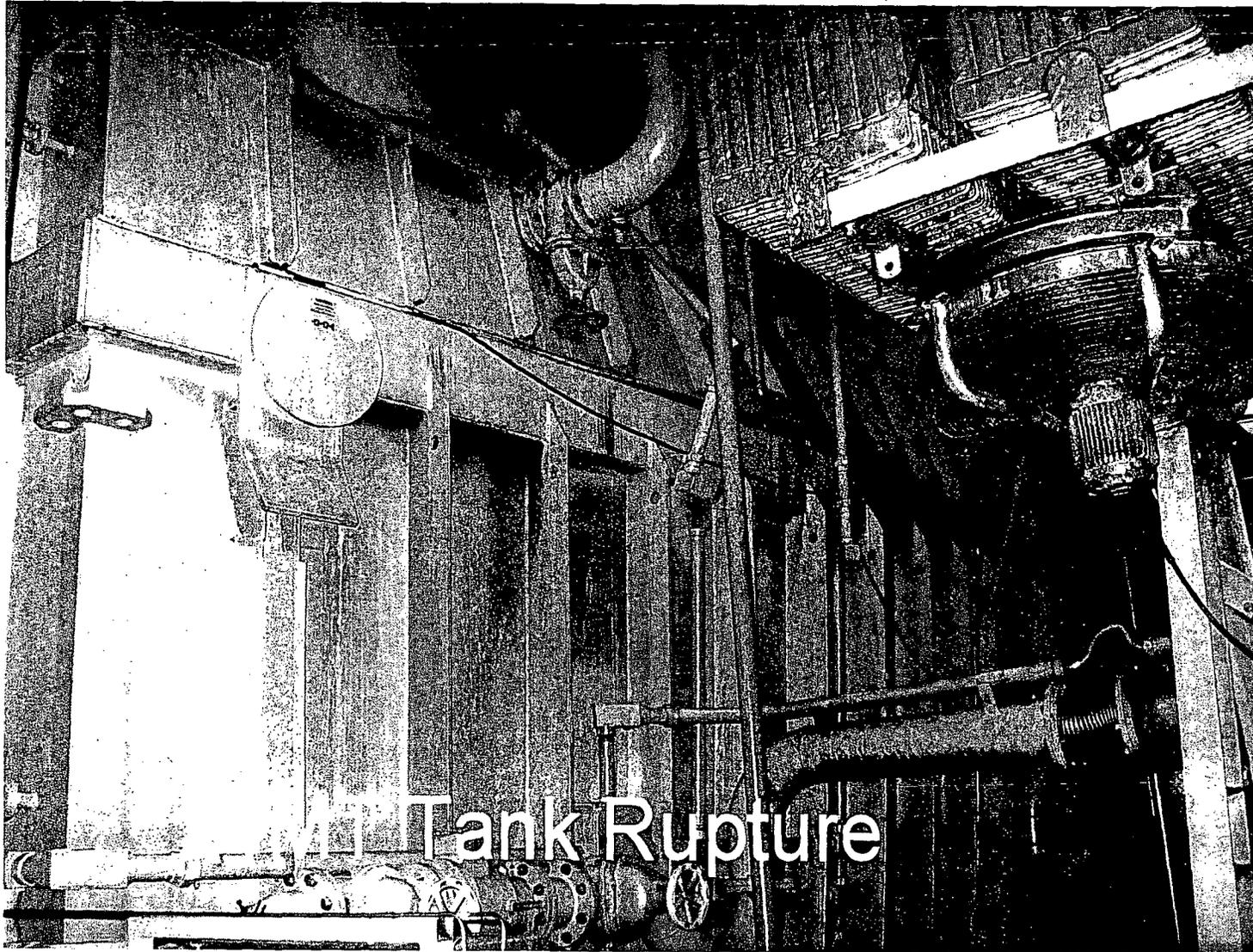
The transformer experienced a rapid increase in pressure due to the failure of the 'B' phase high voltage bushing. This sudden increase caused the tank to fail. Combustible gases, from arcing, built up in the transformer as the insulating oil leaked from the tank breach. After several more minutes, enough oxygen combined with the hot gases causing a secondary explosion. See Attachment 3 for photos of damage to bushings and ruptured transformer tank.

Outside of Scope

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Outside of Scope

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