

EXHIBIT J



CHEMICALS

VINYL CHLORIDE
SAFETY ASSOCIATION
MEETING - 1984

SUBJECT: CORROSION IN RECOVERY SYSTEM

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OCC 3174

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CORROSION IN RECOVERY SYSTEM

● BACKGROUND:

- TWO 316 SS INERTS DRUMS IN RECOVERED VCM OPERATION. UPSTREAM PIPING PRIMARILY CS.
- DRUMS ARE EXPERIENCING PIT CORROSION.
- PITTING IS REPAIRED BY LIGHT GRINDING AND WELDING.
- CONCERNS: (1) INTEGRITY OF DRUMS: LEADS TO ENVIRONMENTAL RELEASE.
(2) REPAIR TECHNIQUE: LEADS TO CSCC.

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CORROSION IN RECOVERY SYSTEM

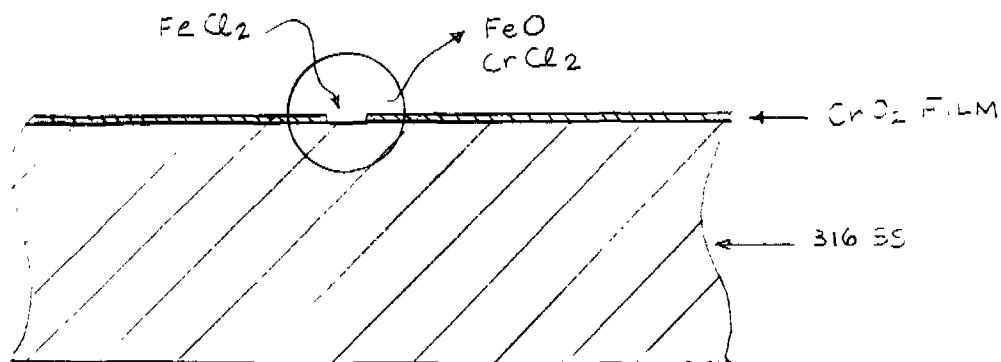


FIG. 1: BREAKDOWN OF OXIDE FILM

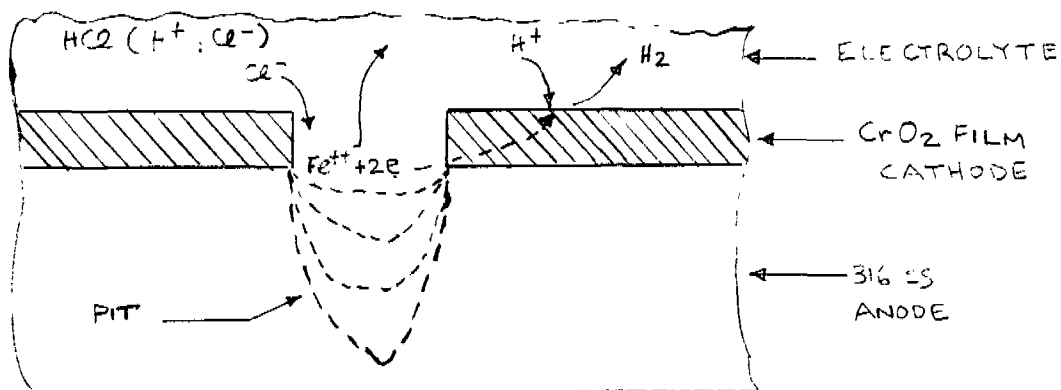


FIG. 2: FORMATION OF PIT



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- MECHANISM:

- CORROSION PROTECTION FOR SS DRUMS PROVIDED BY OXIDE LAYER.
- IRON CHLORIDES CHEMICALLY "BREAKDOWN" THE OXIDE FILM.
- STAGNATION PREVENTS RE-PASSIVATION.
- HYDROCHLORIC ACID ATTACKS THE UNPROTECTED SITE.
- A PIT DEVELOPS.
- PROPAGATION ASSISTED BY THE ELECTROCHEMICAL EFFECT.
- FACTORS THAT ACCELERATE PROCESS:
 - (1) ACIDITY
 - (2) TEMPERATURE

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● CORRECTIVE ACTIONS:

- SHORT-TERM: ● PURCHASED GL VESSEL TO REPLACE MAIN SS DRUM.
● ONE DRUM OPERATION TO PREVENT STAGNATION.

- LONG-TERM: ● CONSIDERING WAYS OF CONTROLLING OR ELIMINATING FACTORS.

OCC 3178