



SFM
Reliability
Solutions

Lubrication Based Reliability Consulting

Texas Gulf Coast Refinery

PROJECT SUMMARY REPORT

**Varnish Removal / HIGH VELOCITY
OIL FLUSH SERVICES**

Allis Chalmers

Centrifugal Compressor

Prepared by: Sania Munford

INTRODUCTION

This report documents the Varnish Removal / High Velocity Oil Flush performed on the Dresser Rand Centrifugal Compressor at Texas Gulf Coast Refinery. There were two additional set up days to move all equipment and supplies into the refinery for preparation of the project. This compressor service was done during the large turnaround where the four other centrifugal compressors also had the same flushing services performed by our crews. The additional set up time was split between all four compressors.

OBJECTIVE:

Provide a safe, thorough, and efficient Flush of this system, satisfying all customer requirements.

RESULTS:

- **403 Man Hours worked with ZERO incidents or injuries**
 - **SFM Reliability Solutions (SFM RS) commitment to safety, demonstrated by its safety record, provides refinery owners, construction companies, and OEM's peace of mind and safety assurance**
- **Mutually developed a comprehensive flush plan with all related parties and executed the Flush, meeting or exceeding all customer requirements**
 - **Comprehensive and properly developed flush plan provided peace of mind and assurance that all flush requirements were satisfied, including properly draining and purging all system piping**
 - **SFM RS executed the flush, utilizing "purpose built" equipment and superior technical expertise. This helped the customer avoid further schedule slippage during the outage.**
- **Provided documentation of flush procedures confirming SFM RS's guarantee that all customer criteria were met.**

Filtration

In addition to one-micron nominal "full flow" filtration used on the inlet side of the flush, dehydrator mobile heater / filter units were used to constantly control oil heat and cleanliness to OEM oil cleanliness. Additional one-micron beta 2000 absolute micro-glass depth media filters were used at the end of the flush to ensure oil cleanliness.

VARNISH REMOVAL FLUSH/HIGH VELOCITY OIL FLUSH
PROCEDURE

Allis Chalmers Centrifugal Compressor
FOR

Texas Gulf Coast Refinery

Beaumont, TX

Approved: [Redacted]

Date: [Redacted]

Approved: [Redacted]
Refinery representative

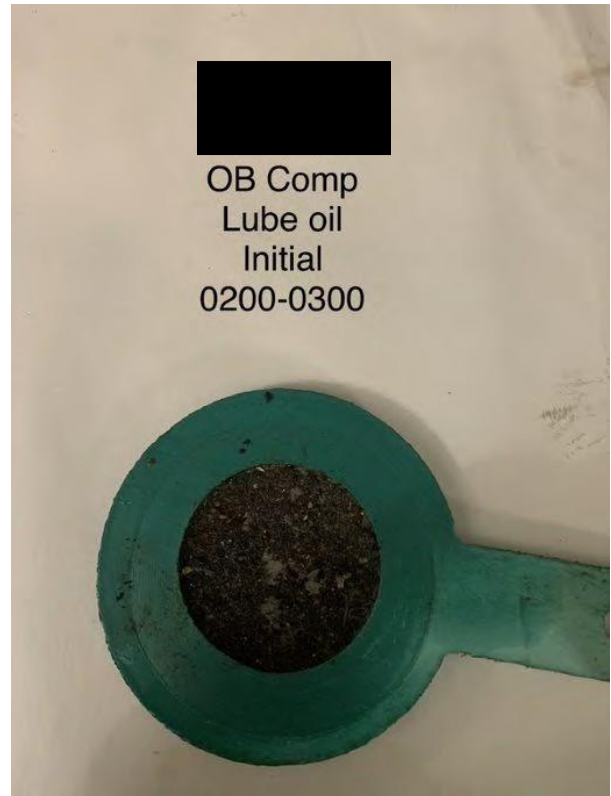
Date: [Redacted]

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OEM

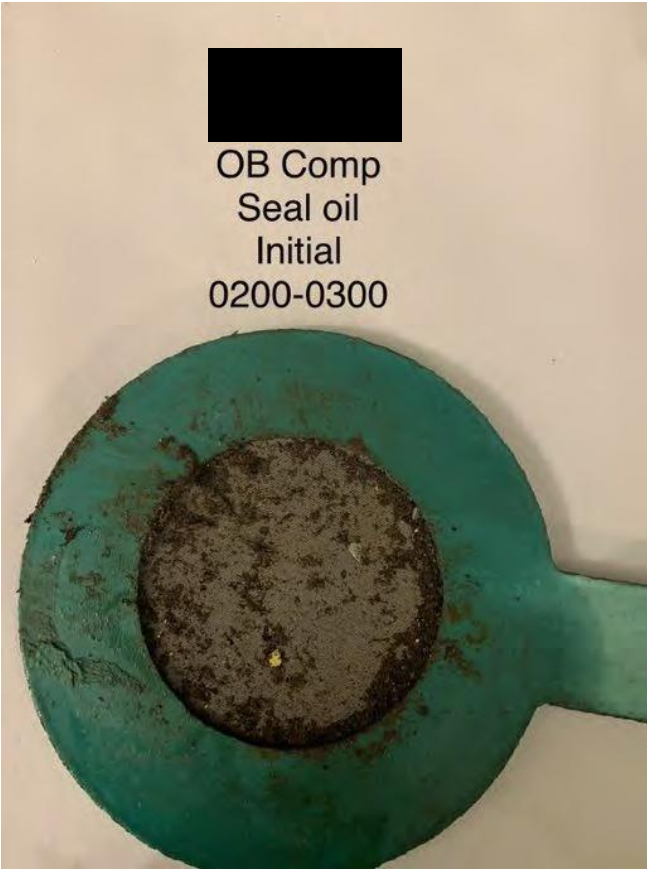
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The following pages detail and photo-document the project, including completion of objectives.

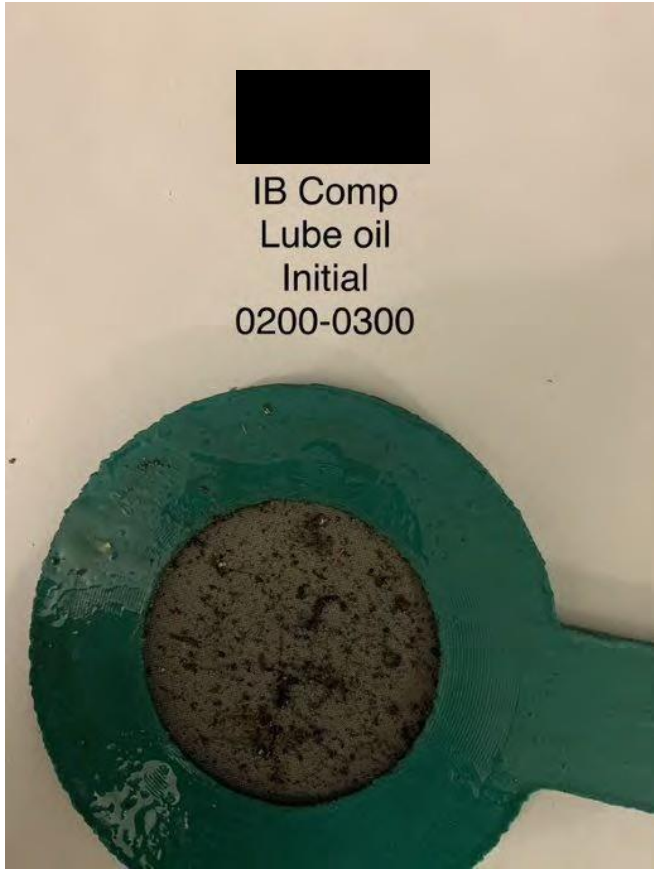
The piping and components were flushed to the required specification, cleanliness and acceptance criteria were verified, witnessed and documented. The “Final Flush Acceptance” documents for the system, detailed flushing logs, and photo documentation are included in this report. These documents indicate time duration during various phases of the project, along with the on-site cleanliness level, photo documentation of various aspects of the flush.



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