



OIL ANALYSIS REPORT

UIN 07D3AA6

Transmission

Unit No. OOSR340SD

Unit:

Make

Model

Serial No.

Site

Compartment:

Name Port Transmission

Make ZF

Model .

Serial No. 15-16837

Capacity: 0.0 Ltrs

Customer:

MIDSOUTH MARINE SERVICES LLC

3402 Bluebird Lane

Corinth MS 38834

USA

DIAGNOSIS

Iron and copper levels are higher than normal for this unit. Silicon level (dirt/sealant material) satisfactory. Water content acceptable. Viscosity low for specified oil grade. Action: Check for any abnormal noise or vibration. Change oil and filter(s) if not already done. Resample at a reduced service interval to further monitor.

ANALYST: Jon.Sowers



Caution

LEGEND



Severe



Abnormal



Caution



Normal

| | |
|---------------|-----------|
| DATE SAMPLED | 13-Mar-20 |
| DATE RECEIVED | 19-Mar-20 |
| DATE REPORTED | 23-Mar-20 |

| | |
|--------------|--------------|
| LAB NO. | 42021469721 |
| SIF NO. | 25929789 |
| TIME ON UNIT | Hrs 761 |
| TIME ON OIL | Hrs 761 |
| OIL BRAND | Unidentified |
| OIL TYPE | ATF |
| OIL GRADE | - |
| OIL ADDED | |
| FILTER | Not Changed |
| OIL CHANGED | Not Changed |
| WO NUMBER | |

Metals (ppm)

| | |
|----------------|-----|
| Iron (Fe) | 305 |
| Chromium (Cr) | 1 |
| Lead (Pb) | 385 |
| Copper (Cu) | 260 |
| Tin (Sn) | 4 |
| Aluminium (Al) | 5 |
| Nickel (Ni) | <1 |
| Silver (Ag) | <1 |
| Titanium (Ti) | <1 |
| Vanadium (V) | <1 |

Contaminants (ppm)

| | |
|---------------|----|
| Silicon (Si) | 14 |
| Sodium (Na) | 7 |
| Potassium (K) | 2 |

Additives (ppm)

| | |
|-----------------|-----|
| Magnesium (Mg) | 4 |
| Calcium (Ca) | 19 |
| Barium (Ba) | 640 |
| Phosphorus (P) | 277 |
| Zinc (Zn) | 325 |
| Molybdenum (Mo) | <1 |
| Boron (B) | 68 |

Contaminants

| | |
|-----------|-------|
| Water (%) | <0.05 |
|-----------|-------|

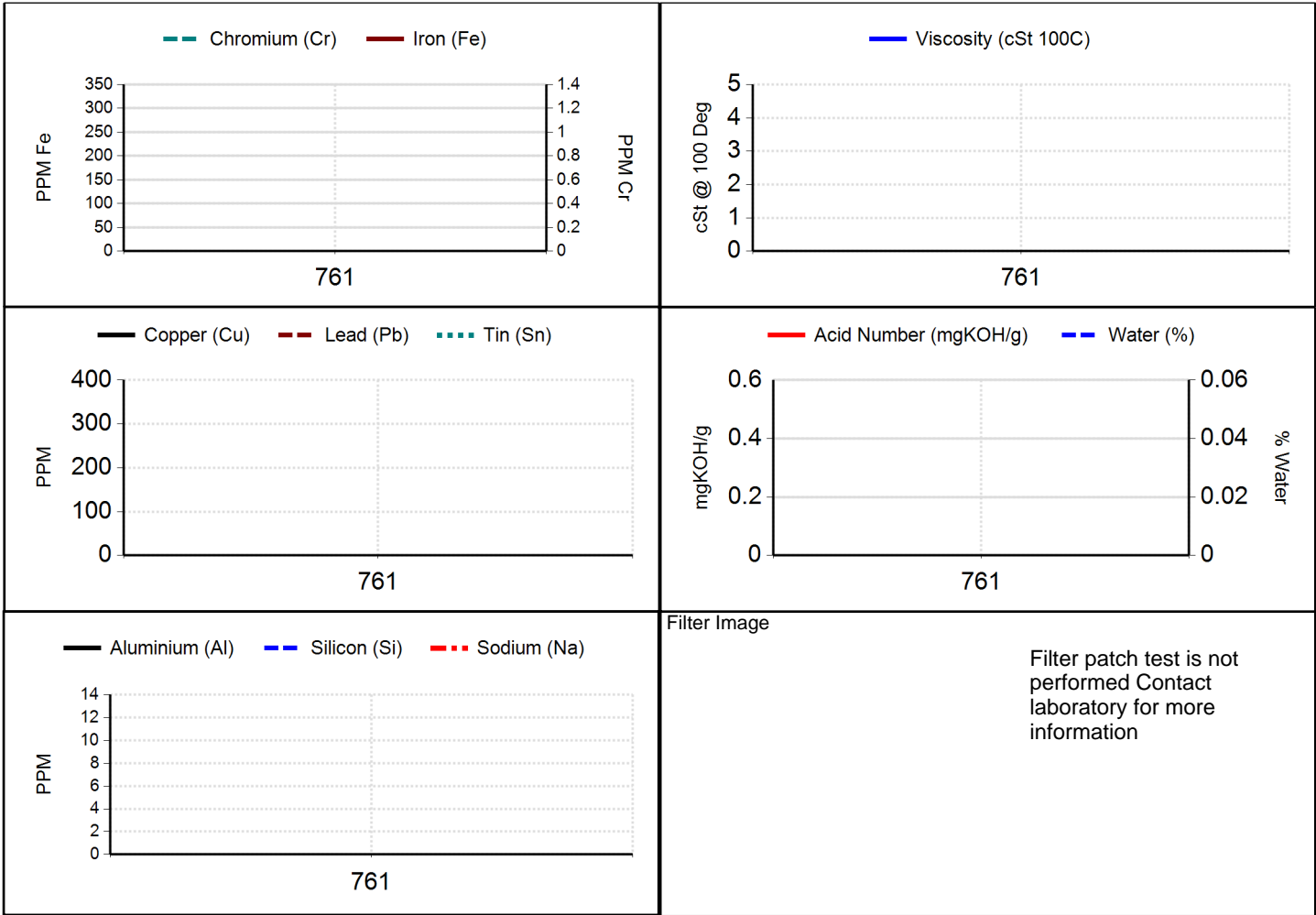
Physical Tests

| | |
|----------------------|------|
| Viscosity (cSt 100C) | 4.4 |
| Solids (%) | <0.1 |

Physical / Chemical

| | |
|-----------------------|------|
| Acid Number (mgKOH/g) | 0.55 |
|-----------------------|------|





Since services are based on samples and information supplied by others, and since corrective actions, if any, are necessarily taken by others, these services are rendered without any warranty or liability of any kind beyond the actual amount paid to ALS Tribology for the services. Reported recommendations are based on interpretations of the generated test results and historical data. Certain test results appearing in this report may have been tested at other ALS laboratories within the Tribology divisional network.

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UIN 07D3AA6

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