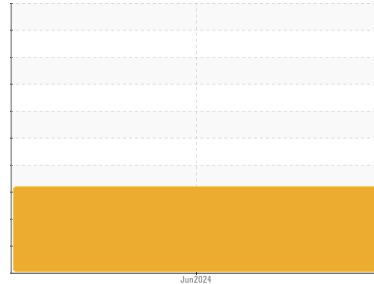




FILTER DEBRIS ANALYSIS

Sample Rating Trend



WEAR PARTICLES



Machine Id
FORD 24112-A
 Component
Filter
 Fluid
 {not provided} (--- GAL)

DIAGNOSIS

Recommendation

We understand that this sample is for warranty/insurance purposes. Diagnostician's Note: The filter debris was normal except for a few large aluminum sliding wear particles (likely bearing wear). The large amount of debris in the filter is the filter media. Engine fire suspected due to burnt cellulose filter media and water present in filter.

Wear Particles

Wear particle analysis indicates that the patch weight particles are abnormal. Wear particle analysis indicates that the nonferrous rolling particles are marginal. Bearing wear is indicated. One large non-ferrous platelet measuring approximately 2.0mm x 1.2mm was found in the filter. Platelet tests positive for aluminum via wet chemistry.

Contaminants

The filter contained only normal levels of contaminants, and debris. All filter contaminant levels are normal.

SAMPLE INFORMATION

| method | limit/base | current | history1 | history2 |
|---------------|-------------|-------------|----------|----------|
| Sample Number | Client Info | WC0959457 | --- | --- |
| Sample Date | Client Info | 24 Jun 2024 | --- | --- |
| Machine Age | hrs | Client Info | 0 | --- |
| Oil Age | hrs | Client Info | 0 | --- |
| Oil Changed | Client Info | N/A | --- | --- |
| Sample Status | | ABNORMAL | --- | --- |

CONTAMINATION

| method | limit/base | current | history1 | history2 |
|--------|------------|---------|----------|----------|
| Water | WC Method | NEG | --- | --- |

FILTER WEAR PARTICLES

| method | limit/base | current | history1 | history2 |
|----------------------|------------------------|---------|----------|----------|
| Ferrous Rubbing | Scale 0-10 ASTM D7684* | 2 | | |
| Ferrous Sliding | Scale 0-10 ASTM D7684* | 1 | | |
| Ferrous Cutting | Scale 0-10 ASTM D7684* | | | |
| Ferrous Rolling | Scale 0-10 ASTM D7684* | 1 | | |
| Ferrous Break-in | Scale 0-10 ASTM D7684* | | | |
| Ferrous Spheres | Scale 0-10 ASTM D7684* | | | |
| Ferrous Black Oxides | Scale 0-10 ASTM D7684* | | | |
| Ferrous Red Oxides | Scale 0-10 ASTM D7684* | | | |
| Ferrous Corrosive | Scale 0-10 ASTM D7684* | | | |
| Ferrous Other | Scale 0-10 ASTM D7684* | | | |
| Nonferrous Rubbing | Scale 0-10 ASTM D7684* | 2 | | |
| Nonferrous Sliding | Scale 0-10 ASTM D7684* | | | |
| Nonferrous Cutting | Scale 0-10 ASTM D7684* | | | |
| Nonferrous Rolling | Scale 0-10 ASTM D7684* | 2 | | |
| Nonferrous Other | Scale 0-10 ASTM D7684* | | | |

FILTER CONTAMINANTS

| method | limit/base | current | history1 | history2 |
|--------------|------------------------|---------|----------|----------|
| Sand/Dirt | Scale 0-10 ASTM D7684* | 2 | | |
| Fibres | Scale 0-10 ASTM D7684* | 1 | | |
| Spheres | Scale 0-10 ASTM D7684* | | | |
| Other | Scale 0-10 ASTM D7684* | 6 | | |
| Patch Weight | mg | 591 | --- | --- |

SAMPLE IMAGES

| method | limit/base | current | history1 | history2 |
|--------|------------|---------|----------|----------|
| Color | | | no image | no image |
| Bottom | | | no image | no image |

Machine Id

FORD 24112-A

Component

Filter

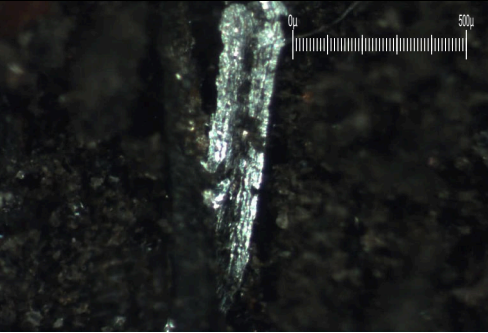
Fluid

{not provided} (--- GAL)

Magn: 10x Illum: RW



Magn: 60x Illum: RW

**WEAR**

Wear particle analysis indicates that the patch weight particles are abnormal. Wear particle analysis indicates that the nonferrous rolling particles are marginal. Bearing wear is indicated. One large non-ferrous platelet measuring approximately 2.0mm x 1.2mm was found in the filter. Platelet tests positive for aluminum via wet chemistry.