

OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
THOMAS 8518
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 15W40 (--- GAL)

DIAGNOSIS

Recommendation
Resample at the next service interval to monitor. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) DIESEL ENGINE OIL SAE 15W40. Please confirm.

Wear
All component wear rates are normal.

Contamination
There is no indication of any contamination in the oil.

Fluid Condition
The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION

| | method | limit/base | current | history1 | history2 |
|---------------|-------------|-------------|--------------------|----------|----------|
| Sample Number | Client Info | | PC0089681 | --- | --- |
| Sample Date | Client Info | | 05 Jun 2024 | --- | --- |
| Machine Age | kms | Client Info | 156766 | --- | --- |
| Oil Age | kms | Client Info | 0 | --- | --- |
| Oil Changed | Client Info | | N/A | --- | --- |
| Sample Status | | | NORMAL | --- | --- |

CONTAMINATION

| | method | limit/base | current | history1 | history2 |
|--------|-----------|------------|----------------|----------|----------|
| Fuel | WC Method | >3.0 | <1.0 | --- | --- |
| Water | WC Method | >0.2 | NEG | --- | --- |
| Glycol | WC Method | | NEG | --- | --- |

WEAR METALS

| | method | limit/base | current | history1 | history2 |
|-----------|--------|--------------------|--------------|----------|----------|
| Iron | ppm | ASTM D5185(m) >90 | 18 | --- | --- |
| Chromium | ppm | ASTM D5185(m) >20 | <1 | --- | --- |
| Nickel | ppm | ASTM D5185(m) >2 | <1 | --- | --- |
| Titanium | ppm | ASTM D5185(m) >2 | 0 | --- | --- |
| Silver | ppm | ASTM D5185(m) >2 | 0 | --- | --- |
| Aluminum | ppm | ASTM D5185(m) >20 | 5 | --- | --- |
| Lead | ppm | ASTM D5185(m) >40 | 0 | --- | --- |
| Copper | ppm | ASTM D5185(m) >330 | <1 | --- | --- |
| Tin | ppm | ASTM D5185(m) >15 | 0 | --- | --- |
| Antimony | ppm | ASTM D5185(m) | 0 | --- | --- |
| Vanadium | ppm | ASTM D5185(m) | 0 | --- | --- |
| Beryllium | ppm | ASTM D5185(m) | 0 | --- | --- |
| Cadmium | ppm | ASTM D5185(m) | 0 | --- | --- |

ADDITIVES

| | method | limit/base | current | history1 | history2 |
|------------|--------|--------------------|--------------|----------|----------|
| Boron | ppm | ASTM D5185(m) 250 | 5 | --- | --- |
| Barium | ppm | ASTM D5185(m) 10 | 0 | --- | --- |
| Molybdenum | ppm | ASTM D5185(m) 100 | 59 | --- | --- |
| Manganese | ppm | ASTM D5185(m) | <1 | --- | --- |
| Magnesium | ppm | ASTM D5185(m) 450 | 944 | --- | --- |
| Calcium | ppm | ASTM D5185(m) 3000 | 1012 | --- | --- |
| Phosphorus | ppm | ASTM D5185(m) 1150 | 988 | --- | --- |
| Zinc | ppm | ASTM D5185(m) 1350 | 1170 | --- | --- |
| Sulfur | ppm | ASTM D5185(m) 4250 | 2478 | --- | --- |
| Lithium | ppm | ASTM D5185(m) | <1 | --- | --- |

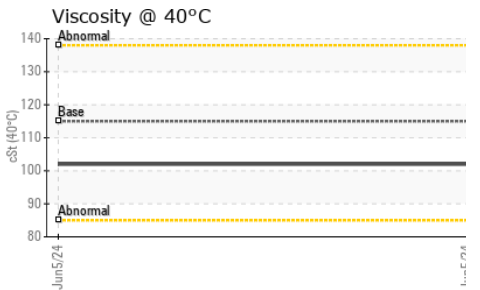
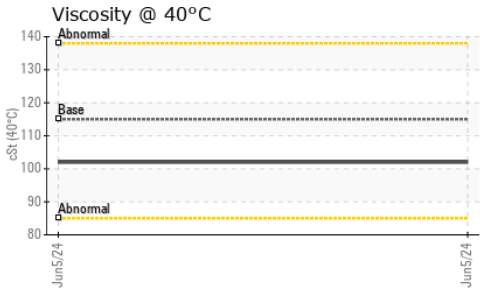
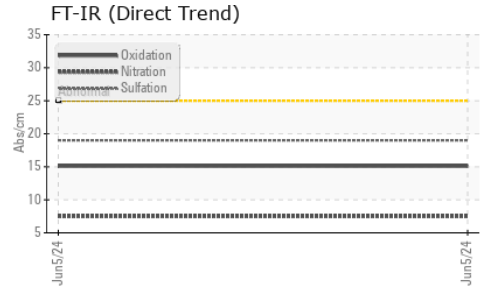
CONTAMINANTS

| | method | limit/base | current | history1 | history2 |
|-----------|--------|--------------------|----------|----------|----------|
| Silicon | ppm | ASTM D5185(m) >25 | 3 | --- | --- |
| Sodium | ppm | ASTM D5185(m) >158 | 2 | --- | --- |
| Potassium | ppm | ASTM D5185(m) >20 | 4 | --- | --- |

INFRA-RED

| | method | limit/base | current | history1 | history2 |
|-----------|----------|-----------------|-------------|----------|----------|
| Soot % | % | ASTM D7844* >6 | 0.2 | --- | --- |
| Nitration | Abs/cm | ASTM D7624* >20 | 7.5 | --- | --- |
| Sulfation | Abs./1mm | ASTM D7415* >30 | 19.0 | --- | --- |

OIL ANALYSIS REPORT

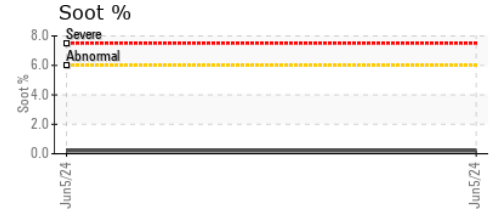
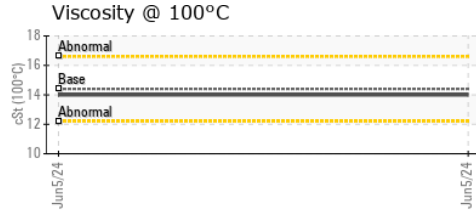
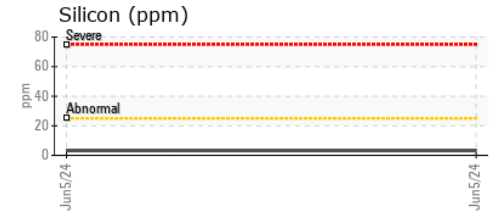
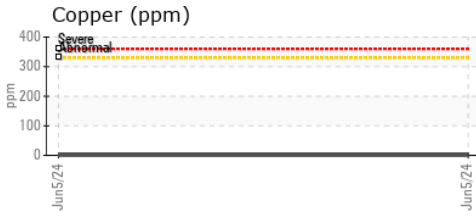
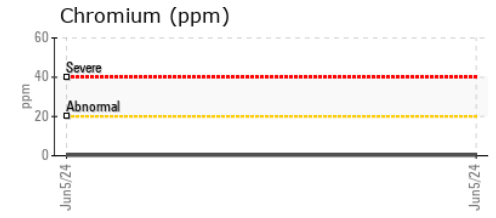
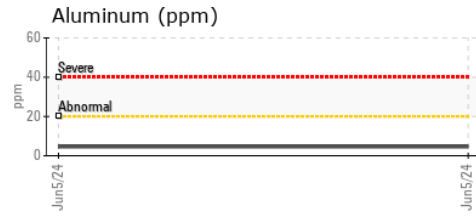
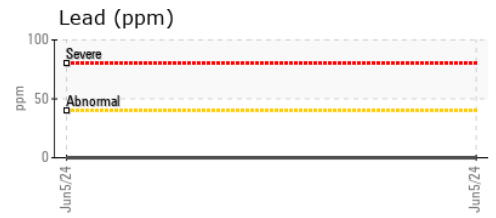
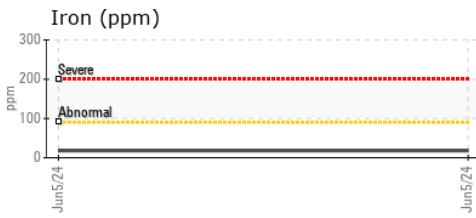


| FLUID DEGRADATION | | method | limit/base | current | history1 | history2 |
|-------------------|----------|-------------|------------|-------------|----------|----------|
| Oxidation | Abs./1mm | ASTM D7414* | >25 | 15.1 | --- | --- |

| VISUAL | | method | limit/base | current | history1 | history2 |
|------------------|--------|---------|------------|--------------|----------|----------|
| White Metal | scalar | Visual* | NONE | VLITE | --- | --- |
| Yellow Metal | scalar | Visual* | NONE | NONE | --- | --- |
| Precipitate | scalar | Visual* | NONE | NONE | --- | --- |
| Silt | scalar | Visual* | NONE | NONE | --- | --- |
| Debris | scalar | Visual* | NONE | NONE | --- | --- |
| Sand/Dirt | scalar | Visual* | NONE | NONE | --- | --- |
| Appearance | scalar | Visual* | NORML | NORML | --- | --- |
| Odor | scalar | Visual* | NORML | NORML | --- | --- |
| Emulsified Water | scalar | Visual* | >0.2 | NEG | --- | --- |
| Free Water | scalar | Visual* | | NEG | --- | --- |

| FLUID PROPERTIES | | method | limit/base | current | history1 | history2 |
|----------------------|-------|---------------|------------|-------------|----------|----------|
| Visc @ 40°C | cSt | ASTM D7279(m) | 115 | 102 | --- | --- |
| Visc @ 100°C | cSt | ASTM D7279(m) | 14.4 | 14.0 | --- | --- |
| Viscosity Index (VI) | Scale | ASTM D2270* | 126 | 139 | --- | --- |

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0089681 **Received** : 09 Jul 2024
Lab Number : **02646612** **Tested** : 09 Jul 2024
Unique Number : 5812164 **Diagnosed** : 09 Jul 2024 - Kevin Marson
Test Package : MOB 1 (Additional Tests: KV40, VI, Visual)

ICSB - Brantford
 567 Oak Park Rd.
 Brantford, ON
 CA N3T 5L8
 Contact: Doug Hall
 Djhall@sharpbus.com
 T: (519)751-3434
 F:

To discuss this sample report, contact Customer Service at 1-800-268-2131.
 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
 Validity of results and interpretation are based on the sample and information as supplied.