



OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Area
WWH BROOKLYN FIRE [132357]
 Machine Id
NO UNIT CU0021741
 Component
Diesel Engine
 Fluid
DIESEL ENGINE OIL SAE 15W40 (--- GAL)



DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

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 | | CU0021741 | --- | --- |
| Sample Date | Client Info | | 03 Oct 2023 | --- | --- |
| Machine Age | hrs | Client Info | 0 | --- | --- |
| Oil Age | hrs | Client Info | 0 | --- | --- |
| Oil Changed | Client Info | | N/A | --- | --- |
| Sample Status | | | NORMAL | --- | --- |

CONTAMINATION

| | method | limit/base | current | history1 | history2 |
|--------|-----------|------------|----------------|----------|----------|
| Fuel | WC Method | >5 | <1.0 | --- | --- |
| Glycol | WC Method | | NEG | --- | --- |

WEAR METALS

| | method | limit/base | current | history1 | history2 |
|-----------|--------|--------------------|--------------|----------|----------|
| Iron | ppm | ASTM D5185(m) >100 | 3 | --- | --- |
| Chromium | ppm | ASTM D5185(m) >20 | 0 | --- | --- |
| Nickel | ppm | ASTM D5185(m) >4 | 0 | --- | --- |
| Titanium | ppm | ASTM D5185(m) | 0 | --- | --- |
| Silver | ppm | ASTM D5185(m) >3 | <1 | --- | --- |
| Aluminum | ppm | ASTM D5185(m) >20 | <1 | --- | --- |
| Lead | ppm | ASTM D5185(m) >40 | <1 | --- | --- |
| 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 | 33 | --- | --- |
| Barium | ppm | ASTM D5185(m) 10 | <1 | --- | --- |
| Molybdenum | ppm | ASTM D5185(m) 100 | 46 | --- | --- |
| Manganese | ppm | ASTM D5185(m) | 0 | --- | --- |
| Magnesium | ppm | ASTM D5185(m) 450 | 768 | --- | --- |
| Calcium | ppm | ASTM D5185(m) 3000 | 1175 | --- | --- |
| Phosphorus | ppm | ASTM D5185(m) 1150 | 681 | --- | --- |
| Zinc | ppm | ASTM D5185(m) 1350 | 814 | --- | --- |
| Sulfur | ppm | ASTM D5185(m) 4250 | 1912 | --- | --- |
| 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 | 3 | --- | --- |
| Potassium | ppm | ASTM D5185(m) >20 | <1 | --- | --- |

INFRA-RED

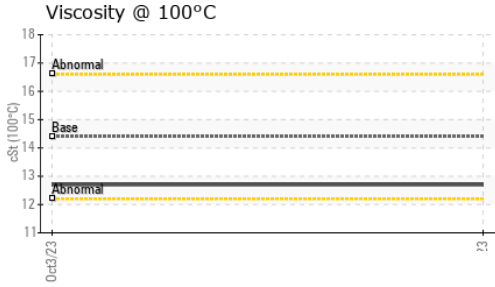
| | method | limit/base | current | history1 | history2 |
|-----------|----------|-----------------|-------------|----------|----------|
| Soot % | % | ASTM D7844* >3 | 0 | --- | --- |
| Nitration | Abs/cm | ASTM D7624* >20 | 7.7 | --- | --- |
| Sulfation | Abs/.1mm | ASTM D7415* >30 | 19.6 | --- | --- |

FLUID DEGRADATION

| | method | limit/base | current | history1 | history2 |
|-----------|----------|-----------------|-------------|----------|----------|
| Oxidation | Abs/.1mm | ASTM D7414* >25 | 17.4 | --- | --- |



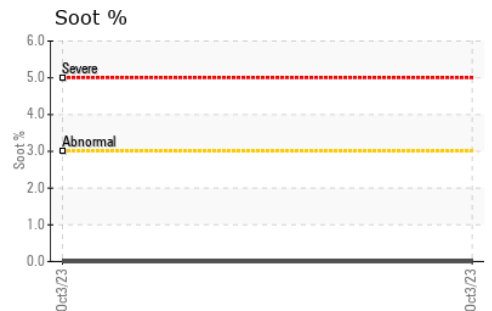
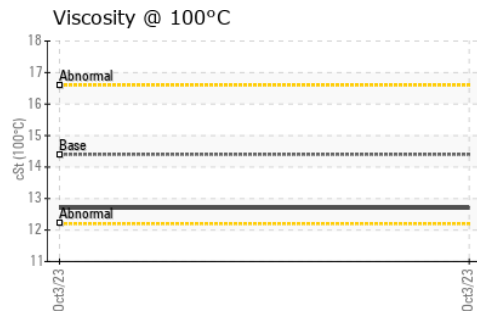
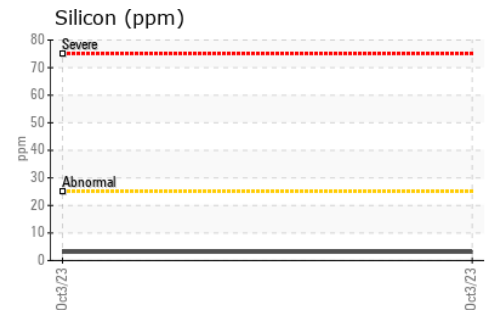
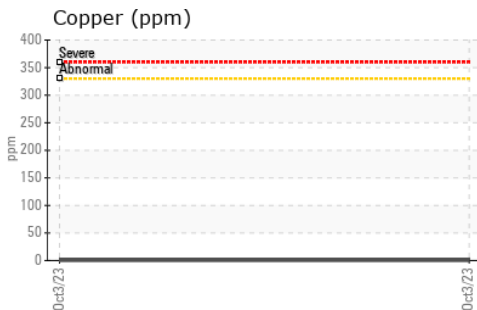
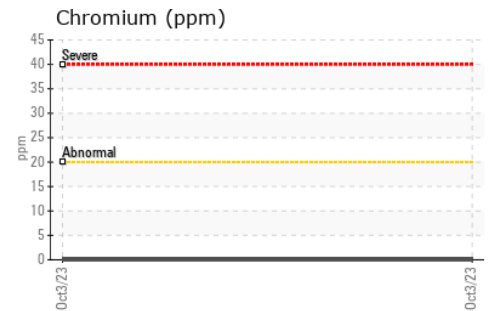
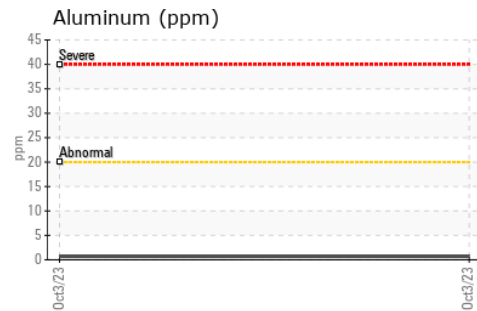
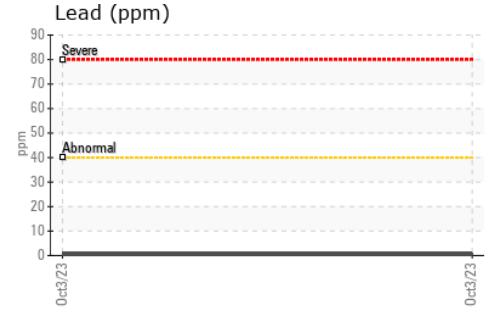
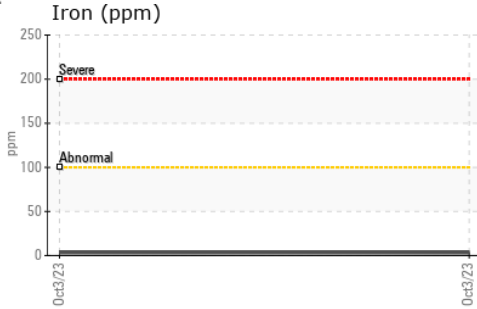
OIL ANALYSIS REPORT



| VISUAL | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| Emulsified Water | scalar | Visual* | >0.2 | NEG | --- |
| Free Water | scalar | Visual* | | NEG | --- |

| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |
|------------------|--------|---------------|---------|----------|----------|
| Visc @ 100°C | cSt | ASTM D7279(m) | 14.4 | 12.7 | --- |

GRAPHS



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : CU0021741
Lab Number : 02586676
Unique Number : 5655742
Test Package : MOB 1

Received : 04 Oct 2023
Diagnosed : 04 Oct 2023
Diagnostician : Wes Davis

CUMMINS DIESEL
 50 SIMMONDS DRIVE
 DARTMOUTH, NS
 CA B3B 1R3

Contact: Maurice Connolly
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 T: (902)468-7938
 F: (902)468-5177

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.