

OIL ANALYSIS REPORT

Sample Rating Trend



DEGRADATION



Machine Id
MACK GR64B 169 (S/N KM010354)
 Component
Diesel Engine
 Fluid
PETRO CANADA 15W40 (--- GAL)

DIAGNOSIS

▲ Recommendation

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

▲ Fluid Condition

The BN level is low. The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION

| | method | limit/base | current | history1 | history2 |
|---------------|-------------|-------------|--------------------|----------|----------|
| Sample Number | Client Info | | PCA0124979 | --- | --- |
| Sample Date | Client Info | | 20 May 2024 | --- | --- |
| Machine Age | hrs | Client Info | 64948 | --- | --- |
| Oil Age | hrs | Client Info | 8136 | --- | --- |
| Oil Changed | Client Info | | Changed | --- | --- |
| Sample Status | | | ABNORMAL | --- | --- |

CONTAMINATION

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

WEAR METALS

| | method | limit/base | current | history1 | history2 |
|----------|--------|------------------|--------------|----------|----------|
| Iron | ppm | ASTM D5185m >120 | 85 | --- | --- |
| Chromium | ppm | ASTM D5185m >20 | 2 | --- | --- |
| Nickel | ppm | ASTM D5185m >5 | 2 | --- | --- |
| Titanium | ppm | ASTM D5185m >2 | 29 | --- | --- |
| Silver | ppm | ASTM D5185m >2 | 1 | --- | --- |
| Aluminum | ppm | ASTM D5185m >20 | 12 | --- | --- |
| Lead | ppm | ASTM D5185m >40 | 1 | --- | --- |
| Copper | ppm | ASTM D5185m >330 | 29 | --- | --- |
| Tin | ppm | ASTM D5185m >15 | 2 | --- | --- |
| Vanadium | ppm | ASTM D5185m | <1 | --- | --- |
| Cadmium | ppm | ASTM D5185m | 0 | --- | --- |

ADDITIVES

| | method | limit/base | current | history1 | history2 |
|------------|--------|-------------|-------------|----------|----------|
| Boron | ppm | ASTM D5185m | 22 | --- | --- |
| Barium | ppm | ASTM D5185m | 0 | --- | --- |
| Molybdenum | ppm | ASTM D5185m | 59 | --- | --- |
| Manganese | ppm | ASTM D5185m | 2 | --- | --- |
| Magnesium | ppm | ASTM D5185m | 688 | --- | --- |
| Calcium | ppm | ASTM D5185m | 1428 | --- | --- |
| Phosphorus | ppm | ASTM D5185m | 1141 | --- | --- |
| Zinc | ppm | ASTM D5185m | 1297 | --- | --- |
| Sulfur | ppm | ASTM D5185m | 2935 | --- | --- |

CONTAMINANTS

| | method | limit/base | current | history1 | history2 |
|-----------|--------|-----------------|------------|----------|----------|
| Silicon | ppm | ASTM D5185m >25 | 15 | --- | --- |
| Sodium | ppm | ASTM D5185m | 18 | --- | --- |
| Potassium | ppm | ASTM D5185m >20 | 33 | --- | --- |
| Glycol | % | *ASTM D2982 | NEG | --- | --- |

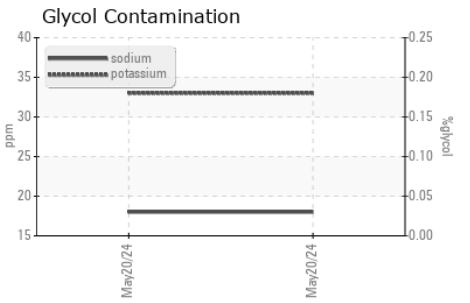
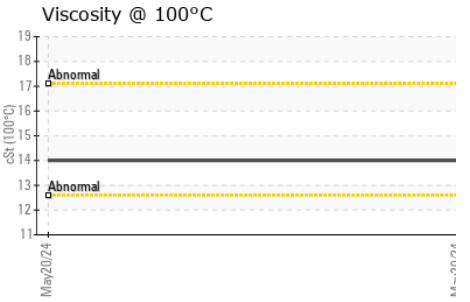
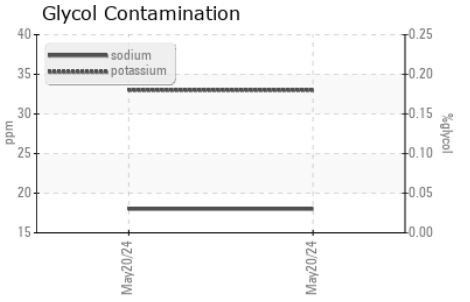
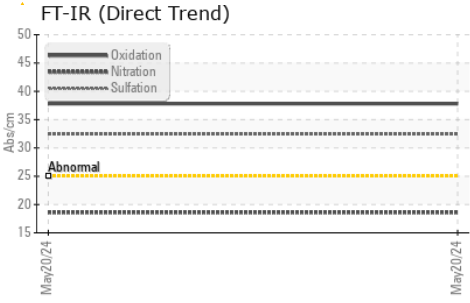
INFRA-RED

| | method | limit/base | current | history1 | history2 |
|-----------|----------|-----------------|-------------|----------|----------|
| Soot % | % | *ASTM D7844 >4 | 0.8 | --- | --- |
| Nitration | Abs/cm | *ASTM D7624 >20 | 18.6 | --- | --- |
| Sulfation | Abs/.1mm | *ASTM D7415 >30 | 32.4 | --- | --- |

FLUID DEGRADATION

| | method | limit/base | current | history1 | history2 |
|------------------|----------|-----------------|--------------|----------|----------|
| Oxidation | Abs/.1mm | *ASTM D7414 >25 | 37.8 | --- | --- |
| Base Number (BN) | mg KOH/g | ASTM D2896 | ▲ 2.9 | --- | --- |

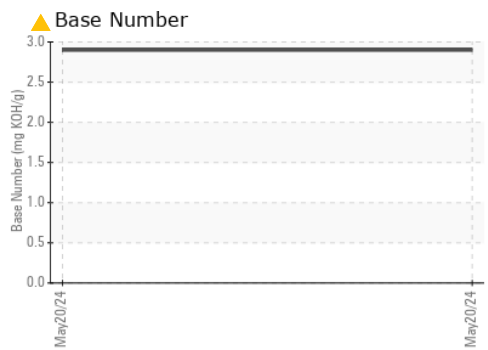
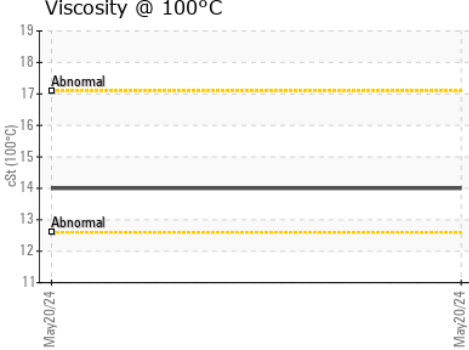
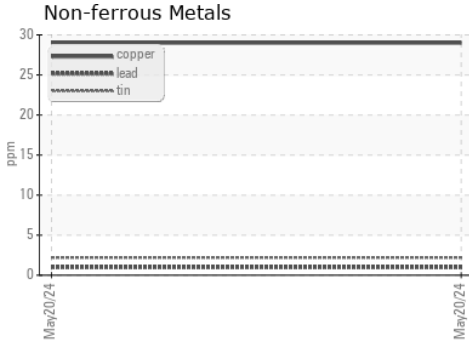
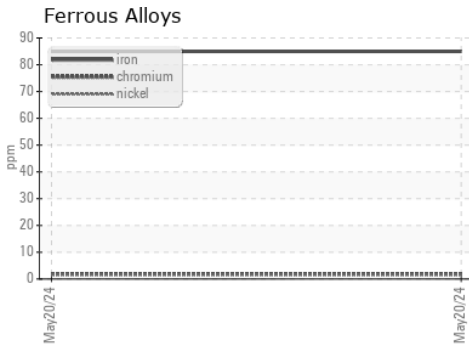
OIL ANALYSIS REPORT



| VISUAL | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal | scalar | *Visual | NONE | NONE | --- |
| 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 @ 100°C | cSt | ASTM D445 | 14.0 | --- | --- |

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0124979 **Received** : 06 Jun 2024
Lab Number : 06202271 **Tested** : 11 Jun 2024
Unique Number : 11069732 **Diagnosed** : 11 Jun 2024 - Jonathan Hester
Test Package : FLEET (Additional Tests: Glycol)

SCRUGGS CONCRETE CO
 807 RIVER ST
 VALDOSTA, GA
 US 31601

Contact: D ALTMAN
 DALTMAN@SCRUGGSCONCRETE.COM

To discuss this sample report, contact Customer Service at 1-800-237-1369.

* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

T:
F: