

OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
NO UNIT PC0064196
Component
Diesel Engine
Fluid
PETRO CANADA DURON HP 15W40 (--- GAL)

DIAGNOSIS

Recommendation

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 condition of the oil is acceptable for the time in service.

| SAMPLE INFORMATION | | method | limit/base | current | history1 | history2 |
|--------------------|-------------|-------------|------------|--------------------|----------|----------|
| Sample Number | Client Info | | | PC0064196 | --- | --- |
| Sample Date | Client Info | | | 05 Oct 2023 | --- | --- |
| Machine Age | kms | Client Info | | 1553130 | --- | --- |
| 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 | >5 | | <1.0 | --- | --- |
| Water | WC Method | >0.2 | | NEG | --- | --- |
| Glycol | WC Method | | | NEG | --- | --- |

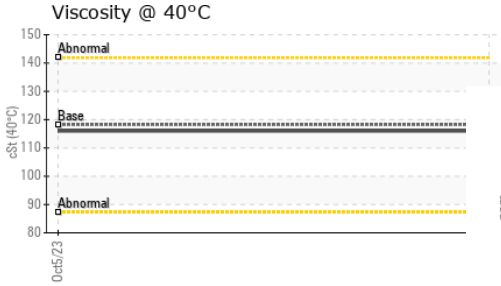
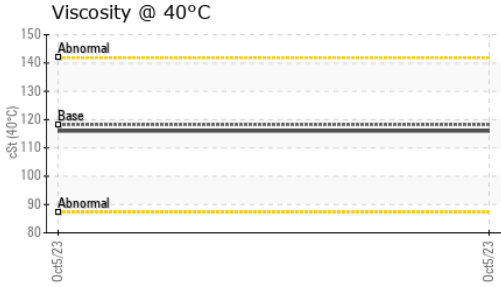
| WEAR METALS | | method | limit/base | current | history1 | history2 |
|-------------|-----|---------------|------------|--------------|----------|----------|
| Iron | ppm | ASTM D5185(m) | >110 | 13 | --- | --- |
| Chromium | ppm | ASTM D5185(m) | >4 | <1 | --- | --- |
| Nickel | ppm | ASTM D5185(m) | >2 | <1 | --- | --- |
| Titanium | ppm | ASTM D5185(m) | | 0 | --- | --- |
| Silver | ppm | ASTM D5185(m) | >2 | <1 | --- | --- |
| Aluminum | ppm | ASTM D5185(m) | >25 | 2 | --- | --- |
| Lead | ppm | ASTM D5185(m) | >45 | 2 | --- | --- |
| Copper | ppm | ASTM D5185(m) | >85 | 2 | --- | --- |
| Tin | ppm | ASTM D5185(m) | >4 | <1 | --- | --- |
| 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) | 0 | 23 | --- | --- |
| Barium | ppm | ASTM D5185(m) | 0 | <1 | --- | --- |
| Molybdenum | ppm | ASTM D5185(m) | 60 | 48 | --- | --- |
| Manganese | ppm | ASTM D5185(m) | 0 | 0 | --- | --- |
| Magnesium | ppm | ASTM D5185(m) | 1010 | 767 | --- | --- |
| Calcium | ppm | ASTM D5185(m) | 1070 | 1074 | --- | --- |
| Phosphorus | ppm | ASTM D5185(m) | 1150 | 893 | --- | --- |
| Zinc | ppm | ASTM D5185(m) | 1270 | 1089 | --- | --- |
| Sulfur | ppm | ASTM D5185(m) | 2060 | 2549 | --- | --- |
| Lithium | ppm | ASTM D5185(m) | | <1 | --- | --- |

| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
|--------------|-----|---------------|------------|-----------|----------|----------|
| Silicon | ppm | ASTM D5185(m) | >30 | 17 | --- | --- |
| Sodium | ppm | ASTM D5185(m) | | 2 | --- | --- |
| 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 | 5.6 | --- | --- |
| Sulfation | Abs/.1mm | ASTM D7415* | >30 | 18.4 | --- | --- |

OIL ANALYSIS REPORT

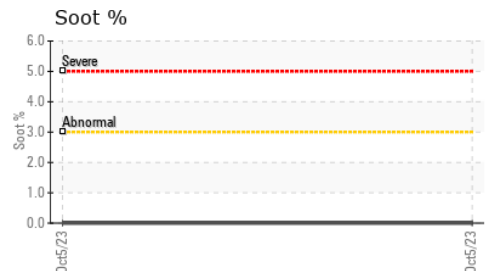
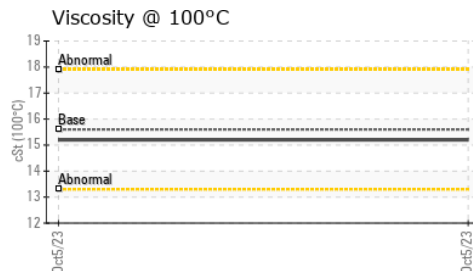
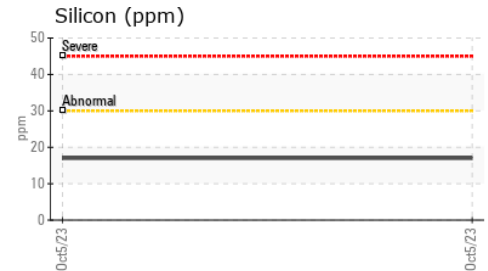
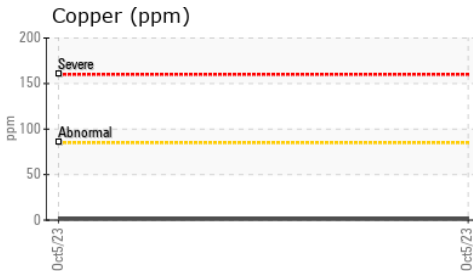
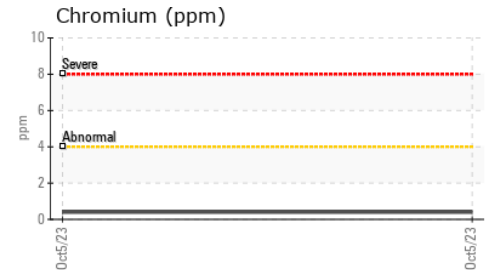
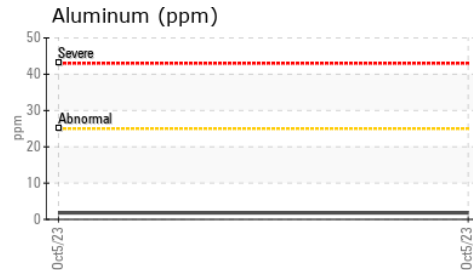
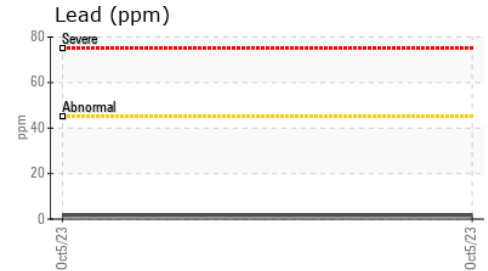
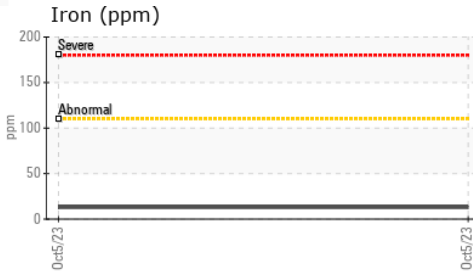


| FLUID DEGRADATION | | method | limit/base | current | history1 | history2 |
|-------------------|----------|-------------|------------|-------------|----------|----------|
| Oxidation | Abs./1mm | ASTM D7414* | >25 | 13.8 | --- | --- |

| 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 @ 40°C | cSt | ASTM D7279(m) | 118.2 | 116 | --- | --- |
| Visc @ 100°C | cSt | ASTM D7279(m) | 15.6 | 15.2 | --- | --- |
| Viscosity Index (VI) | Scale | ASTM D2270* | 139 | 136 | --- | --- |

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0064196
Lab Number : 02600893
Unique Number : 5693978
Test Package : MOB 1 (Additional Tests: KV40, VI)

ROCKY MOUNTAIN MECHANICAL
 1088 MAIN ST
 PINCHER CREEK, AB
 CA T0K 1W0
 Contact: Dan Kufinoff
 parts@rockymm.ca
 T: (403)627-2127
 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.