

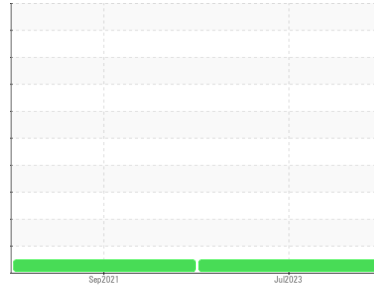
OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id
CASE 9120 9120M
 Component
Rear Diesel Engine
 Fluid
PETRO CANADA DURON UHP 5W40 (27 LTR)



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 BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFORMATION

| method | limit/base | current | history1 | history2 |
|---------------|-------------|--------------------|-------------|----------|
| Sample Number | Client Info | PC0009048 | PC0041350 | --- |
| Sample Date | Client Info | 19 Jul 2023 | 28 Sep 2021 | --- |
| Machine Age | hrs | Client Info | 2152 | 2141 |
| Oil Age | hrs | Client Info | 88 | 77 |
| Oil Changed | Client Info | Not Chngd | Not Chngd | --- |
| Sample Status | | NORMAL | NORMAL | --- |

CONTAMINATION

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

WEAR METALS

| method | limit/base | current | history1 | history2 |
|-----------|------------------------|--------------|----------|----------|
| Iron | ppm ASTM D5185(m) >100 | 12 | 12 | --- |
| Chromium | ppm ASTM D5185(m) >20 | <1 | <1 | --- |
| Nickel | ppm ASTM D5185(m) >4 | 0 | <1 | --- |
| Titanium | ppm ASTM D5185(m) | 0 | 0 | --- |
| Silver | ppm ASTM D5185(m) >3 | 0 | 0 | --- |
| Aluminum | ppm ASTM D5185(m) >20 | 2 | 2 | --- |
| Lead | ppm ASTM D5185(m) >40 | <1 | <1 | --- |
| Copper | ppm ASTM D5185(m) >330 | 2 | 1 | --- |
| Tin | ppm ASTM D5185(m) >15 | <1 | <1 | --- |
| Antimony | ppm ASTM D5185(m) | 0 | <1 | --- |
| Vanadium | ppm ASTM D5185(m) | 0 | 0 | --- |
| Beryllium | ppm ASTM D5185(m) | 0 | 0 | --- |
| Cadmium | ppm ASTM D5185(m) | 0 | 0 | --- |

ADDITIVES

| method | limit/base | current | history1 | history2 |
|------------|------------------------|--------------|----------|----------|
| Boron | ppm ASTM D5185(m) 65 | 38 | 46 | --- |
| Barium | ppm ASTM D5185(m) 0 | 0 | 0 | --- |
| Molybdenum | ppm ASTM D5185(m) 65 | 57 | 63 | --- |
| Manganese | ppm ASTM D5185(m) 0 | <1 | <1 | --- |
| Magnesium | ppm ASTM D5185(m) 1160 | 1091 | 1254 | --- |
| Calcium | ppm ASTM D5185(m) 820 | 902 | 999 | --- |
| Phosphorus | ppm ASTM D5185(m) 1160 | 1058 | 1182 | --- |
| Zinc | ppm ASTM D5185(m) 1260 | 1202 | 1355 | --- |
| Sulfur | ppm ASTM D5185(m) 3000 | 2797 | 3125 | --- |
| Lithium | ppm ASTM D5185(m) | <1 | <1 | --- |

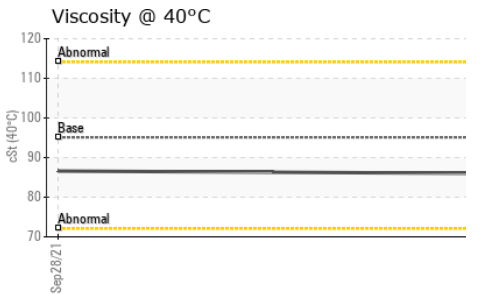
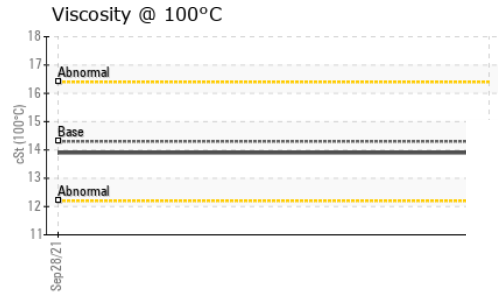
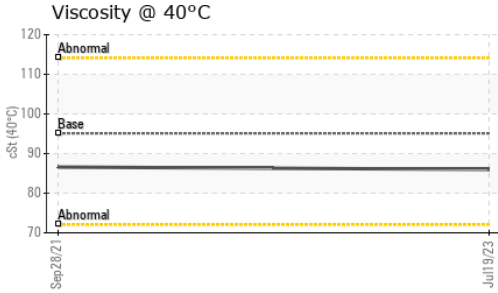
CONTAMINANTS

| method | limit/base | current | history1 | history2 |
|-----------|-----------------------|--------------|----------|----------|
| Silicon | ppm ASTM D5185(m) >25 | 6 | 2 | --- |
| Sodium | ppm ASTM D5185(m) | 5 | 5 | --- |
| Potassium | ppm ASTM D5185(m) >20 | <1 | <1 | --- |

INFRA-RED

| method | limit/base | current | history1 | history2 |
|-----------|--------------------------|-------------|----------|----------|
| Soot % | % ASTM D7844* >3 | 0.7 | 0.6 | --- |
| Nitration | Abs/cm ASTM D7624* >20 | 9.0 | 8.4 | --- |
| Sulfation | Abs/.1mm ASTM D7415* >30 | 21.3 | 22.0 | --- |

OIL ANALYSIS REPORT

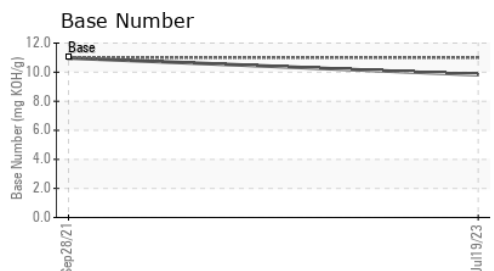
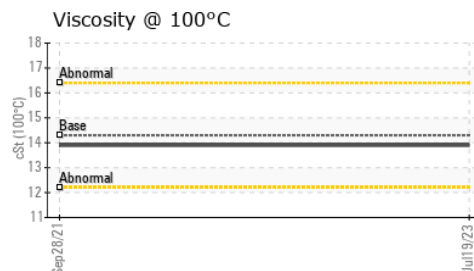
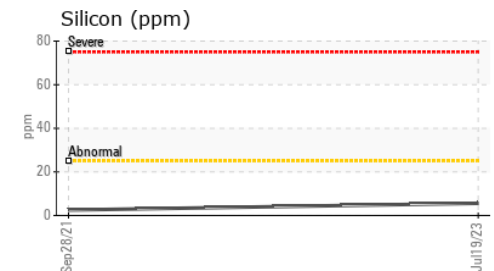
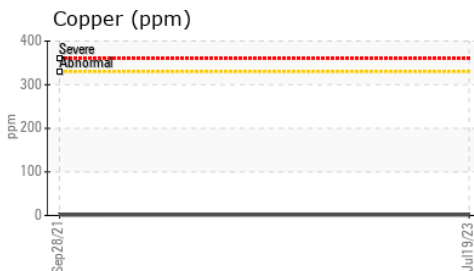
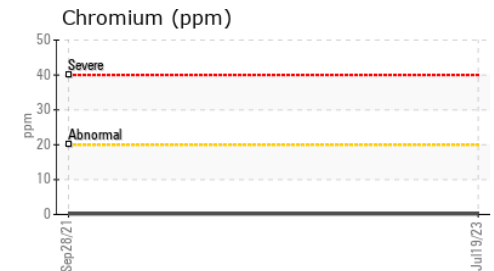
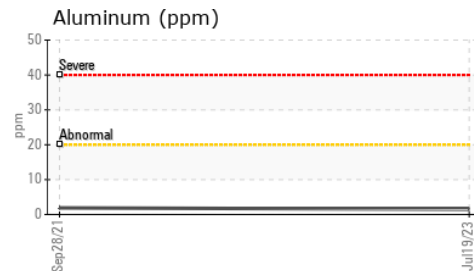
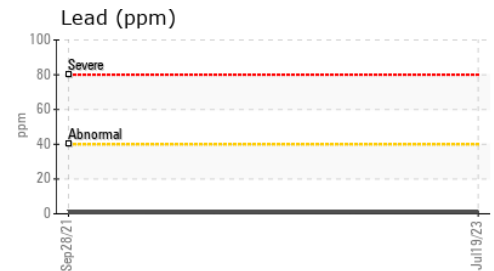
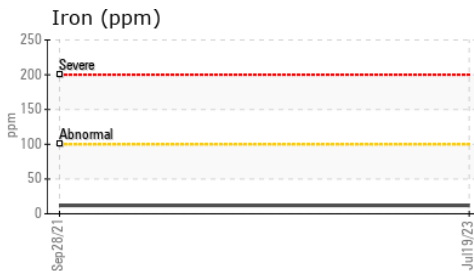


| FLUID DEGRADATION | | method | limit/base | current | history1 | history2 |
|-------------------|----------|-------------|------------|-------------|----------|----------|
| Oxidation | Abs./1mm | ASTM D7414* | >25 | 17.9 | 17.4 | --- |
| Base Number (BN) | mg KOH/g | ASTM D2896* | 11.0 | 9.82 | 10.98 | --- |

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

| FLUID PROPERTIES | | method | limit/base | current | history1 | history2 |
|----------------------|-------|---------------|------------|-------------|----------|----------|
| Visc @ 40°C | cSt | ASTM D7279(m) | 95.1 | 86.0 | 86.6 | --- |
| Visc @ 100°C | cSt | ASTM D7279(m) | 14.3 | 13.9 | 13.9 | --- |
| Viscosity Index (VI) | Scale | ASTM D2270* | 169 | 166 | 165 | --- |

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0009048 **Received** : 25 Jul 2023
Lab Number : **02571831** **Diagnosed** : 25 Jul 2023
Unique Number : 5616882 **Diagnostician** : Wes Davis
Test Package : MOB 2 (Additional Tests: KV40, VI)

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.

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