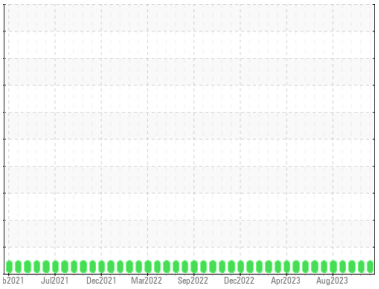
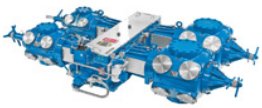
# OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
**K601**
Component
**Reciprocating Compressor**
Fluid
**PETRO CANADA SENTRON LD 3000 (--- LTR)**

## DIAGNOSIS

**Recommendation**
Resample at the next service interval to monitor.

**Wear**
All component wear rates are normal.

**Contamination**
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The water content is negligible. The system and fluid cleanliness is acceptable.

**Fluid Condition**
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

| SAMPLE INFORMATION | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Sample Number | | Client Info | | **PC0085502** | PC0085490 | PC90000842 |
| Sample Date | | Client Info | | **16 Feb 2024** | 17 Jan 2024 | 25 Oct 2023 |
| Machine Age | hrs | Client Info | | **30354** | 29659 | 27671 |
| Oil Age | hrs | Client Info | | **0** | 0 | 1258 |
| Oil Changed | | Client Info | | **Not Changd** | Not Changd | Not Changd |
| Sample Status | | | | **NORMAL** | NORMAL | NORMAL |

| WEAR METALS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Iron | ppm | ASTM D5185(m) | >50 | **<1** | <1 | 0 |
| Chromium | ppm | ASTM D5185(m) | >10 | **0** | 0 | 0 |
| Nickel | ppm | ASTM D5185(m) | | **0** | <1 | 0 |
| Titanium | ppm | ASTM D5185(m) | | **0** | 0 | 0 |
| Silver | ppm | ASTM D5185(m) | | **<1** | 0 | 0 |
| Aluminum | ppm | ASTM D5185(m) | >25 | **1** | 1 | 1 |
| Lead | ppm | ASTM D5185(m) | >25 | **0** | <1 | 0 |
| Copper | ppm | ASTM D5185(m) | >50 | **2** | 1 | 3 |
| Tin | ppm | ASTM D5185(m) | >15 | **<1** | 0 | 0 |
| Antimony | ppm | ASTM D5185(m) | | **0** | 0 | 0 |
| Vanadium | ppm | ASTM D5185(m) | | **0** | 0 | 0 |
| Beryllium | ppm | ASTM D5185(m) | | **0** | 0 | 0 |
| Cadmium | ppm | ASTM D5185(m) | | **0** | 0 | 0 |

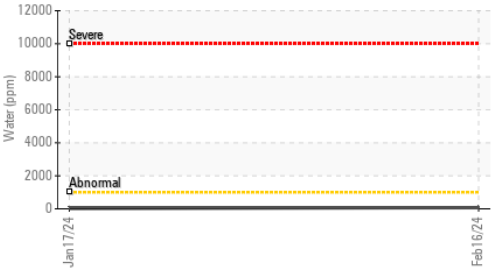
| ADDITIVES | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Boron | ppm | ASTM D5185(m) | 5 | **<1** | 1 | 1 |
| Barium | ppm | ASTM D5185(m) | 1 | **0** | 0 | 0 |
| Molybdenum | ppm | ASTM D5185(m) | 2 | **0** | 0 | 0 |
| Manganese | ppm | ASTM D5185(m) | 1 | **0** | 0 | 0 |
| Magnesium | ppm | ASTM D5185(m) | 5 | **7** | 7 | 6 |
| Calcium | ppm | ASTM D5185(m) | 1220 | **1219** | 1225 | 1168 |
| Phosphorus | ppm | ASTM D5185(m) | 298 | **264** | 266 | 272 |
| Zinc | ppm | ASTM D5185(m) | 350 | **298** | 299 | 305 |
| Sulfur | ppm | ASTM D5185(m) | 1995 | **2077** | 2118 | --- |
| Lithium | ppm | ASTM D5185(m) | | **<1** | <1 | 0 |

| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Silicon | ppm | ASTM D5185(m) | >25 | **1** | 1 | 2 |
| Sodium | ppm | ASTM D5185(m) | | **<1** | <1 | 0 |
| Potassium | ppm | ASTM D5185(m) | >20 | **<1** | <1 | 0 |
| Water | % | ASTM D6304* | >0.1 | **0.007** | 0.003 | --- |
| ppm Water | ppm | ASTM D6304* | >1000 | **71** | 26 | --- |

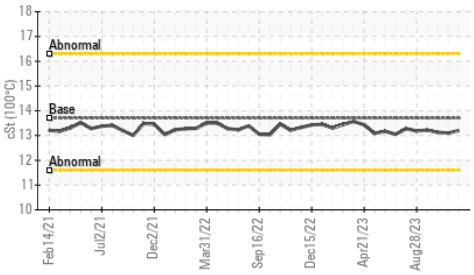
| FLUID CLEANLINESS | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Particles >4µm | | ASTM D7647 | >1300 | **83** | 210 | --- |
| Particles >6µm | | ASTM D7647 | >640 | **33** | 67 | --- |
| Particles >14µm | | ASTM D7647 | >160 | **5** | 7 | --- |
| Particles >21µm | | ASTM D7647 | >40 | **2** | 3 | --- |
| Particles >38µm | | ASTM D7647 | >10 | **2** | 1 | --- |
| Particles >71µm | | ASTM D7647 | >3 | **1** | 1 | --- |
| Oil Cleanliness | | ISO 4406 (c) | >17/16/14 | **14/12/10** | 15/13/10 | --- |

# OIL ANALYSIS REPORT

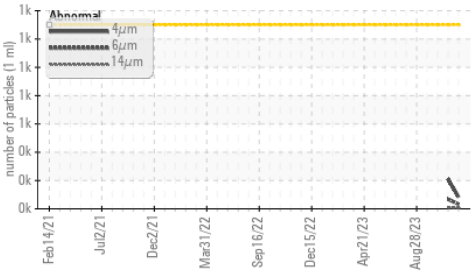
Water (KF)



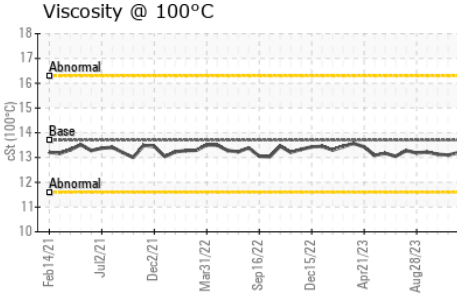

Viscosity @ 100°C



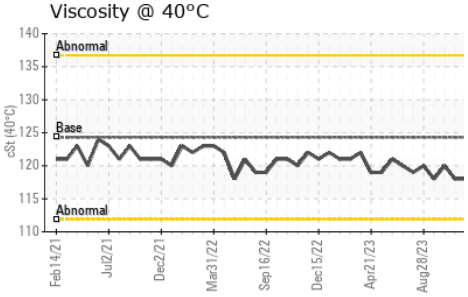

Particle Trend




Viscosity @ 100°C




Viscosity @ 40°C




| FLUID DEGRADATION | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Acid Number (AN) | mg KOH/g | ASTM D974* | 0.86 | **0.49** | 0.23 | --- |

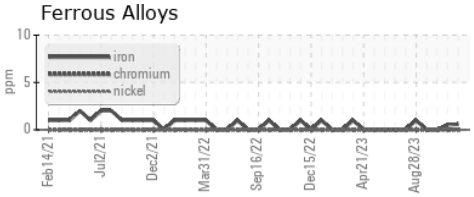
| VISUAL | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| White Metal | scalar | Visual* | NONE | **NONE** | NONE | --- |
| Yellow Metal | scalar | Visual* | NONE | **NONE** | NONE | --- |
| Precipitate | scalar | Visual* | NONE | **NONE** | NONE | --- |
| Silt | scalar | Visual* | NONE | **NONE** | NONE | --- |
| Debris | scalar | Visual* | NONE | **NONE** | NONE | --- |
| Sand/Dirt | scalar | Visual* | NONE | **NONE** | NONE | --- |
| Appearance | scalar | Visual* | NORML | **NORML** | NORML | --- |
| Odor | scalar | Visual* | NORML | **NORML** | NORML | --- |
| Emulsified Water | scalar | Visual* | >0.1 | **NEG** | NEG | --- |
| Free Water | scalar | Visual* | | **NEG** | NEG | --- |

| FLUID PROPERTIES | | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|---|
| Visc @ 40°C | cSt | ASTM D7279(m) | 124.3 | **118** | 118 | 120 |
| Visc @ 100°C | cSt | ASTM D7279(m) | 13.7 | **13.2** | 13.1 | 13.13 |
| Viscosity Index (VI) | Scale | ASTM D2270* | 106 | **106** | 105 | 103 |

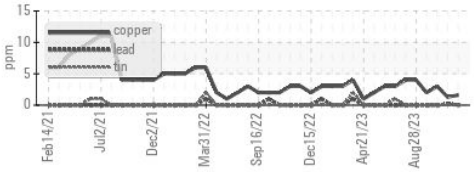
| SAMPLE IMAGES | method | limit/base | current | history1 | history2 |
|---|---|---|---|---|---|
| Color | | | | | *no image* |
| Bottom | | | | | *no image* |

## GRAPHS

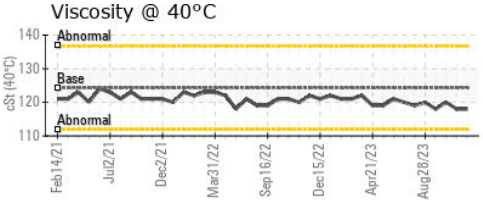
Ferrous Alloys



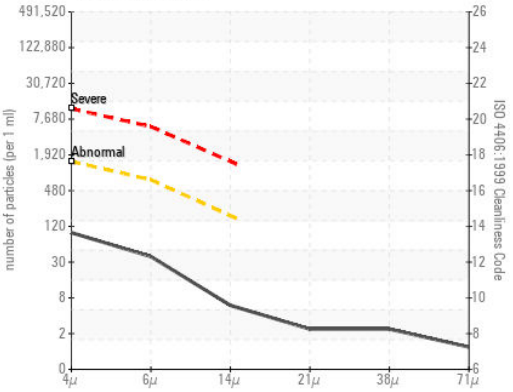

Non-ferrous Metals



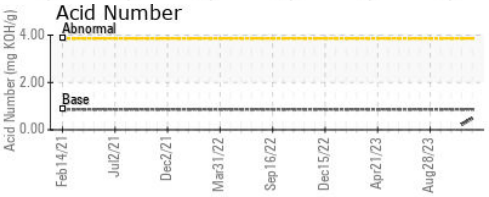

Viscosity @ 40°C




Particle Count




Acid Number




ISO 17025:2017 Accredited Laboratory

**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
**Sample No.** : PC0085502 **Received** : 23 Feb 2024
**Lab Number** : 02617659 **Tested** : 27 Feb 2024
**Unique Number** : 5734769 **Diagnosed** : 27 Feb 2024 - Wes Davis
**Test Package** : PLANT ( Additional Tests: KF, KV100, 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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