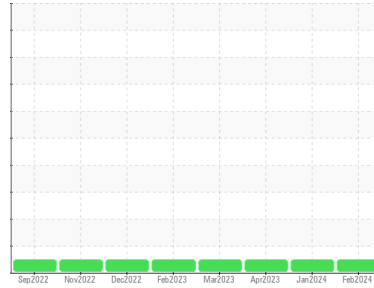


# OIL ANALYSIS REPORT

## Sample Rating Trend



**NORMAL**



Machine Id  
**Liberty 1**

Component  
**Compressor**

Fluid  
**PETRO CANADA SENTRON LD 3000 (--- 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 component.

#### 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 |             |            | <b>PCA0111971</b>  | PCA0103416  | PCA0091281  |
| Sample Date        | Client Info |             |            | <b>02 Feb 2024</b> | 02 Jan 2024 | 03 Apr 2023 |
| Machine Age        | hrs         | Client Info |            | <b>69528</b>       | 69211       | 67974       |
| Oil Age            | hrs         | Client Info |            | <b>29182</b>       | 67974       | 27627       |
| Oil Changed        |             | Client Info |            | <b>N/A</b>         | N/A         | Not Chngd   |
| Sample Status      |             |             |            | <b>NORMAL</b>      | NORMAL      | NORMAL      |

| CONTAMINATION |           | method | limit/base | current    | history1 | history2 |
|---------------|-----------|--------|------------|------------|----------|----------|
| Water         | WC Method |        | >0.1       | <b>NEG</b> | NEG      | NEG      |

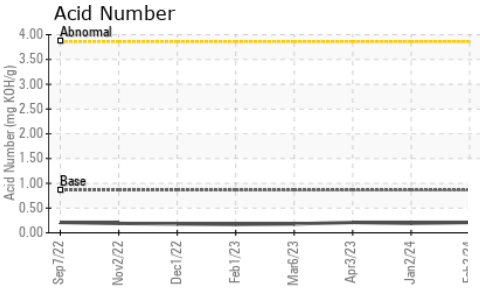
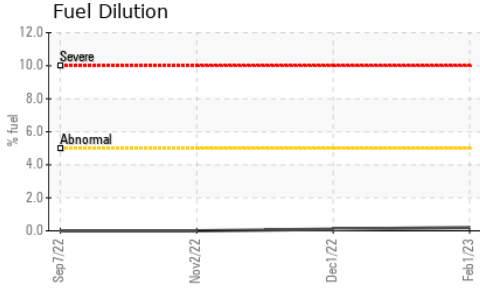
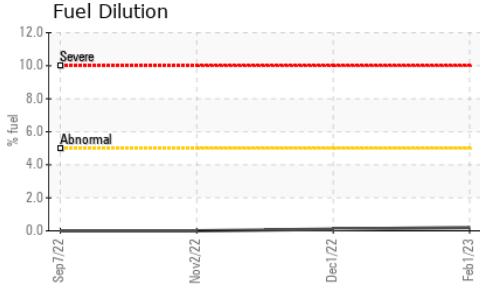
| WEAR METALS |     | method      | limit/base | current      | history1 | history2 |
|-------------|-----|-------------|------------|--------------|----------|----------|
| Iron        | ppm | ASTM D5185m | >50        | <b>0</b>     | <1       | <1       |
| Chromium    | ppm | ASTM D5185m | >10        | <b>0</b>     | 0        | 0        |
| Nickel      | ppm | ASTM D5185m |            | <b>0</b>     | 0        | 0        |
| Titanium    | ppm | ASTM D5185m |            | <b>0</b>     | 0        | 0        |
| Silver      | ppm | ASTM D5185m |            | <b>0</b>     | 0        | 0        |
| Aluminum    | ppm | ASTM D5185m | >25        | <b>0</b>     | 2        | 0        |
| Lead        | ppm | ASTM D5185m | >25        | <b>&lt;1</b> | 0        | 0        |
| Copper      | ppm | ASTM D5185m | >50        | <b>&lt;1</b> | <1       | <1       |
| Tin         | ppm | ASTM D5185m | >15        | <b>&lt;1</b> | <1       | <1       |
| Vanadium    | ppm | ASTM D5185m |            | <b>0</b>     | 0        | 0        |
| Cadmium     | ppm | ASTM D5185m |            | <b>0</b>     | 0        | 0        |

| ADDITIVES  |     | method      | limit/base | current     | history1 | history2 |
|------------|-----|-------------|------------|-------------|----------|----------|
| Boron      | ppm | ASTM D5185m | 5          | <b>0</b>    | 0        | 0        |
| Barium     | ppm | ASTM D5185m | 1          | <b>0</b>    | 0        | 0        |
| Molybdenum | ppm | ASTM D5185m | 2          | <b>0</b>    | 0        | 0        |
| Manganese  | ppm | ASTM D5185m | 1          | <b>0</b>    | 0        | 0        |
| Magnesium  | ppm | ASTM D5185m | 5          | <b>1</b>    | <1       | 0        |
| Calcium    | ppm | ASTM D5185m | 1220       | <b>17</b>   | 6        | 6        |
| Phosphorus | ppm | ASTM D5185m | 298        | <b>8</b>    | 33       | 14       |
| Zinc       | ppm | ASTM D5185m | 350        | <b>2</b>    | 0        | <1       |
| Sulfur     | ppm | ASTM D5185m | 1995       | <b>1372</b> | 1408     | 1437     |

| CONTAMINANTS |     | method      | limit/base | current  | history1 | history2 |
|--------------|-----|-------------|------------|----------|----------|----------|
| Silicon      | ppm | ASTM D5185m | >25        | <b>0</b> | 0        | <1       |
| Sodium       | ppm | ASTM D5185m |            | <b>2</b> | 0        | 0        |
| Potassium    | ppm | ASTM D5185m | >20        | <b>1</b> | <1       | <1       |

| FLUID DEGRADATION |          | method     | limit/base | current     | history1 | history2 |
|-------------------|----------|------------|------------|-------------|----------|----------|
| Acid Number (AN)  | mg KOH/g | ASTM D8045 | 0.86       | <b>0.21</b> | 0.19     | 0.21     |

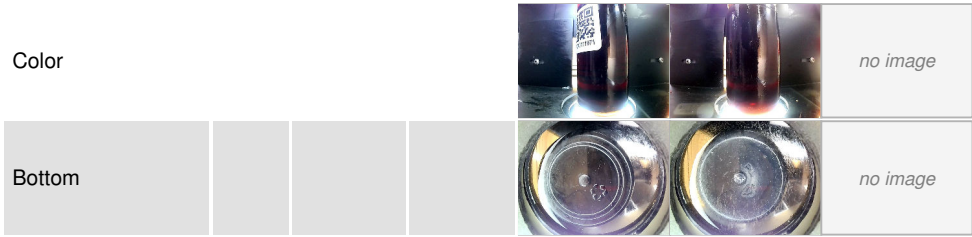
# OIL ANALYSIS REPORT



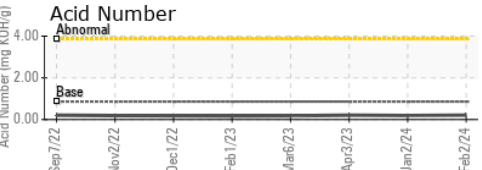
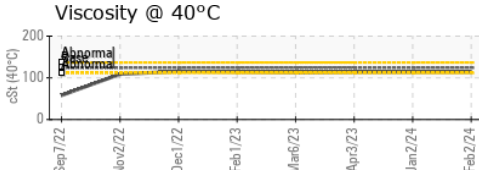
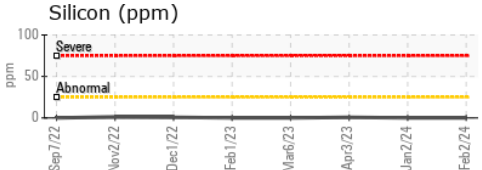
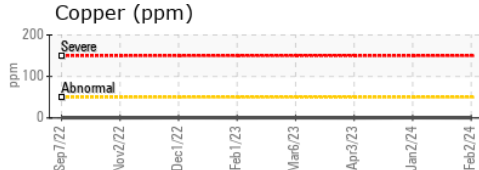
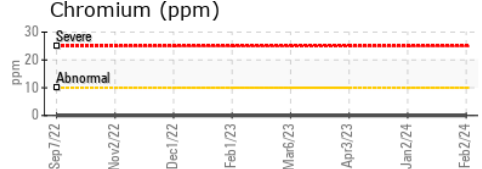
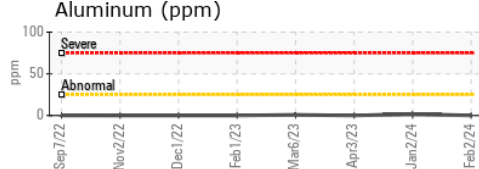
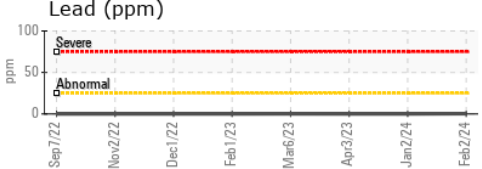
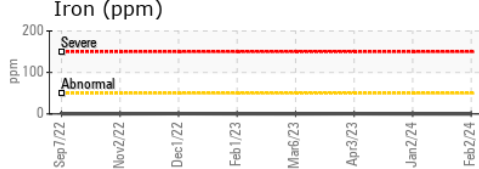
| VISUAL           | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal      | scalar | *Visual    | NONE    | NONE     | NONE     |
| Yellow Metal     | scalar | *Visual    | NONE    | NONE     | NONE     |
| 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 D445  | 124.3   | 114      | 114      |

| SAMPLE IMAGES | method | limit/base | current | history1 | history2 |
|---------------|--------|------------|---------|----------|----------|
|---------------|--------|------------|---------|----------|----------|



## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0111971 **Received** : 16 Feb 2024  
**Lab Number** : 06092400 **Tested** : 20 Feb 2024  
**Unique Number** : 10885253 **Diagnosed** : 20 Feb 2024 - Jonathan Hester  
**Test Package** : MOB 2 ( Additional Tests: FuelDilution )

**ENERVEST OPERATING - LIBERTY**  
 318 SINGLETON ROAD  
 NORA, VA  
 US 24272  
 Contact: Service Manager

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: