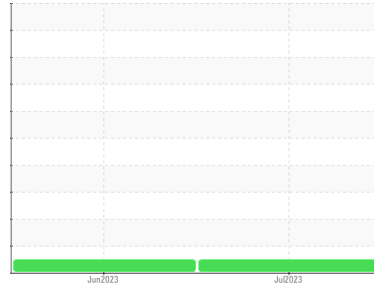


# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**U1-19**

Component  
**Hydraulic System**

Fluid  
**PETRO CANADA PURITY FG HYDRAULIC AW 68 (750 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 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     | <b>PC0062074</b>   | PC0077145   | ---      |
| Sample Date   | Client Info     | <b>11 Jul 2023</b> | 14 Jun 2023 | ---      |
| Machine Age   | hrs Client Info | <b>67837</b>       | 68590       | ---      |
| Oil Age       | hrs Client Info | <b>67837</b>       | 0           | ---      |
| Oil Changed   | Client Info     | <b>N/A</b>         | N/A         | ---      |
| Sample Status |                 | <b>NORMAL</b>      | NORMAL      | ---      |

## WEAR METALS

| method                      | limit/base | current      | history1 | history2 |
|-----------------------------|------------|--------------|----------|----------|
| Iron ppm ASTM D5185(m)      | >20        | <b>0</b>     | 0        | ---      |
| Chromium ppm ASTM D5185(m)  | >20        | <b>0</b>     | 0        | ---      |
| Nickel ppm ASTM D5185(m)    | >20        | <b>&lt;1</b> | <1       | ---      |
| Titanium ppm ASTM D5185(m)  |            | <b>0</b>     | 0        | ---      |
| Silver ppm ASTM D5185(m)    |            | <b>0</b>     | 0        | ---      |
| Aluminum ppm ASTM D5185(m)  | >20        | <b>0</b>     | 0        | ---      |
| Lead ppm ASTM D5185(m)      | >20        | <b>0</b>     | 0        | ---      |
| Copper ppm ASTM D5185(m)    | >20        | <b>&lt;1</b> | 0        | ---      |
| Tin ppm ASTM D5185(m)       | >20        | <b>0</b>     | 0        | ---      |
| Antimony ppm ASTM D5185(m)  |            | <b>0</b>     | 0        | ---      |
| Vanadium ppm ASTM D5185(m)  |            | <b>0</b>     | 0        | ---      |
| Beryllium ppm ASTM D5185(m) |            | <b>0</b>     | 0        | ---      |
| Cadmium ppm ASTM D5185(m)   |            | <b>0</b>     | 0        | ---      |

## ADDITIVES

| method                       | limit/base | current      | history1 | history2 |
|------------------------------|------------|--------------|----------|----------|
| Boron ppm ASTM D5185(m)      |            | <b>&lt;1</b> | <1       | ---      |
| Barium ppm ASTM D5185(m)     |            | <b>0</b>     | 0        | ---      |
| Molybdenum ppm ASTM D5185(m) |            | <b>0</b>     | 0        | ---      |
| Manganese ppm ASTM D5185(m)  |            | <b>0</b>     | 0        | ---      |
| Magnesium ppm ASTM D5185(m)  |            | <b>&lt;1</b> | 0        | ---      |
| Calcium ppm ASTM D5185(m)    |            | <b>&lt;1</b> | 0        | ---      |
| Phosphorus ppm ASTM D5185(m) |            | <b>420</b>   | 433      | ---      |
| Zinc ppm ASTM D5185(m)       |            | <b>1</b>     | <1       | ---      |
| Sulfur ppm ASTM D5185(m)     |            | <b>444</b>   | 469      | ---      |
| Lithium ppm ASTM D5185(m)    |            | <b>&lt;1</b> | <1       | ---      |

## CONTAMINANTS

| method                      | limit/base | current      | history1 | history2 |
|-----------------------------|------------|--------------|----------|----------|
| Silicon ppm ASTM D5185(m)   | >15        | <b>&lt;1</b> | <1       | ---      |
| Sodium ppm ASTM D5185(m)    |            | <b>0</b>     | 0        | ---      |
| Potassium ppm ASTM D5185(m) | >20        | <b>&lt;1</b> | <1       | ---      |

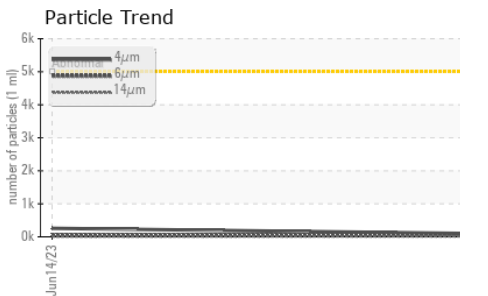
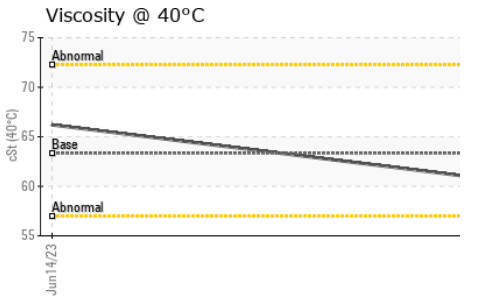
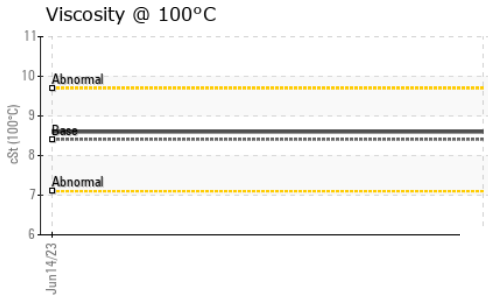
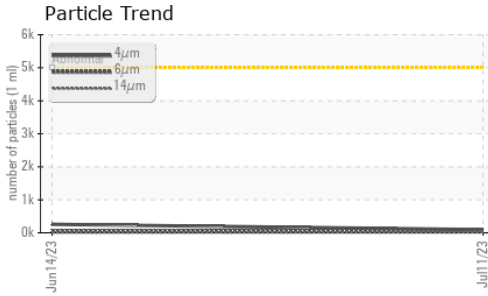
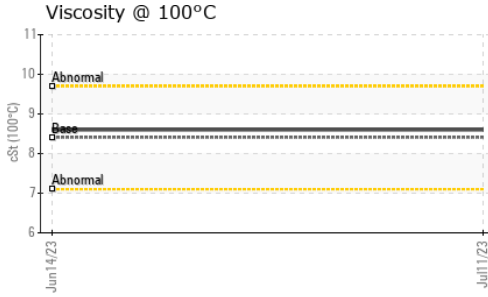
## FLUID CLEANLINESS

| method                       | limit/base | current         | history1 | history2 |
|------------------------------|------------|-----------------|----------|----------|
| Particles >4µm ASTM D7647    | >5000      | <b>96</b>       | 258      | ---      |
| Particles >6µm ASTM D7647    | >1300      | <b>55</b>       | 53       | ---      |
| Particles >14µm ASTM D7647   | >160       | <b>12</b>       | 5        | ---      |
| Particles >21µm ASTM D7647   | >40        | <b>3</b>        | 2        | ---      |
| Particles >38µm ASTM D7647   | >10        | <b>0</b>        | 0        | ---      |
| Particles >71µm ASTM D7647   | >3         | <b>0</b>        | 0        | ---      |
| Oil Cleanliness ISO 4406 (c) | >19/17/14  | <b>14/13/11</b> | 15/13/10 | ---      |

## FLUID DEGRADATION

| method                               | limit/base | current     | history1 | history2 |
|--------------------------------------|------------|-------------|----------|----------|
| Acid Number (AN) mg KOH/g ASTM D974* | 0.26       | <b>0.16</b> | 0.22     | ---      |

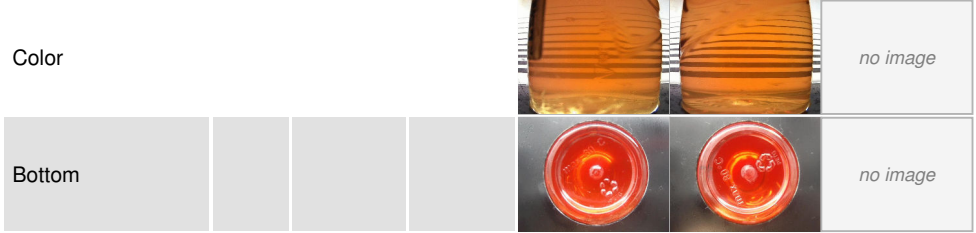
# OIL ANALYSIS REPORT



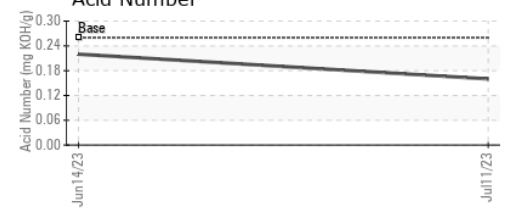
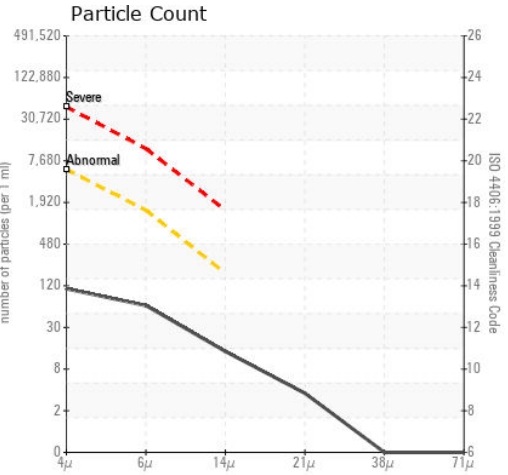
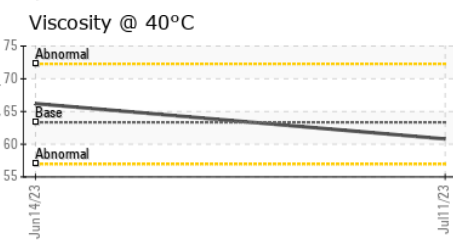
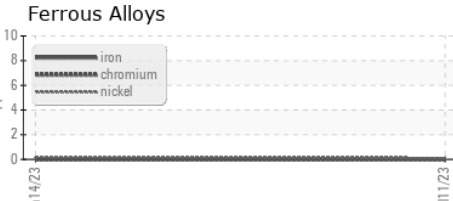
| VISUAL           | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal      | scalar | Visual*    | NONE    | NONE     | ---      |
| Yellow Metal     | scalar | Visual*    | NONE    | NONE     | ---      |
| 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*    | >0.05   | NEG      | ---      |
| Free Water       | scalar | Visual*    |         | NEG      | ---      |

| FLUID PROPERTIES     | method | limit/base    | current | history1 | history2 |
|----------------------|--------|---------------|---------|----------|----------|
| Visc @ 40°C          | cSt    | ASTM D7279(m) | 63.34   | 60.8     | 66.2     |
| Visc @ 100°C         | cSt    | ASTM D7279(m) | 8.409   | 8.6      | 8.6      |
| Viscosity Index (VI) | Scale  | ASTM D2270*   | 102     | 114      | 100      |

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



## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : PC0062074 **Received** : 12 Jul 2023  
**Lab Number** : 02569389 **Diagnosed** : 13 Jul 2023  
**Unique Number** : 5606435 **Diagnostician** : Wes Davis  
**Test Package** : IND 2 ( Additional Tests: KV100, VI )

**North America IML Container**  
 2625, Route 344  
 St. Placide, QC  
 CA J0V 2B0  
 Contact: Sebastien Brisson  
 sbrisson@iml.ca  
 T: (450)258-2262  
 F: (450)258-3345

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.