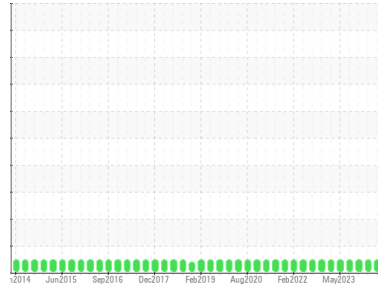


# OIL ANALYSIS REPORT

Area  
**TEAM 3**  
Machine Id  
**166119**  
Component  
**Hydraulic System**  
Fluid  
**PETRO CANADA HYDREX AW 46 (10 GAL)**

Sample Rating Trend



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

## SAMPLE INFORMATION

| method        | limit/base       | current            | history1    | history2    |
|---------------|------------------|--------------------|-------------|-------------|
| Sample Number | Client Info      | <b>PC0078783</b>   | PC0076964   | PC0069849   |
| Sample Date   | Client Info      | <b>28 May 2024</b> | 14 Jan 2024 | 20 Oct 2023 |
| Machine Age   | mths Client Info | <b>0</b>           | 0           | 0           |
| Oil Age       | mths Client Info | <b>0</b>           | 0           | 0           |
| Oil Changed   | Client Info      | <b>N/A</b>         | N/A         | N/A         |
| Sample Status |                  | <b>NORMAL</b>      | NORMAL      | NORMAL      |

## CONTAMINATION

| method | limit/base      | current    | history1 | history2 |
|--------|-----------------|------------|----------|----------|
| Water  | WC Method >0.05 | <b>NEG</b> | NEG      | NEG      |

## WEAR METALS

| method    | limit/base            | current      | history1 | history2 |
|-----------|-----------------------|--------------|----------|----------|
| Iron      | ppm ASTM D5185(m) >20 | <b>0</b>     | <1       | <1       |
| Chromium  | ppm ASTM D5185(m) >20 | <b>0</b>     | 0        | 0        |
| Nickel    | ppm ASTM D5185(m) >20 | <b>0</b>     | <1       | 0        |
| Titanium  | ppm ASTM D5185(m)     | <b>0</b>     | 0        | 0        |
| Silver    | ppm ASTM D5185(m)     | <b>&lt;1</b> | 0        | <1       |
| Aluminum  | ppm ASTM D5185(m) >20 | <b>0</b>     | <1       | 0        |
| Lead      | ppm ASTM D5185(m) >20 | <b>0</b>     | 0        | <1       |
| Copper    | ppm ASTM D5185(m) >20 | <b>&lt;1</b> | 2        | 3        |
| Tin       | ppm ASTM D5185(m) >20 | <b>0</b>     | 0        | 0        |
| Antimony  | ppm ASTM D5185(m)     | <b>0</b>     | 0        | 0        |
| Vanadium  | ppm ASTM D5185(m)     | <b>0</b>     | 0        | 0        |
| Beryllium | ppm ASTM D5185(m)     | <b>0</b>     | 0        | 0        |
| Cadmium   | ppm ASTM D5185(m)     | <b>0</b>     | 0        | 0        |

## ADDITIVES

| method     | limit/base            | current      | history1 | history2 |
|------------|-----------------------|--------------|----------|----------|
| Boron      | ppm ASTM D5185(m) 0   | <b>0</b>     | 0        | <1       |
| Barium     | ppm ASTM D5185(m) 0   | <b>0</b>     | 0        | <1       |
| Molybdenum | ppm ASTM D5185(m) 0   | <b>0</b>     | 0        | 0        |
| Manganese  | ppm ASTM D5185(m) 0   | <b>0</b>     | 0        | 0        |
| Magnesium  | ppm ASTM D5185(m) 0   | <b>0</b>     | <1       | <1       |
| Calcium    | ppm ASTM D5185(m) 50  | <b>50</b>    | 36       | 36       |
| Phosphorus | ppm ASTM D5185(m) 330 | <b>337</b>   | 317      | 320      |
| Zinc       | ppm ASTM D5185(m) 430 | <b>430</b>   | 381      | 388      |
| Sulfur     | ppm ASTM D5185(m) 760 | <b>784</b>   | 1059     | 1026     |
| Lithium    | ppm ASTM D5185(m)     | <b>&lt;1</b> | <1       | <1       |

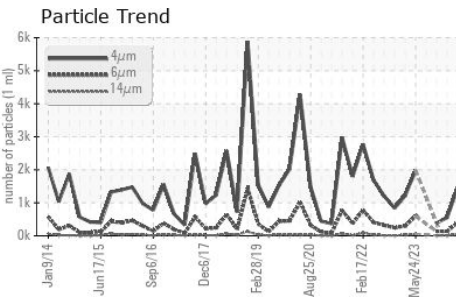
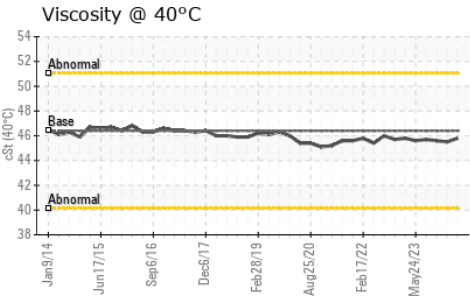
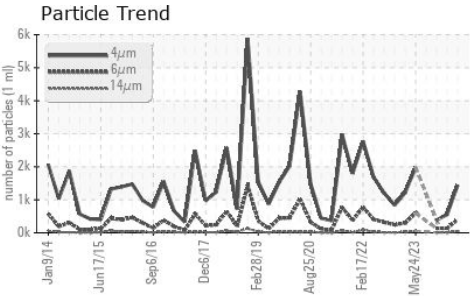
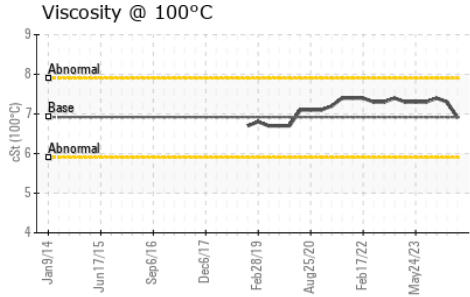
## CONTAMINANTS

| method    | limit/base            | current      | history1 | history2 |
|-----------|-----------------------|--------------|----------|----------|
| Silicon   | ppm ASTM D5185(m) >15 | <b>0</b>     | 0        | 0        |
| Sodium    | ppm ASTM D5185(m)     | <b>&lt;1</b> | 2        | 3        |
| Potassium | ppm ASTM D5185(m) >20 | <b>0</b>     | <1       | 0        |

## FLUID CLEANLINESS

| method          | limit/base             | current         | history1 | history2 |
|-----------------|------------------------|-----------------|----------|----------|
| Particles >4µm  | ASTM D7647             | <b>1439</b>     | 555      | 386      |
| Particles >6µm  | ASTM D7647 >1300       | <b>402</b>      | 136      | 133      |
| Particles >14µm | ASTM D7647 >160        | <b>47</b>       | 12       | 10       |
| Particles >21µm | ASTM D7647 >40         | <b>15</b>       | 5        | 3        |
| Particles >38µm | ASTM D7647 >10         | <b>1</b>        | 1        | 0        |
| Particles >71µm | ASTM D7647 >3          | <b>0</b>        | 0        | 0        |
| Oil Cleanliness | ISO 4406 (c) >--/17/14 | <b>18/16/13</b> | 16/14/11 | 16/14/10 |

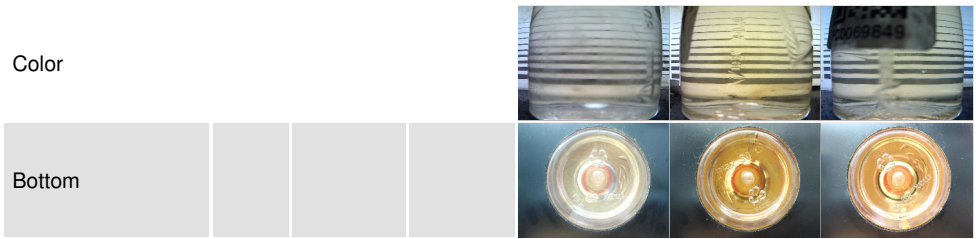
# OIL ANALYSIS REPORT



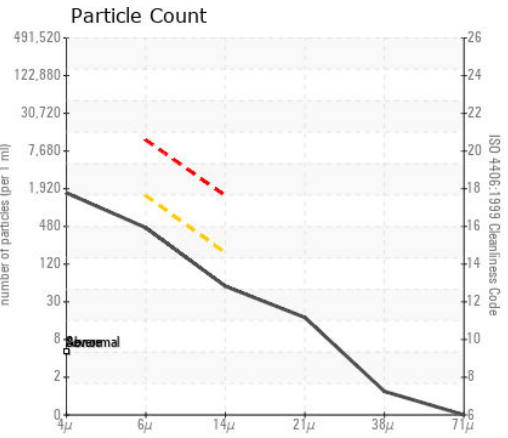
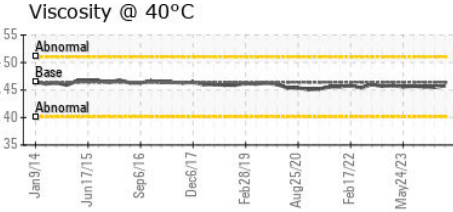
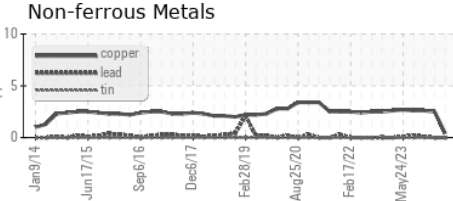
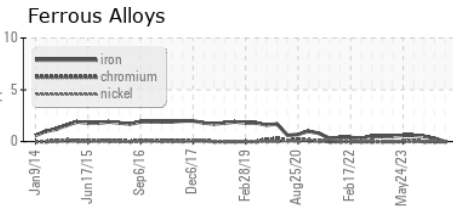
| VISUAL           | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal      | scalar | Visual*    | NONE    | NONE     | NONE     |
| Yellow Metal     | scalar | Visual*    | NONE    | NONE     | NONE     |
|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

| FLUID PROPERTIES     | method | limit/base    | current | history1 | history2 |
|----------------------|--------|---------------|---------|----------|----------|
| Visc @ 40°C          | cSt    | ASTM D7279(m) | 46.4    | 45.8     | 45.5     |
| Visc @ 100°C         | cSt    | ASTM D7279(m) | 6.92    | 6.9      | 7.3      |
| Viscosity Index (VI) | Scale  | ASTM D2270*   | 104     | 106      | 122      |

## SAMPLE IMAGES



## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : PC0078783 **Received** : 07 Jun 2024  
**Lab Number** : 02640511 **Tested** : 07 Jun 2024  
**Unique Number** : 5789673 **Diagnosed** : 07 Jun 2024 - Wes Davis  
**Test Package** : MOB 2 ( Additional Tests: KV100, VI )

**Dryden Fibre**  
 Box 3001, 1 Duke Street  
 Dryden, ON  
 CA P8N 2Z7  
 Contact: Adebukola Adekanye  
 aadekanye@drydenfibre.ca  
 T: (807)223-9950  
 F: (807)223-9176

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.