



Machine Id  
**ACCUPRESS 11840**

Component  
**Brake**

Fluid  
**PETRO CANADA HYDREX AW 46 (410 LTR)**



## DIAGNOSIS

### Recommendation

The filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

There is a light amount of silt (particulates < 14 microns in size) present in the fluid.

### Fluid Condition

The AN level is acceptable for this fluid. The condition of the fluid is suitable for further service.

## SAMPLE INFORMATION

|               | method      | limit/base  | current            | history1 | history2 |
|---------------|-------------|-------------|--------------------|----------|----------|
| Sample Number | Client Info |             | <b>PC0087506</b>   | ---      | ---      |
| Sample Date   | Client Info |             | <b>26 Jun 2024</b> | ---      | ---      |
| Machine Age   | hrs         | Client Info | <b>16380</b>       | ---      | ---      |
| Oil Age       | hrs         | Client Info | <b>0</b>           | ---      | ---      |
| Oil Changed   | Client Info |             | <b>Changed</b>     | ---      | ---      |
| Sample Status |             |             | <b>ATTENTION</b>   | ---      | ---      |

## CONTAMINATION

|       | method    | limit/base | current    | history1 | history2 |
|-------|-----------|------------|------------|----------|----------|
| Water | WC Method | >0.2       | <b>NEG</b> | ---      | ---      |

## WEAR METALS

|           | method | limit/base         | current      | history1 | history2 |
|-----------|--------|--------------------|--------------|----------|----------|
| Iron      | ppm    | ASTM D5185(m) >350 | <b>&lt;1</b> | ---      | ---      |
| Chromium  | ppm    | ASTM D5185(m) >5   | <b>0</b>     | ---      | ---      |
| Nickel    | ppm    | ASTM D5185(m) >5   | <b>&lt;1</b> | ---      | ---      |
| Titanium  | ppm    | ASTM D5185(m)      | <b>0</b>     | ---      | ---      |
| Silver    | ppm    | ASTM D5185(m)      | <b>&lt;1</b> | ---      | ---      |
| Aluminum  | ppm    | ASTM D5185(m) >8   | <b>&lt;1</b> | ---      | ---      |
| Lead      | ppm    | ASTM D5185(m) >10  | <b>0</b>     | ---      | ---      |
| Copper    | ppm    | ASTM D5185(m) >150 | <b>9</b>     | ---      | ---      |
| Tin       | ppm    | ASTM D5185(m) >5   | <b>0</b>     | ---      | ---      |
| Antimony  | ppm    | ASTM D5185(m) >5   | <b>0</b>     | ---      | ---      |
| Vanadium  | ppm    | ASTM D5185(m)      | <b>0</b>     | ---      | ---      |
| Beryllium | ppm    | ASTM D5185(m)      | <b>0</b>     | ---      | ---      |
| Cadmium   | ppm    | ASTM D5185(m)      | <b>0</b>     | ---      | ---      |

## ADDITIVES

|            | method | limit/base        | current      | history1 | history2 |
|------------|--------|-------------------|--------------|----------|----------|
| Boron      | ppm    | ASTM D5185(m) 0   | <b>&lt;1</b> | ---      | ---      |
| Barium     | ppm    | ASTM D5185(m) 0   | <b>&lt;1</b> | ---      | ---      |
| Molybdenum | ppm    | ASTM D5185(m) 0   | <b>0</b>     | ---      | ---      |
| Manganese  | ppm    | ASTM D5185(m) 0   | <b>0</b>     | ---      | ---      |
| Magnesium  | ppm    | ASTM D5185(m) 0   | <b>&lt;1</b> | ---      | ---      |
| Calcium    | ppm    | ASTM D5185(m) 50  | <b>45</b>    | ---      | ---      |
| Phosphorus | ppm    | ASTM D5185(m) 330 | <b>318</b>   | ---      | ---      |
| Zinc       | ppm    | ASTM D5185(m) 430 | <b>389</b>   | ---      | ---      |
| Sulfur     | ppm    | ASTM D5185(m) 760 | <b>766</b>   | ---      | ---      |
| Lithium    | ppm    | ASTM D5185(m)     | <b>&lt;1</b> | ---      | ---      |

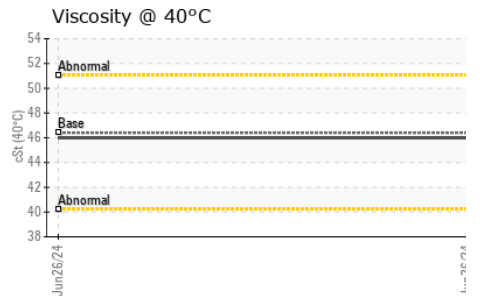
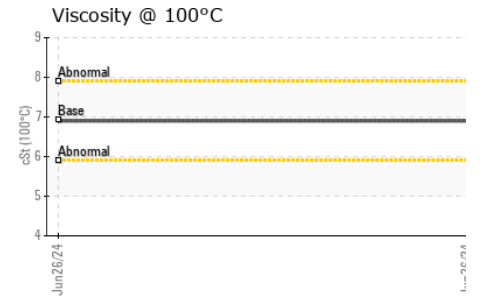
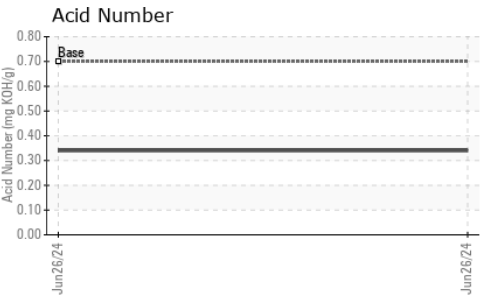
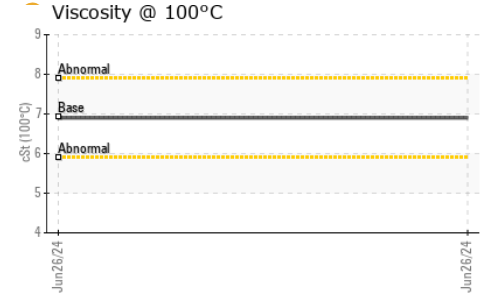
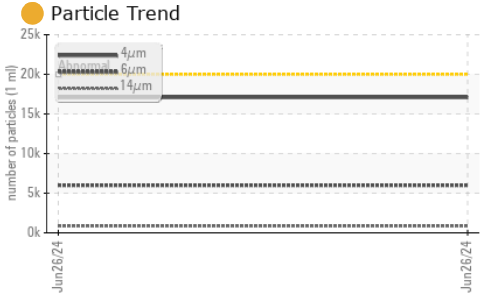
## CONTAMINANTS

|           | method | limit/base         | current  | history1 | history2 |
|-----------|--------|--------------------|----------|----------|----------|
| Silicon   | ppm    | ASTM D5185(m) >400 | <b>6</b> | ---      | ---      |
| Sodium    | ppm    | ASTM D5185(m)      | <b>0</b> | ---      | ---      |
| Potassium | ppm    | ASTM D5185(m) >20  | <b>0</b> | ---      | ---      |

## FLUID CLEANLINESS

|                 | method       | limit/base | current         | history1 | history2 |
|-----------------|--------------|------------|-----------------|----------|----------|
| Particles >4µm  | ASTM D7647   | >20000     | <b>17090</b>    | ---      | ---      |
| Particles >6µm  | ASTM D7647   | >5000      | <b>5998</b>     | ---      | ---      |
| Particles >14µm | ASTM D7647   | >640       | <b>844</b>      | ---      | ---      |
| Particles >21µm | ASTM D7647   | >160       | <b>311</b>      | ---      | ---      |
| Particles >38µm | ASTM D7647   | >40        | <b>51</b>       | ---      | ---      |
| Particles >71µm | ASTM D7647   | >10        | <b>8</b>        | ---      | ---      |
| Oil Cleanliness | ISO 4406 (c) | >21/19/16  | <b>21/20/17</b> | ---      | ---      |

# OIL ANALYSIS REPORT



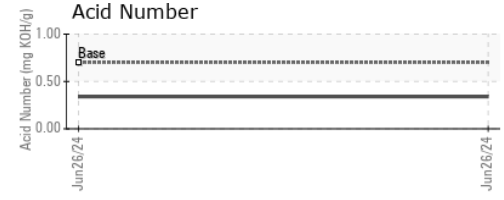
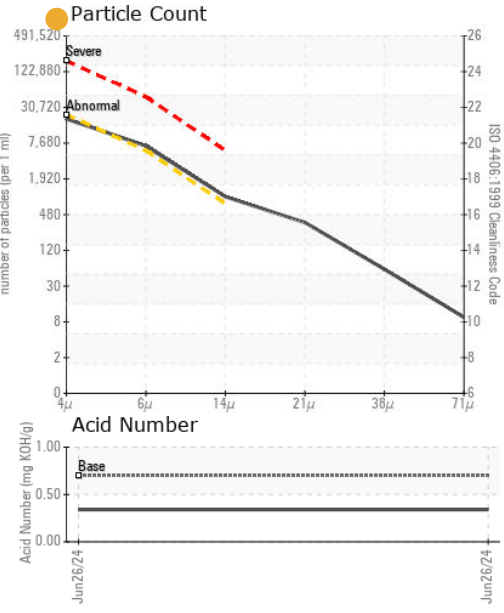
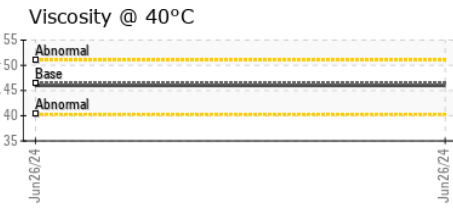
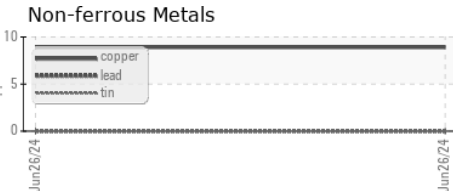
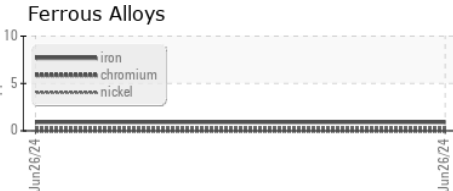
| FLUID DEGRADATION |          | method     | limit/base | current     | history1 | history2 |
|-------------------|----------|------------|------------|-------------|----------|----------|
| Acid Number (AN)  | mg KOH/g | ASTM D974* | 0.70       | <b>0.34</b> | ---      | ---      |

| VISUAL           |        | method  | limit/base | current      | history1 | history2 |
|------------------|--------|---------|------------|--------------|----------|----------|
| White Metal      | scalar | Visual* | NONE       | <b>VLITE</b> | ---      | ---      |
| Yellow Metal     | scalar | Visual* | NONE       | <b>NONE</b>  | ---      | ---      |
| Precipitate      | scalar | Visual* | NONE       | <b>NONE</b>  | ---      | ---      |
| Silt             | scalar | Visual* | NONE       | <b>VLITE</b> | ---      | ---      |
| Debris           | scalar | Visual* | NONE       | <b>NONE</b>  | ---      | ---      |
| Sand/Dirt        | scalar | Visual* | NONE       | <b>NONE</b>  | ---      | ---      |
| Appearance       | scalar | Visual* | NORML      | <b>NORML</b> | ---      | ---      |
| Odor             | scalar | Visual* | NORML      | <b>NORML</b> | ---      | ---      |
| Emulsified Water | scalar | Visual* | >0.2       | <b>NEG</b>   | ---      | ---      |
| Free Water       | scalar | Visual* |            | <b>NEG</b>   | ---      | ---      |

| FLUID PROPERTIES     |       | method        | limit/base | current     | history1 | history2 |
|----------------------|-------|---------------|------------|-------------|----------|----------|
| Visc @ 40°C          | cSt   | ASTM D7279(m) | 46.4       | <b>46.0</b> | ---      | ---      |
| Visc @ 100°C         | cSt   | ASTM D7279(m) | 6.92       | <b>6.9</b>  | ---      | ---      |
| Viscosity Index (VI) | Scale | ASTM D2270*   | 104        | <b>105</b>  | ---      | ---      |

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

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : PC0087506 **Received** : 02 Jul 2024  
**Lab Number** : **02644982** **Tested** : 04 Jul 2024  
**Unique Number** : 5802521 **Diagnosed** : 04 Jul 2024 - Kevin Marson  
**Test Package** : IND 2 ( Additional Tests: 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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