



|                 |                 |
|-----------------|-----------------|
| WEAR            | <b>ABNORMAL</b> |
| CONTAMINATION   | <b>NORMAL</b>   |
| FLUID CONDITION | <b>NORMAL</b>   |

Machine Id  
**421047**  
Component  
**Hydraulic System**  
Fluid  
**PETRO CANADA HYDREX MV 32 (--- GAL)**

**RECOMMENDATION**

We recommend an early resample to monitor this condition. Please contact your representative for information regarding the proper sampling kits for your service. NOTE: We recommend using MOB 2 test kits, this testkit includes Particle Count to determine the ISO cleanliness of the fluid.

**WEAR**

Iron ppm levels are abnormal. The low ferrous density (PQ) index indicates the wear metal levels are due to corrosion.

**CONTAMINATION**

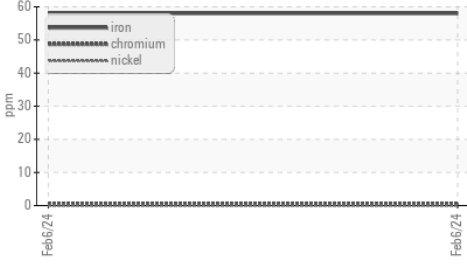
There is no indication of any contamination in the component(unconfirmed).

**FLUID CONDITION**

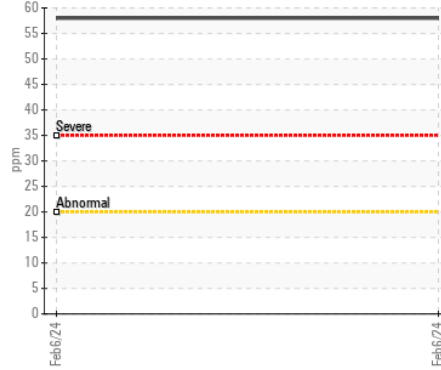
The oil is no longer serviceable as a result of the abnormal and/or severe wear.

| Test             | UOM    | Method        | Limit/Abn | Current            | History1 | History2 |
|------------------|--------|---------------|-----------|--------------------|----------|----------|
| Sample Number    |        | Client Info   |           | <b>GFL0089853</b>  | ---      | ---      |
| Sample Date      |        | Client Info   |           | <b>06 Feb 2024</b> | ---      | ---      |
| Machine Age      | hrs    | Client Info   |           | <b>5574</b>        | ---      | ---      |
| Oil Age          | hrs    | Client Info   |           | <b>5574</b>        | ---      | ---      |
| Filter Age       | hrs    | Client Info   |           | <b>5574</b>        | ---      | ---      |
| Oil Changed      |        | Client Info   |           | <b>Not Changd</b>  | ---      | ---      |
| Filter Changed   |        | Client Info   |           | <b>Not Changd</b>  | ---      | ---      |
| Sample Status    |        |               |           | <b>ABNORMAL</b>    | ---      | ---      |
| PQ               |        | ASTM D8184*   |           | <b>10</b>          | ---      | ---      |
| Iron             | ppm    | ASTM D5185(m) | >20       | <b>58</b>          | ---      | ---      |
| Chromium         | ppm    | ASTM D5185(m) | >10       | <b>&lt;1</b>       | ---      | ---      |
| Nickel           | ppm    | ASTM D5185(m) | >10       | <b>0</b>           | ---      | ---      |
| Titanium         | ppm    | ASTM D5185(m) |           | <b>0</b>           | ---      | ---      |
| Silver           | ppm    | ASTM D5185(m) |           | <b>0</b>           | ---      | ---      |
| Aluminum         | ppm    | ASTM D5185(m) | >10       | <b>6</b>           | ---      | ---      |
| Lead             | ppm    | ASTM D5185(m) | >10       | <b>&lt;1</b>       | ---      | ---      |
| Copper           | ppm    | ASTM D5185(m) | >75       | <b>1</b>           | ---      | ---      |
| Tin              | ppm    | ASTM D5185(m) | >10       | <b>0</b>           | ---      | ---      |
| Vanadium         | ppm    | ASTM D5185(m) |           | <b>0</b>           | ---      | ---      |
| White Metal      | scalar | Visual*       | NONE      | <b>NONE</b>        | ---      | ---      |
| Yellow Metal     | scalar | Visual*       | NONE      | <b>NONE</b>        | ---      | ---      |
| Silicon          | ppm    | ASTM D5185(m) | >20       | <b>12</b>          | ---      | ---      |
| Potassium        | ppm    | ASTM D5185(m) | >20       | <b>2</b>           | ---      | ---      |
| Water            |        | WC Method     | >0.1      | <b>NEG</b>         | ---      | ---      |
| Silt             | scalar | Visual*       | NONE      | <b>NONE</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*       | >0.1      | <b>NEG</b>         | ---      | ---      |
| Sodium           | ppm    | ASTM D5185(m) |           | <b>5</b>           | ---      | ---      |
| Boron            | ppm    | ASTM D5185(m) | 0         | <b>0</b>           | ---      | ---      |
| Barium           | ppm    | ASTM D5185(m) | 0         | <b>0</b>           | ---      | ---      |
| Molybdenum       | ppm    | ASTM D5185(m) | 0         | <b>0</b>           | ---      | ---      |
| Manganese        | ppm    | ASTM D5185(m) | 1         | <b>0</b>           | ---      | ---      |
| Magnesium        | ppm    | ASTM D5185(m) | 0         | <b>3</b>           | ---      | ---      |
| Calcium          | ppm    | ASTM D5185(m) | 50        | <b>55</b>          | ---      | ---      |
| Phosphorus       | ppm    | ASTM D5185(m) | 330       | <b>337</b>         | ---      | ---      |
| Zinc             | ppm    | ASTM D5185(m) | 430       | <b>413</b>         | ---      | ---      |
| Sulfur           | ppm    | ASTM D5185(m) | 760       | <b>844</b>         | ---      | ---      |
| Visc @ 40°C      | cSt    | ASTM D7279(m) | 31.9      | <b>35.0</b>        | ---      | ---      |

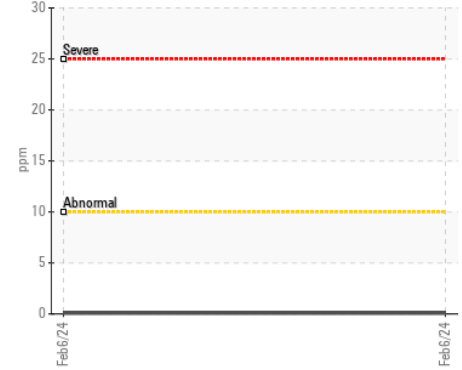
▲ Ferrous Alloys



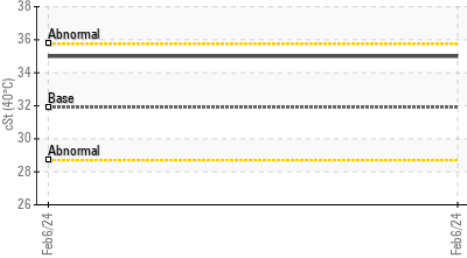
▲ Iron (ppm)



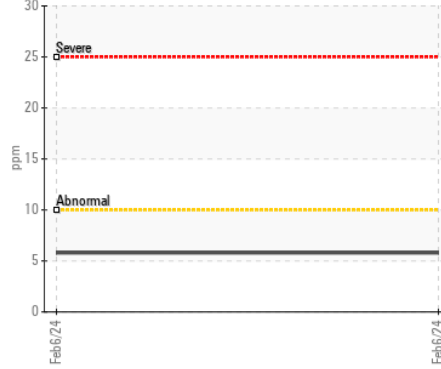
Lead (ppm)



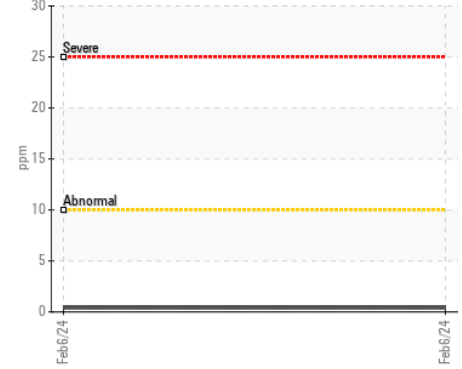
Viscosity @ 40°C



Aluminum (ppm)



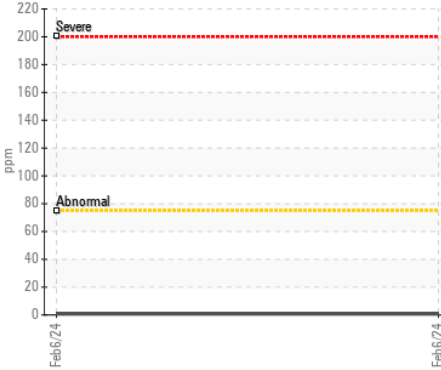
Chromium (ppm)



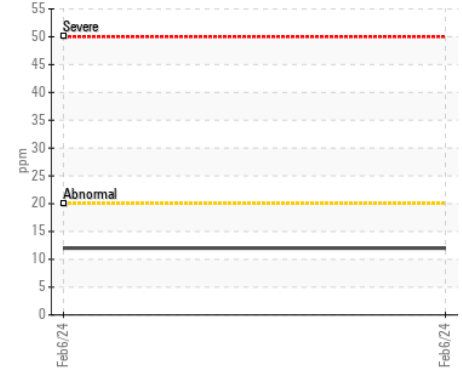
PQ



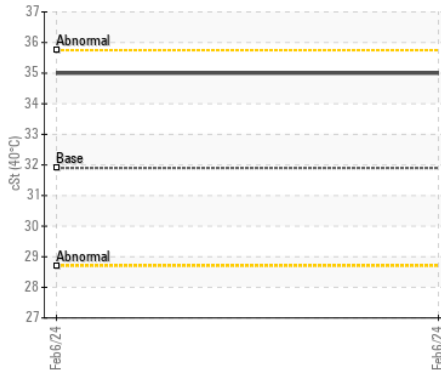
Copper (ppm)



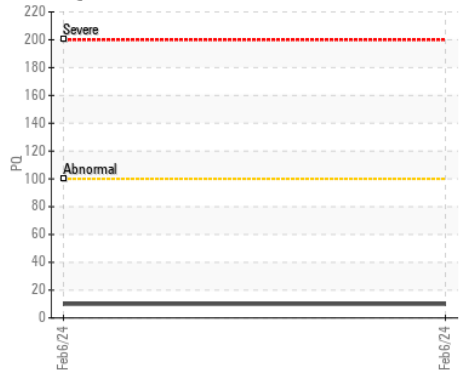
Silicon (ppm)



Viscosity @ 40°C



PQ



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : GFL0089853 **Received** : 15 Feb 2024  
**Lab Number** : 02615978 **Tested** : 15 Feb 2024  
**Unique Number** : 5733088 **Diagnosed** : 16 Feb 2024 - Kevin Marson  
**Test Package** : MOB 1 ( Additional Tests: PQ )

**GFL Environmental DO NOT USE\_USE GFL582**  
 4624 Cumberland Road  
 Cumberland, BC  
 CA V0R 1S0  
 Contact: Patrick Rutti  
 prutti@gflenv.com

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.

T:  
F: