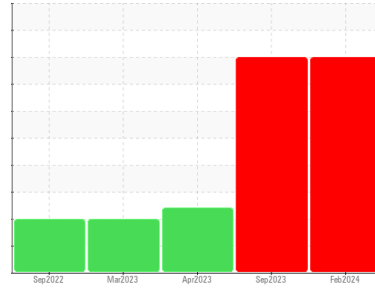




OIL ANALYSIS REPORT

Sample Rating Trend

ISO



Machine Id
711037
Component
Hydraulic System
Fluid
PETRO CANADA HYDREX MV 32 (--- GAL)

DIAGNOSIS

Recommendation

Nous vous recommandons de vérifier tous les endroits par lesquels des contaminants peuvent pénétrer dans le système. Nous avons pris note que la vidange d'huile a été effectuée au moment de l'échantillonnage. Le reniflard d'air doit être réparé. S'il n'est pas classé, nous vous recommandons de le remplacer par un reniflard à air adapté au micron et / ou au dessiccant. Si évalué, nous vous recommandons de réparer / remplacer le reniflard. Échantillonner de nouveau dans 30 à 45 jours afin de contrôler la situation.

Wear

Les taux d'usure de tous les composants sont normaux.

Contamination

Il y a une quantité élevée de matières particulaires (2 à 100 µm de taille) présente dans l'huile.

Fluid Condition

l'huile peut encore servir si la contamination peut être réduite à un niveau acceptable.

SAMPLE INFORMATION

| | method | limit/base | current | history1 | history2 |
|---------------|-------------|-------------|--------------------|-------------|-------------|
| Sample Number | Client Info | | GFL0107603 | GFL0088895 | GFL0073455 |
| Sample Date | Client Info | | 21 Feb 2024 | 12 Sep 2023 | 26 Apr 2023 |
| Machine Age | kms | Client Info | 0 | 79238 | 4177 |
| Oil Age | kms | Client Info | 0 | 0 | 1200 |
| Oil Changed | Client Info | | Changed | Not Changd | Not Changd |
| Sample Status | | | SEVERE | SEVERE | SEVERE |

CONTAMINATION

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

WEAR METALS

| | method | limit/base | current | history1 | history2 |
|-----------|--------|-------------------|--------------|----------|----------|
| Iron | ppm | ASTM D5185(m) >50 | 8 | 10 | 11 |
| Chromium | ppm | ASTM D5185(m) >10 | <1 | <1 | 1 |
| Nickel | ppm | ASTM D5185(m) >4 | 0 | <1 | <1 |
| Titanium | ppm | ASTM D5185(m) | 0 | 0 | <1 |
| Silver | ppm | ASTM D5185(m) | 0 | <1 | 0 |
| Aluminum | ppm | ASTM D5185(m) >5 | 1 | 1 | 1 |
| Lead | ppm | ASTM D5185(m) >4 | 0 | <1 | <1 |
| Copper | ppm | ASTM D5185(m) >15 | <1 | 1 | 1 |
| Tin | ppm | ASTM D5185(m) >4 | 0 | 0 | 0 |
| Antimony | ppm | ASTM D5185(m) | 0 | 0 | 0 |
| Vanadium | ppm | ASTM D5185(m) | 0 | 0 | 0 |
| Beryllium | ppm | ASTM D5185(m) | 0 | 0 | 0 |
| Cadmium | ppm | ASTM D5185(m) | 0 | 0 | 0 |

ADDITIVES

| | method | limit/base | current | history1 | history2 |
|------------|--------|-------------------|--------------|----------|----------|
| Boron | ppm | ASTM D5185(m) 0 | 0 | <1 | <1 |
| Barium | ppm | ASTM D5185(m) 0 | 0 | <1 | 0 |
| Molybdenum | ppm | ASTM D5185(m) 0 | 0 | <1 | 2 |
| Manganese | ppm | ASTM D5185(m) 1 | 0 | 0 | <1 |
| Magnesium | ppm | ASTM D5185(m) 0 | 9 | 20 | 31 |
| Calcium | ppm | ASTM D5185(m) 50 | 67 | 84 | 90 |
| Phosphorus | ppm | ASTM D5185(m) 330 | 351 | 384 | 378 |
| Zinc | ppm | ASTM D5185(m) 430 | 436 | 505 | 434 |
| Sulfur | ppm | ASTM D5185(m) 760 | 825 | 892 | 830 |
| Lithium | ppm | ASTM D5185(m) | <1 | <1 | <1 |

CONTAMINANTS

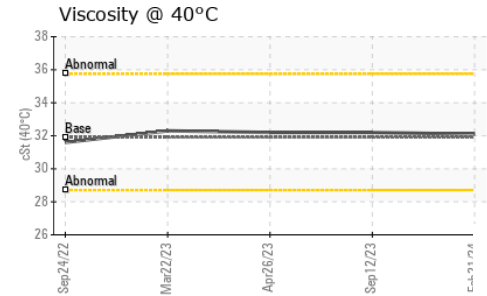
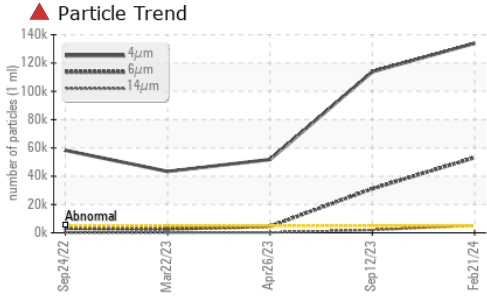
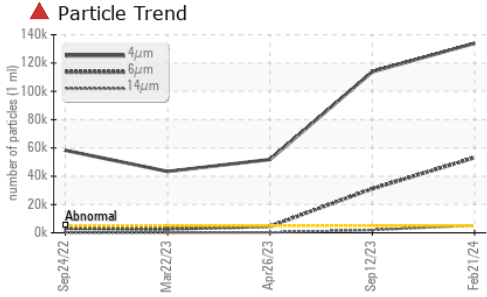
| | method | limit/base | current | history1 | history2 |
|-----------|--------|-------------------|----------|----------|----------|
| Silicon | ppm | ASTM D5185(m) >15 | 3 | 4 | 4 |
| Sodium | ppm | ASTM D5185(m) | 4 | 7 | 11 |
| Potassium | ppm | ASTM D5185(m) >20 | 1 | <1 | <1 |

FLUID CLEANLINESS

| | method | limit/base | current | history1 | history2 |
|-----------------|--------------|------------|-------------------|------------|------------|
| Particles >4µm | ASTM D7647 | >5000 | ▲ 133952 | ▲ 113838 | ▲ 51798 |
| Particles >6µm | ASTM D7647 | >1300 | ▲ 53168 | ▲ 31172 | ▲ 4519 |
| Particles >14µm | ASTM D7647 | >160 | ▲ 5247 | ▲ 1942 | ● 217 |
| Particles >21µm | ASTM D7647 | >40 | ▲ 1394 | ▲ 449 | 49 |
| Particles >38µm | ASTM D7647 | >10 | ▲ 64 | ▲ 21 | 1 |
| Particles >71µm | ASTM D7647 | >3 | 2 | 2 | 0 |
| Oil Cleanliness | ISO 4406 (c) | >19/17/14 | ▲ 24/23/20 | ▲ 24/22/18 | ▲ 23/19/15 |



OIL ANALYSIS REPORT



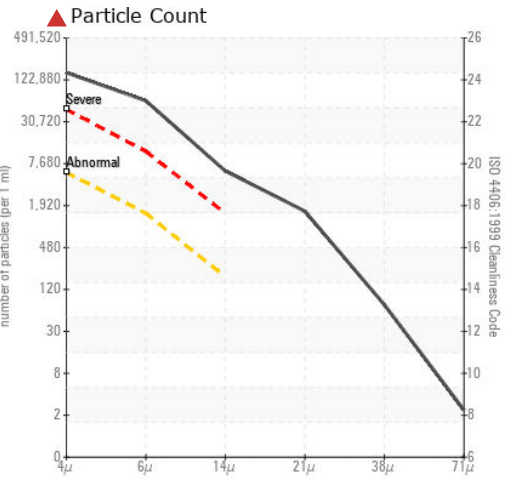
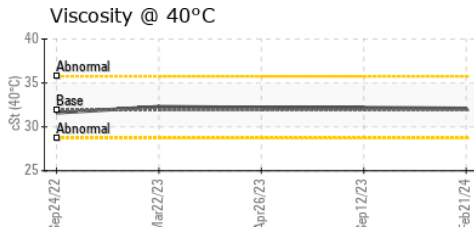
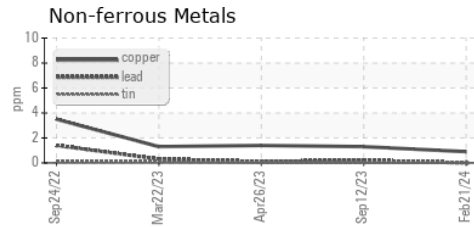
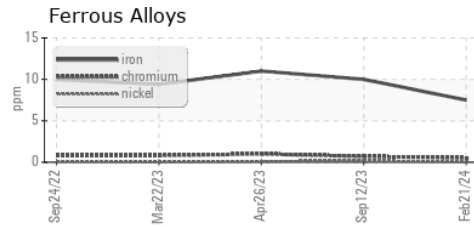
| VISUAL | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal | scalar | Visual* | NONE | NONE | NONE |
| Yellow Metal | scalar | Visual* | NONE | NONE | NONE |
| Precipitate | scalar | Visual* | NONE | NONE | 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 D7279(m) | 31.9 | 32.1 | 32.2 |

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



GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 **GFL Environmental - 747 - GMA - Solid Waste**
Sample No. : GFL0107603 **Received** : 04 Mar 2024 4 Chemin du Tremblay,
Lab Number : 02619724 **Tested** : 05 Mar 2024 Boucherville, QC
Unique Number : 5736834 **Diagnosed** : 05 Mar 2024 - Wes Davis CA J4B 6Z5
Test Package : MOB 1 (Additional Tests: PrtCount) Contact: Steve Voyer
svoyer@matrec.ca

To discuss this sample report, contact Customer Service at 1-800-268-2131. T:
 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab. F:
 Validity of results and interpretation are based on the sample and information as supplied.