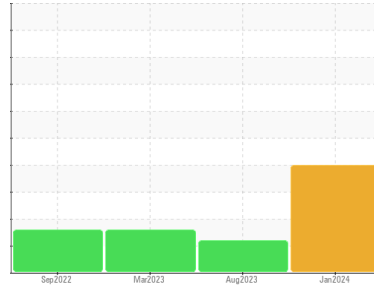




OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id
811039

Component
Hydraulic System

Fluid
PETRO CANADA HYDREX MV 32 (--- LTR)

DIAGNOSIS

Recommendation

Nous vous recommandons de vérifier tous les endroits par lesquels des contaminants peuvent pénétrer dans le système. Nous vous recommandons de remplacer le filtre et d'utiliser un système de filtrage hors-ligne afin d'améliorer la propreté du fluide. 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 | GFL0107571 | GFL0087629 | GFL0072793 | |
| Sample Date | Client Info | 29 Jan 2024 | 15 Aug 2023 | 09 Mar 2023 | |
| Machine Age | kms | Client Info | 105928 | 4509 | 3470 |
| Oil Age | kms | Client Info | 0 | 0 | 0 |
| Oil Changed | Client Info | Not Changed | Not Changd | Not Changed | |
| Sample Status | | SEVERE | ABNORMAL | ABNORMAL | |

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) >40 | 16 | 16 | 19 |
| Chromium | ppm ASTM D5185(m) >5 | 0 | <1 | 0 |
| Nickel | ppm ASTM D5185(m) >2 | 0 | 0 | <1 |
| Titanium | ppm ASTM D5185(m) >2 | 0 | 0 | 0 |
| Silver | ppm ASTM D5185(m) | 1 | 0 | 0 |
| Aluminum | ppm ASTM D5185(m) >8 | <1 | <1 | <1 |
| Lead | ppm ASTM D5185(m) >5 | 0 | 0 | 0 |
| Copper | ppm ASTM D5185(m) >20 | <1 | <1 | <1 |
| Tin | ppm ASTM D5185(m) >2 | 0 | 0 | 0 |
| Antimony | ppm ASTM D5185(m) >2 | 0 | 0 | <1 |
| 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 | <1 | <1 | <1 |
| Barium | ppm ASTM D5185(m) 0 | 0 | 0 | 0 |
| Molybdenum | ppm ASTM D5185(m) 0 | 0 | <1 | <1 |
| Manganese | ppm ASTM D5185(m) 1 | 0 | 0 | <1 |
| Magnesium | ppm ASTM D5185(m) 0 | 7 | 13 | 10 |
| Calcium | ppm ASTM D5185(m) 50 | 63 | 67 | 67 |
| Phosphorus | ppm ASTM D5185(m) 330 | 339 | 371 | 366 |
| Zinc | ppm ASTM D5185(m) 430 | 434 | 442 | 431 |
| Sulfur | ppm ASTM D5185(m) 760 | 808 | 793 | 800 |
| Lithium | ppm ASTM D5185(m) | <1 | <1 | <1 |

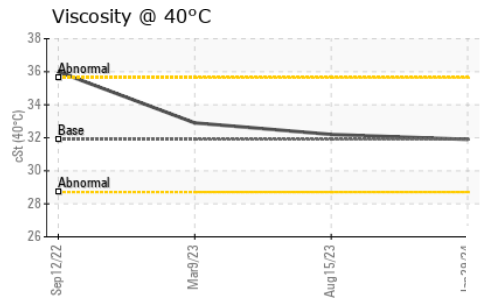
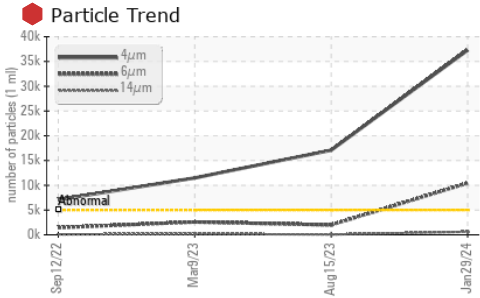
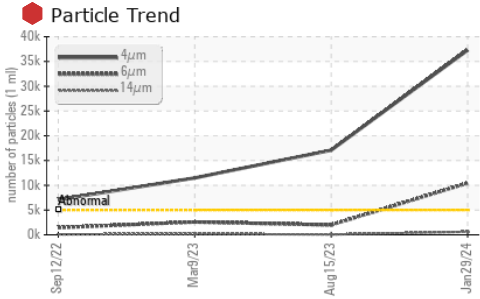
CONTAMINANTS

| method | limit/base | current | history1 | history2 |
|-----------|-----------------------|----------|----------|----------|
| Silicon | ppm ASTM D5185(m) >20 | 2 | 2 | 2 |
| Sodium | ppm ASTM D5185(m) | 2 | 2 | 4 |
| Potassium | ppm ASTM D5185(m) >20 | 2 | 2 | 2 |

FLUID CLEANLINESS

| method | limit/base | current | history1 | history2 |
|-----------------|------------------------|-------------------|------------|------------|
| Particles >4µm | ASTM D7647 >5000 | ▲ 37293 | ▲ 17085 | ▲ 11483 |
| Particles >6µm | ASTM D7647 >1300 | ● 10444 | ▲ 1995 | ▲ 2586 |
| Particles >14µm | ASTM D7647 >160 | ▲ 616 | 53 | ▲ 189 |
| Particles >21µm | ASTM D7647 >40 | ▲ 118 | 12 | 35 |
| Particles >38µm | ASTM D7647 >10 | 4 | 1 | 1 |
| Particles >71µm | ASTM D7647 >3 | 0 | 0 | 1 |
| Oil Cleanliness | ISO 4406 (c) >19/17/14 | ● 22/21/16 | ▲ 21/18/13 | ▲ 21/19/15 |

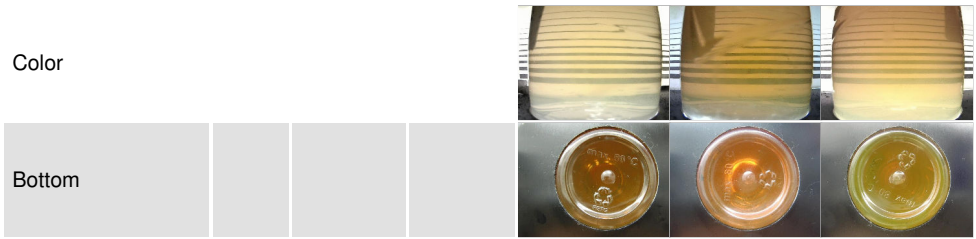
OIL ANALYSIS REPORT



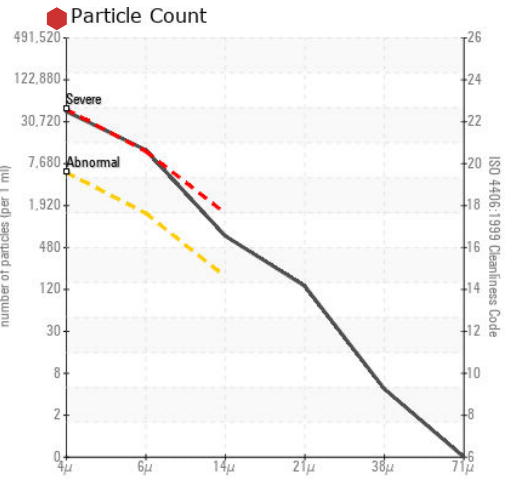
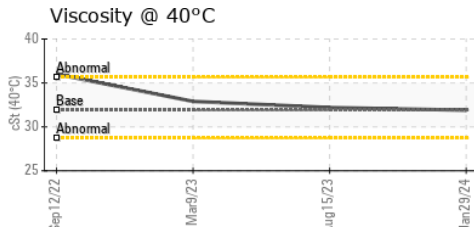
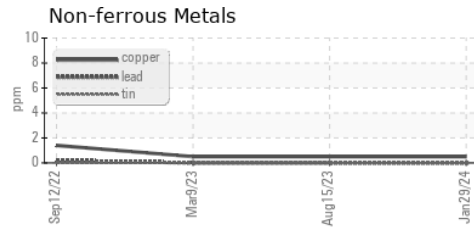
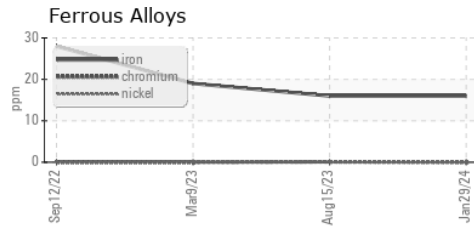
| VISUAL | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal | scalar | Visual* | NONE | NONE | NONE |
| Yellow Metal | scalar | Visual* | NONE | NONE | NONE |
| Precipitate | scalar | Visual* | NONE | NONE | NONE |
| Silt | scalar | Visual* | NONE | NONE | NONE |
| Debris | scalar | Visual* | NONE | NONE | VLITE |
| 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 | 32.2 | 32.9 |

| 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. : GFL0107571 **Received** : 05 Feb 2024 4 Chemin du Tremblay,
Lab Number : 02613447 **Tested** : 06 Feb 2024 Boucherville, QC
Unique Number : 5722542 **Diagnosed** : 06 Feb 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.