



Machine Id
EX0354
 Component
Hydraulic System
 Fluid
CASE CASE IH HY-TRAN ULTRA (220 LTR)

RECOMMENDATION

We advise that you check all areas where contaminants can enter the system. Oil and filter change at the time of sampling has been noted. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. Confirm the source of the lubricant being utilized for top-up/fill. Re-sampling is suggested to confirm test results prior to significant maintenance activities being performed. Please indicate that this is a resample on your Sample Information Form (SIF). Resample in 30-45 days to monitor this situation. (Customer Sample Comment: System capacity is 220L. Refill capacity is 150L. Oil sampled was CASE HYtran ultra. Tank was emptied and refilled with Hydrex aw46)

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|----------|----------|
| Sample Number | | Client Info | | GFL0092229 | --- | --- |
| Sample Date | | Client Info | | 08 Apr 2024 | --- | --- |
| Machine Age | hrs | Client Info | | 24807 | --- | --- |
| Oil Age | hrs | Client Info | | 4000 | --- | --- |
| Filter Age | hrs | Client Info | | 1000 | --- | --- |
| Oil Changed | | Client Info | | Changed | --- | --- |
| Filter Changed | | Client Info | | Changed | --- | --- |
| Sample Status | | | | SEVERE | --- | --- |

WEAR

Iron ppm levels are severe. The high ferrous density (PQ) index indicates that abnormal wear is occurring.

| | | | | | | |
|--------------|--------|---------------|------|--------------|-----|-----|
| PQ | | ASTM D8184* | | 39 | --- | --- |
| Iron | ppm | ASTM D5185(m) | >65 | ▲ 375 | --- | --- |
| Chromium | ppm | ASTM D5185(m) | >6 | 3 | --- | --- |
| Nickel | ppm | ASTM D5185(m) | >10 | 0 | --- | --- |
| Titanium | ppm | ASTM D5185(m) | | 0 | --- | --- |
| Silver | ppm | ASTM D5185(m) | | 0 | --- | --- |
| Aluminum | ppm | ASTM D5185(m) | >5 | <1 | --- | --- |
| Lead | ppm | ASTM D5185(m) | >45 | 0 | --- | --- |
| Copper | ppm | ASTM D5185(m) | >120 | <1 | --- | --- |
| Tin | ppm | ASTM D5185(m) | >4 | 0 | --- | --- |
| Vanadium | ppm | ASTM D5185(m) | | 0 | --- | --- |
| White Metal | scalar | Visual* | NONE | NONE | --- | --- |
| Yellow Metal | scalar | Visual* | NONE | NONE | --- | --- |

CONTAMINATION

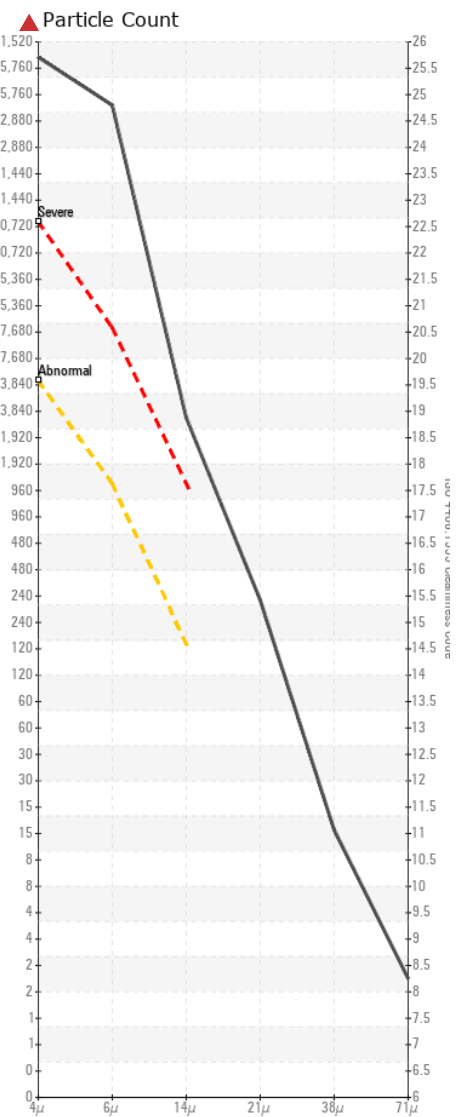
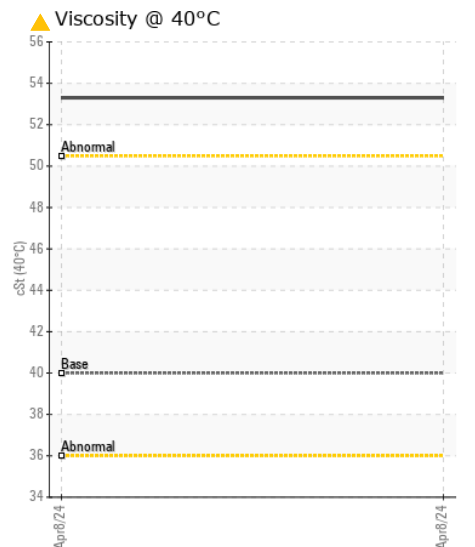
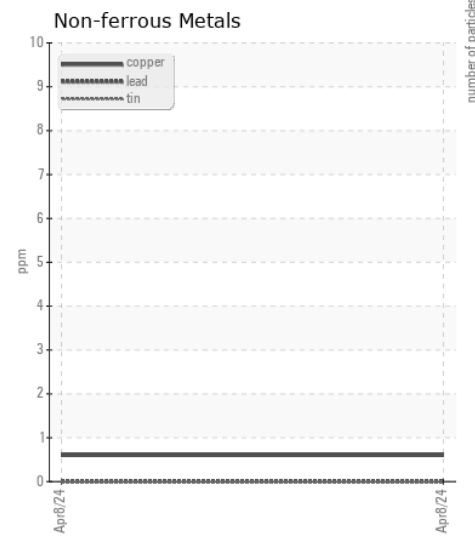
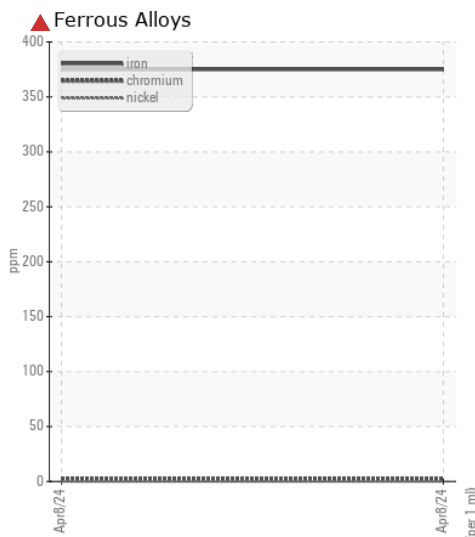
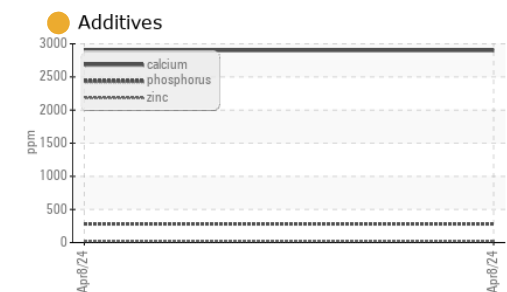
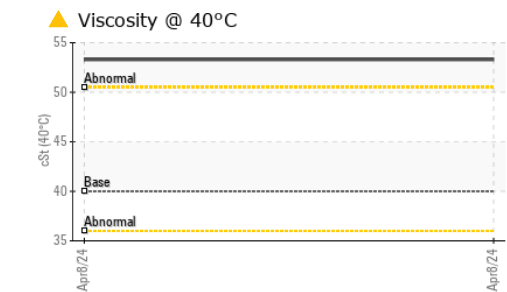
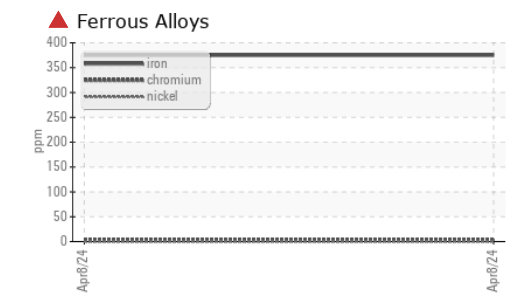
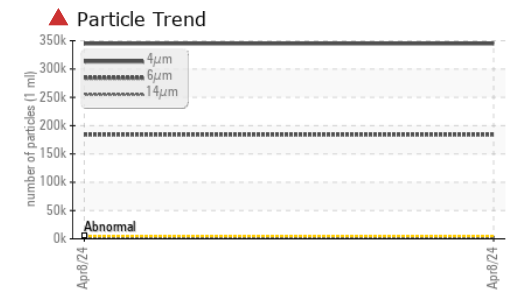
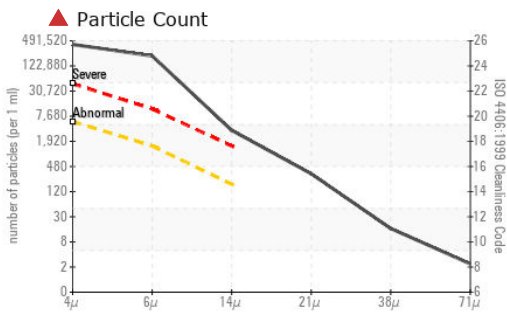
There is a high amount of particulates (2 to 100 microns in size) present in the oil.

| | | | | | | |
|------------------|--------|---------------|-----------|-------------------|-----|-----|
| Silicon | ppm | ASTM D5185(m) | >25 | 4 | --- | --- |
| Potassium | ppm | ASTM D5185(m) | >20 | 3 | --- | --- |
| Water | | WC Method | >0.1 | NEG | --- | --- |
| Particles >4µm | | ASTM D7647 | >5000 | ▲ 344821 | --- | --- |
| Particles >6µm | | ASTM D7647 | >1300 | ▲ 184032 | --- | --- |
| Particles >14µm | | ASTM D7647 | >160 | ▲ 3085 | --- | --- |
| Particles >21µm | | ASTM D7647 | >40 | ▲ 283 | --- | --- |
| Particles >38µm | | ASTM D7647 | >10 | 14 | --- | --- |
| Particles >71µm | | ASTM D7647 | >3 | 2 | --- | --- |
| Oil Cleanliness | | ISO 4406 (c) | >19/17/14 | ▲ 26/25/19 | --- | --- |
| Silt | scalar | Visual* | NONE | LIGHT | --- | --- |
| Debris | scalar | Visual* | NONE | NONE | --- | --- |
| Sand/Dirt | scalar | Visual* | NONE | NONE | --- | --- |
| Appearance | scalar | Visual* | NORML | NORML | --- | --- |
| Odor | scalar | Visual* | NORML | NORML | --- | --- |
| Emulsified Water | scalar | Visual* | >0.1 | NEG | --- | --- |

FLUID CONDITION

The viscosity of the oil is higher than normal, possibly indicating the addition of a heavier grade of oil. This plus the additive levels indicates that this is not the same brand, or type of oil as reported. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

| | | | | | | |
|-------------|-----|---------------|-----|---------------|-----|-----|
| Sodium | ppm | ASTM D5185(m) | | 3 | --- | --- |
| Boron | ppm | ASTM D5185(m) | | 5 | --- | --- |
| Barium | ppm | ASTM D5185(m) | | 0 | --- | --- |
| Molybdenum | ppm | ASTM D5185(m) | | 0 | --- | --- |
| Manganese | ppm | ASTM D5185(m) | | 8 | --- | --- |
| Magnesium | ppm | ASTM D5185(m) | | 11 | --- | --- |
| Calcium | ppm | ASTM D5185(m) | | 2900 | --- | --- |
| Phosphorus | ppm | ASTM D5185(m) | | ● 282 | --- | --- |
| Zinc | ppm | ASTM D5185(m) | 0.0 | ● 23 | --- | --- |
| Sulfur | ppm | ASTM D5185(m) | | ● 1884 | --- | --- |
| Visc @ 40°C | cSt | ASTM D7279(m) | 40 | ▲ 53.3 | --- | --- |



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : GFL0092229
Lab Number : 02630279
Unique Number : 5763411
Test Package : MOB 1 (Additional Tests: PQ, PrtCount)

GFL Environmental - 720 - Lafleche - Landfill
 17125 Lafleche Road,
 Moose Creek, ON
 CA K0C 1W0
 Contact: Charles Bergeron
 cbergeron@gflenv.com
 T: (613)538-4853
 F:

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.