



OIL ANALYSIS REPORT

| | |
|-----------------|----------|
| WEAR | NORMAL |
| CONTAMINATION | ABNORMAL |
| FLUID CONDITION | NORMAL |

Machine Id
SENNEBOGEN 830E 3309
 Component
Swing Drive
 Fluid
IRVING HDH SAE 75W90 (--- GAL)

RECOMMENDATION

We advise that you check for the source of water entry. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|-------------|-------------|-------------|
| Sample Number | | Client Info | | WC0940380 | WC0896374 | WC0849312 |
| Sample Date | | Client Info | | 23 May 2024 | 13 Mar 2024 | 08 Jan 2024 |
| Machine Age | hrs | Client Info | | 11000 | 10000 | 9000 |
| Oil Age | hrs | Client Info | | 1000 | 1000 | 1000 |
| Filter Age | hrs | Client Info | | 0 | 0 | 0 |
| Oil Changed | | Client Info | | Changed | Changed | Changed |
| Filter Changed | | Client Info | | N/A | N/A | N/A |
| Sample Status | | | | ABNORMAL | NORMAL | NORMAL |

WEAR

All component wear rates are normal.

| | | | | | | |
|--------------|--------|---------------|------|------|------|------|
| Iron | ppm | ASTM D5185(m) | >400 | 170 | 26 | 59 |
| Chromium | ppm | ASTM D5185(m) | >10 | <1 | 0 | 0 |
| Nickel | ppm | ASTM D5185(m) | >10 | <1 | 0 | 0 |
| Titanium | ppm | ASTM D5185(m) | | 0 | 0 | 0 |
| Silver | ppm | ASTM D5185(m) | | <1 | 0 | <1 |
| Aluminum | ppm | ASTM D5185(m) | >25 | <1 | 0 | <1 |
| Lead | ppm | ASTM D5185(m) | >50 | 0 | 0 | 0 |
| Copper | ppm | ASTM D5185(m) | >200 | 12 | 8 | 10 |
| Tin | ppm | ASTM D5185(m) | >10 | <1 | <1 | <1 |
| Vanadium | ppm | ASTM D5185(m) | | 0 | 0 | 0 |
| White Metal | scalar | Visual* | NONE | NONE | NONE | NONE |
| Yellow Metal | scalar | Visual* | NONE | NONE | NONE | NONE |

CONTAMINATION

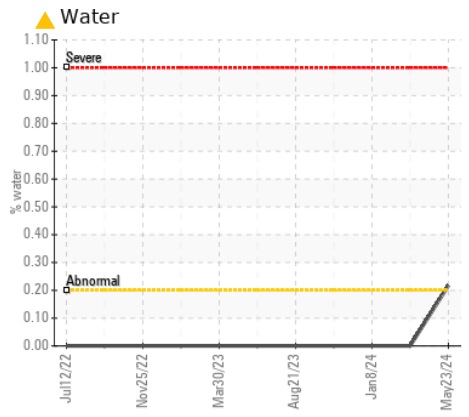
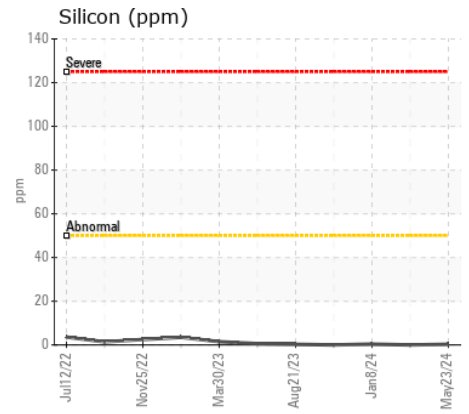
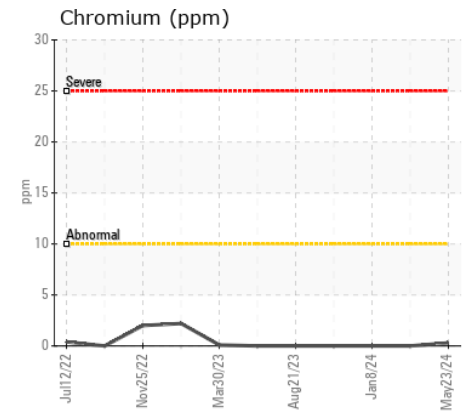
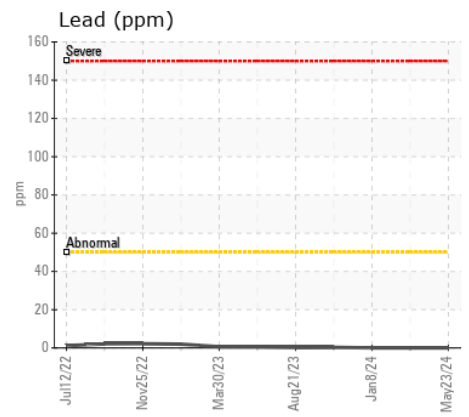
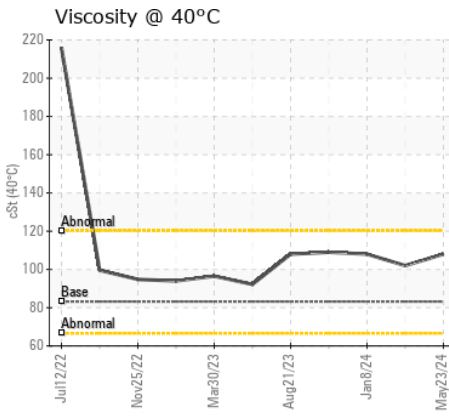
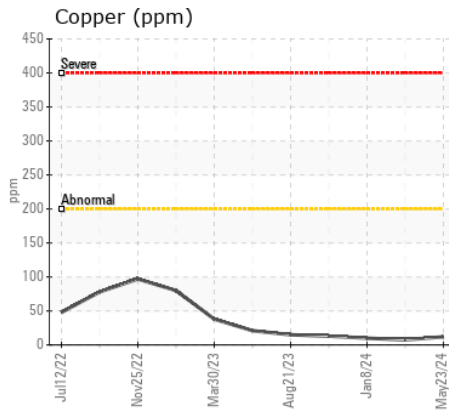
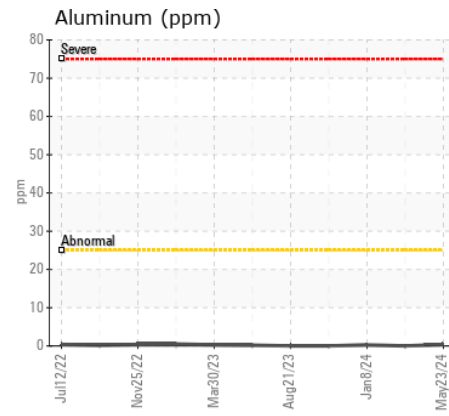
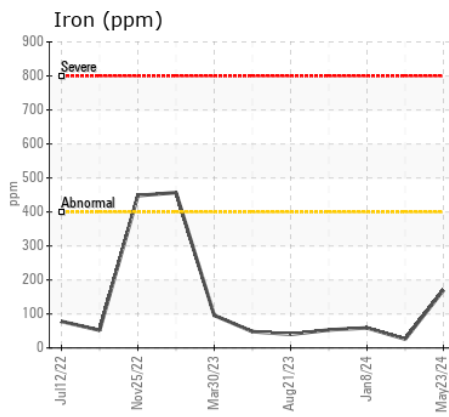
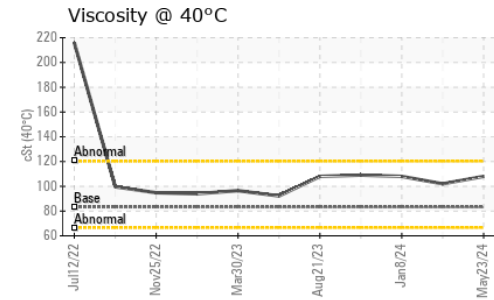
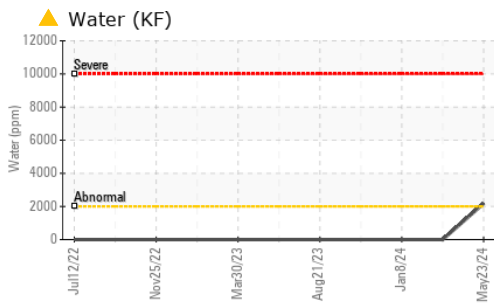
There is a moderate concentration of water present in the oil.

| | | | | | | |
|------------------|--------|---------------|-------|---------|-------|-------|
| Silicon | ppm | ASTM D5185(m) | >50 | <1 | 0 | <1 |
| Potassium | ppm | ASTM D5185(m) | >20 | 4 | <1 | <1 |
| Water | % | ASTM D6304* | >0.2 | ▲ 0.217 | --- | --- |
| ppm Water | ppm | ASTM D6304* | >2000 | ▲ 2178 | --- | --- |
| Silt | scalar | Visual* | NONE | NONE | VLITE | NONE |
| Debris | scalar | Visual* | NONE | NONE | VLITE | NONE |
| Sand/Dirt | scalar | Visual* | NONE | NONE | NONE | NONE |
| Appearance | scalar | Visual* | NORML | NORML | NORML | NORML |
| Odor | scalar | Visual* | NORML | NORML | NORML | NORML |
| Emulsified Water | scalar | Visual* | >0.2 | ▲ .5% | NEG | NEG |

FLUID CONDITION

The oil is no longer serviceable due to the presence of contaminants.

| | | | | | | |
|-------------|-----|---------------|------|-------|-------|-------|
| Sodium | ppm | ASTM D5185(m) | | 1 | <1 | 0 |
| Boron | ppm | ASTM D5185(m) | | 58 | 146 | 149 |
| Barium | ppm | ASTM D5185(m) | | 0 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185(m) | | 0 | 0 | 0 |
| Manganese | ppm | ASTM D5185(m) | | 1 | 0 | 0 |
| Magnesium | ppm | ASTM D5185(m) | | <1 | <1 | <1 |
| Calcium | ppm | ASTM D5185(m) | | 5 | 4 | 13 |
| Phosphorus | ppm | ASTM D5185(m) | | 1024 | 1003 | 1066 |
| Zinc | ppm | ASTM D5185(m) | | 16 | 7 | 10 |
| Sulfur | ppm | ASTM D5185(m) | | 21723 | 21139 | 21684 |
| Visc @ 40°C | cSt | ASTM D7279(m) | 83.2 | 108 | 102 | 108 |



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0940380 **Received** : 19 Jun 2024
Lab Number : 02643023 **Tested** : 21 Jun 2024
Unique Number : 5800562 **Diagnosed** : 21 Jun 2024 - Kevin Marson
Test Package : MOB 1 (Additional Tests: KF)

INTERFOR CORP
 5060 RTE 430
 BRUNSWICK MINE, NB
 CA E2A 6W6
 Contact: Daniel Hachey
 daniel.hachey@interfor.com
 T: (506)547-8700
 F: (506)548-1892

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.