



OIL ANALYSIS REPORT

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

Machine Id
GROVE 7959 (S/N 229061)
Component
Swing Drive
Fluid
GEAR OIL SAE 80W90 (--- QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|----------|
| Sample Number | | Client Info | | DC0021586 | DC0025419 | --- |
| Sample Date | | Client Info | | 11 Jan 2024 | 11 Jan 2023 | --- |
| Machine Age | hrs | Client Info | | 3295 | 2969 | --- |
| Oil Age | hrs | Client Info | | 0 | 0 | --- |
| Filter Age | hrs | Client Info | | 0 | 0 | --- |
| Oil Changed | | Client Info | | Changed | Changed | --- |
| Filter Changed | | Client Info | | N/A | N/A | --- |
| Sample Status | | | | NORMAL | ABNORMAL | --- |

WEAR

All component wear rates are normal.

| | | | | | | |
|--------------|--------|-------------|------|--------------|-------|-----|
| Iron | ppm | ASTM D5185m | >400 | 192 | ▲ 802 | --- |
| Chromium | ppm | ASTM D5185m | >10 | 1 | 3 | --- |
| Nickel | ppm | ASTM D5185m | >10 | <1 | <1 | --- |
| Titanium | ppm | ASTM D5185m | | 0 | 0 | --- |
| Silver | ppm | ASTM D5185m | | <1 | 0 | --- |
| Aluminum | ppm | ASTM D5185m | >25 | <1 | 2 | --- |
| Lead | ppm | ASTM D5185m | >50 | 1 | 0 | --- |
| Copper | ppm | ASTM D5185m | >200 | <1 | 2 | --- |
| Tin | ppm | ASTM D5185m | >10 | <1 | 0 | --- |
| Vanadium | ppm | ASTM D5185m | | 0 | 0 | --- |
| White Metal | scalar | *Visual | NONE | NONE | NONE | --- |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | --- |

CONTAMINATION

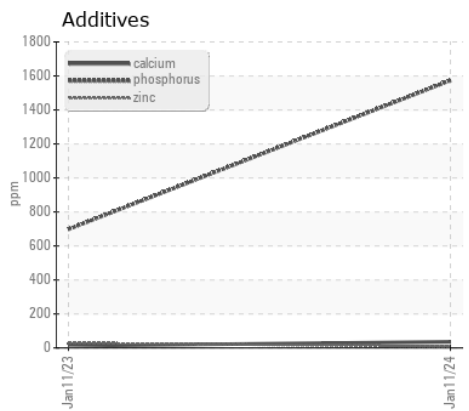
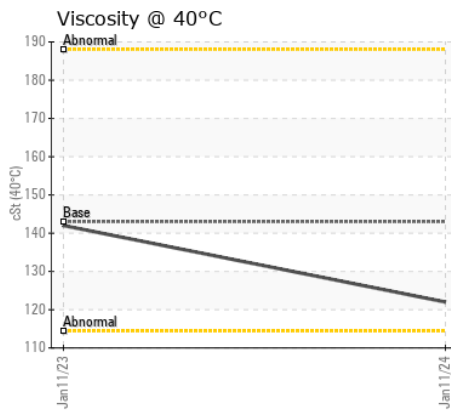
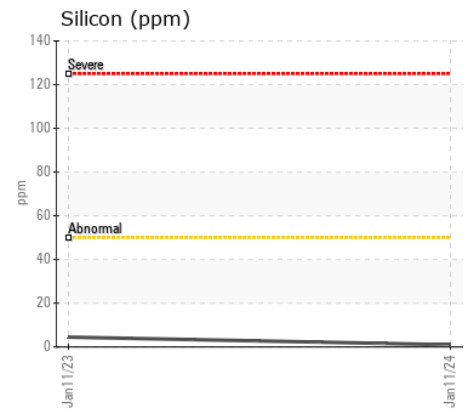
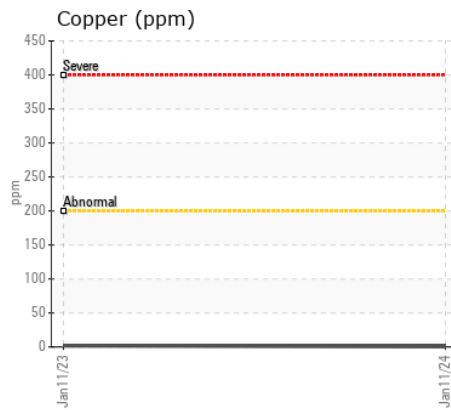
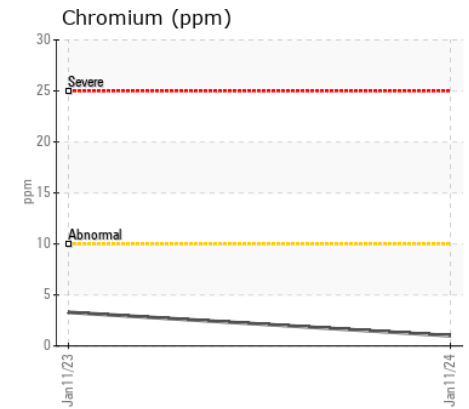
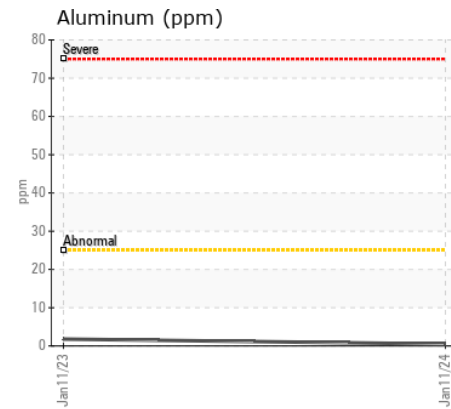
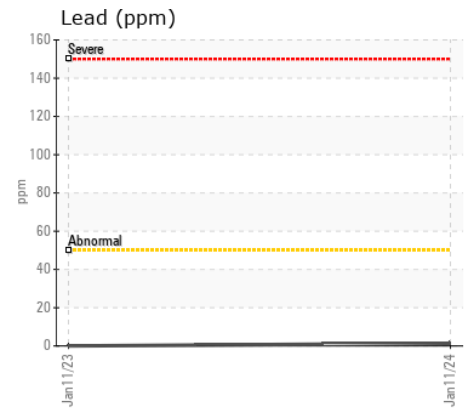
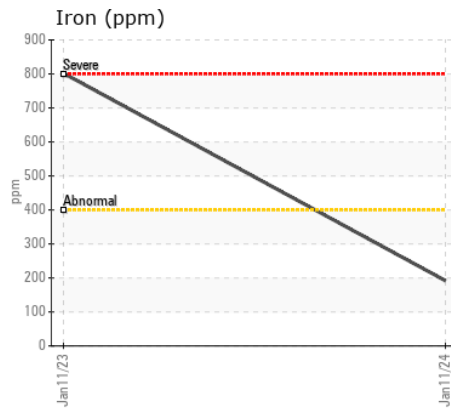
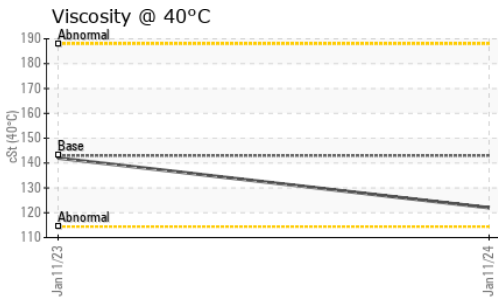
There is no indication of any contamination in the oil.

| | | | | | | |
|------------------|--------|-------------|-------|--------------|--------|-----|
| Silicon | ppm | ASTM D5185m | >50 | 1 | 4 | --- |
| Potassium | ppm | ASTM D5185m | >20 | 5 | 5 | --- |
| Water | | WC Method | >0.2 | NEG | NEG | --- |
| Silt | scalar | *Visual | NONE | NONE | MODER | --- |
| 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 | >0.2 | NEG | ▲ 0.2% | --- |

FLUID CONDITION

The condition of the oil is acceptable for the time in service.

| | | | | | | |
|-------------|-----|-------------|-------|--------------|-------|-----|
| Sodium | ppm | ASTM D5185m | >170 | <1 | 1 | --- |
| Boron | ppm | ASTM D5185m | 400 | 26 | 0 | --- |
| Barium | ppm | ASTM D5185m | 200 | <1 | 0 | --- |
| Molybdenum | ppm | ASTM D5185m | 12 | 0 | 0 | --- |
| Manganese | ppm | ASTM D5185m | | 3 | 9 | --- |
| Magnesium | ppm | ASTM D5185m | 12 | 3 | <1 | --- |
| Calcium | ppm | ASTM D5185m | 150 | 36 | 13 | --- |
| Phosphorus | ppm | ASTM D5185m | 1650 | 1574 | 698 | --- |
| Zinc | ppm | ASTM D5185m | 125 | 8 | 29 | --- |
| Sulfur | ppm | ASTM D5185m | 22500 | 23397 | 23508 | --- |
| Visc @ 40°C | cSt | ASTM D445 | 143 | 122 | 142 | --- |



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : DC0021586 **Received** : 18 Jan 2024
Lab Number : 06065209 **Diagnosed** : 19 Jan 2024
Unique Number : 10836591 **Diagnostician** : Wes Davis
Test Package : MOB 1

ABERDEEN PROVING GROUND
 6721 RARITON AVENUE
 ABERDEEN, MD
 US 21005
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To discuss this sample report, contact Customer Service at 1-800-237-1369.

* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)