



OIL ANALYSIS REPORT

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

Machine Id
CASE 15499 CR1202 (S/N 98205)
 Component
2 Winch
 Fluid
GEAR OIL ISO 220 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|----------|
| Sample Number | | Client Info | | WC0935979 | WC0809388 | --- |
| Sample Date | | Client Info | | 16 May 2024 | 10 May 2023 | --- |
| Machine Age | hrs | Client Info | | 11866 | 11257 | --- |
| Oil Age | hrs | Client Info | | 1000 | 1410 | --- |
| Filter Age | hrs | Client Info | | 0 | 0 | --- |
| Oil Changed | | Client Info | | N/A | Changed | --- |
| Filter Changed | | Client Info | | N/A | Changed | --- |
| Sample Status | | | | NORMAL | NORMAL | --- |

WEAR

All component wear rates are normal.

| | | | | | | |
|--------------|--------|-------------|------|--------------|------|-----|
| Iron | ppm | ASTM D5185m | >150 | 13 | 125 | --- |
| Chromium | ppm | ASTM D5185m | >10 | <1 | 2 | --- |
| Nickel | ppm | ASTM D5185m | >10 | <1 | 1 | --- |
| Titanium | ppm | ASTM D5185m | | <1 | 0 | --- |
| Silver | ppm | ASTM D5185m | | 1 | 0 | --- |
| Aluminum | ppm | ASTM D5185m | >5 | <1 | 1 | --- |
| Lead | ppm | ASTM D5185m | >15 | <1 | 0 | --- |
| Copper | ppm | ASTM D5185m | >80 | 1 | 0 | --- |
| Tin | ppm | ASTM D5185m | | <1 | 0 | --- |
| Vanadium | ppm | ASTM D5185m | | <1 | 0 | --- |
| White Metal | scalar | *Visual | NONE | NONE | NONE | --- |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | --- |

CONTAMINATION

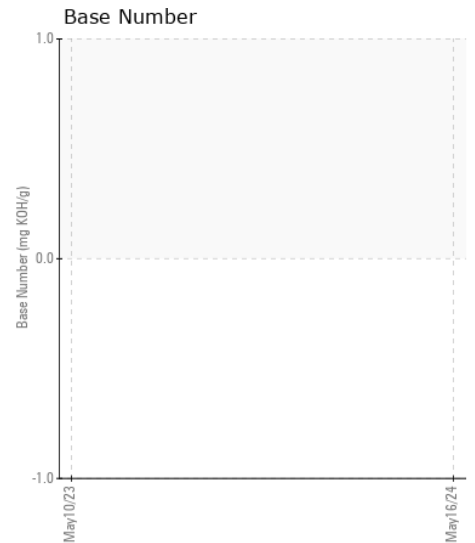
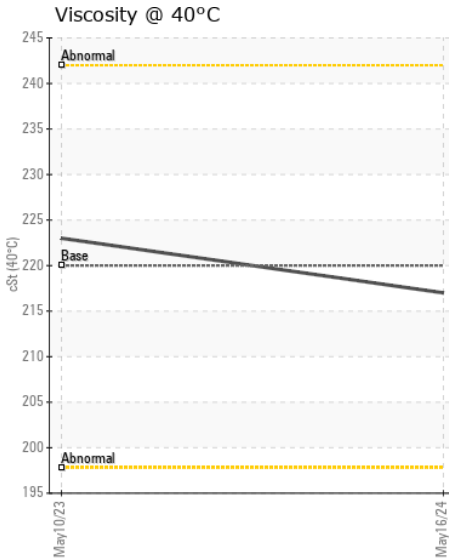
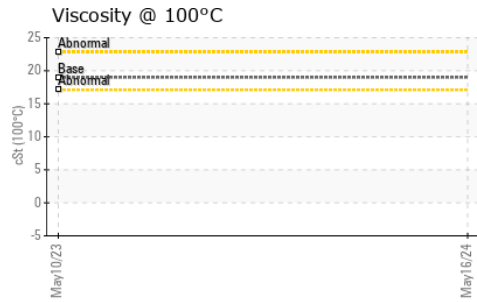
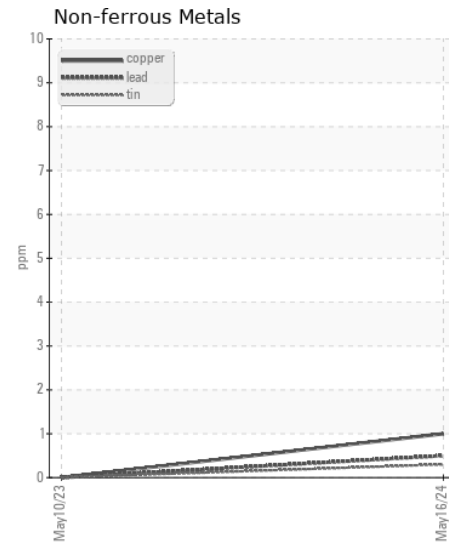
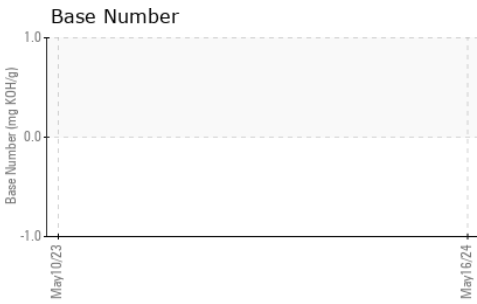
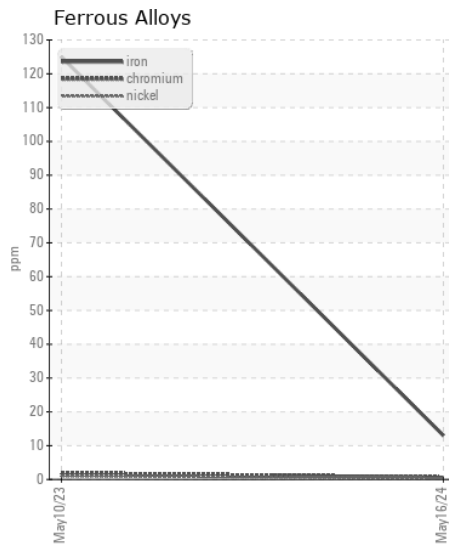
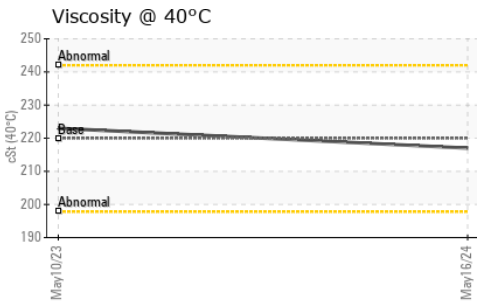
There is no indication of any contamination in the oil.

| | | | | | | |
|------------------|--------|-------------|-------|--------------|-------|-----|
| Silicon | ppm | ASTM D5185m | >25 | 1 | <1 | --- |
| Potassium | ppm | ASTM D5185m | >20 | <1 | 3 | --- |
| 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 | | <1 | 1 | --- |
| Boron | ppm | ASTM D5185m | 50 | 4 | 0 | --- |
| Barium | ppm | ASTM D5185m | 15 | 0 | 0 | --- |
| Molybdenum | ppm | ASTM D5185m | 15 | <1 | 0 | --- |
| Manganese | ppm | ASTM D5185m | | <1 | 1 | --- |
| Magnesium | ppm | ASTM D5185m | 50 | <1 | 1 | --- |
| Calcium | ppm | ASTM D5185m | 50 | 6 | 26 | --- |
| Phosphorus | ppm | ASTM D5185m | 350 | 284 | 66 | --- |
| Zinc | ppm | ASTM D5185m | 100 | 7 | 19 | --- |
| Sulfur | ppm | ASTM D5185m | 12500 | 4304 | 187 | --- |
| Visc @ 40°C | cSt | ASTM D445 | 220 | 217 | 223 | --- |



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0935979 **Received** : 28 May 2024
Lab Number : 06193116 **Tested** : 30 May 2024
Unique Number : 11049868 **Diagnosed** : 30 May 2024 - Sean Felton
Test Package : CONST (Additional Tests: FT-IR, KV100, TBN)

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)

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