James River Equipment

OIL ANALYSIS REPORT

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

Machine Id
## KLEEMANN KT80-2 0573
Component
## Diesel Engine
Fluid
## {not provided} (--- QTS)

## RECOMMENDATION

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

## WEAR

All component wear rates are normal.

## CONTAMINATION

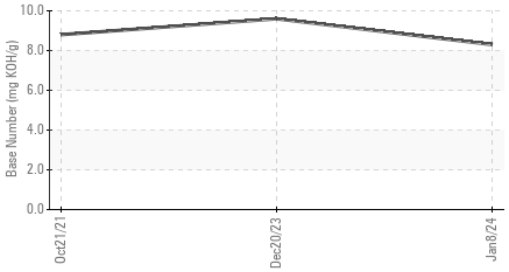
There is no indication of any contamination in the oil.

## FLUID CONDITION

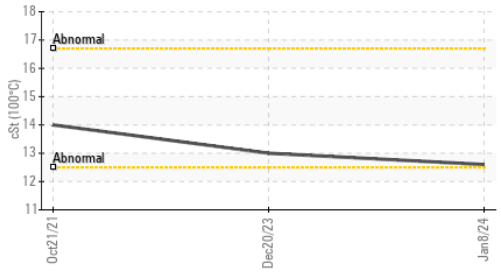
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|---|---|---|---|---|---|---|
| Sample Number | | Client Info | | JR0194104 | JR0194278 | JR0099999 |
| Sample Date | | Client Info | | 08 Jan 2024 | 20 Dec 2023 | 21 Oct 2021 |
| Machine Age | hrs | Client Info | | 0 | 3783 | 1649 |
| Oil Age | hrs | Client Info | | 0 | 0 | 0 |
| Filter Age | hrs | Client Info | | 0 | 0 | 0 |
| Oil Changed | | Client Info | | N/A | N/A | N/A |
| Filter Changed | | Client Info | | N/A | N/A | N/A |
| Sample Status | | | | NORMAL | ABNORMAL | NORMAL |
| Iron | ppm | ASTM D5185m | >100 | 6 | 53 | 28 |
| Chromium | ppm | ASTM D5185m | >20 | <1 | 4 | <1 |
| Nickel | ppm | ASTM D5185m | >4 | <1 | <1 | 0 |
| Titanium | ppm | ASTM D5185m | | <1 | <1 | <1 |
| Silver | ppm | ASTM D5185m | >3 | 0 | 0 | <1 |
| Aluminum | ppm | ASTM D5185m | >20 | 3 | ▲ 20 | 5 |
| Lead | ppm | ASTM D5185m | >40 | <1 | <1 | <1 |
| Copper | ppm | ASTM D5185m | >330 | <1 | 4 | 4 |
| Tin | ppm | ASTM D5185m | >15 | <1 | <1 | <1 |
| Vanadium | ppm | ASTM D5185m | | 0 | <1 | <1 |
| White Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Silicon | ppm | ASTM D5185m | >25 | 9 | ▲ 70 | 16 |
| Potassium | ppm | ASTM D5185m | >20 | 4 | 2 | 2 |
| Fuel | | WC Method | >5 | <1.0 | <1.0 | <1.0 |
| Water | | WC Method | >0.2 | NEG | NEG | NEG |
| Glycol | | WC Method | | NEG | NEG | NEG |
| Soot % | % | *ASTM D7844 | >3 | 0.1 | 0.1 | 0.9 |
| Nitration | Abs/cm | *ASTM D7624 | >20 | 5.8 | 7.6 | 12.5 |
| Sulfation | Abs/.1mm | *ASTM D7415 | >30 | 19.7 | 19.8 | 24.5 |
| Silt | scalar | *Visual | NONE | NONE | NONE | NONE |
| Debris | scalar | *Visual | NONE | NONE | NONE | 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 | NEG | NEG | NEG |
| Sodium | ppm | ASTM D5185m | | 0 | 5 | 0 |
| Boron | ppm | ASTM D5185m | | 229 | 269 | 154 |
| Barium | ppm | ASTM D5185m | | 0 | 2 | <1 |
| Molybdenum | ppm | ASTM D5185m | | 195 | 252 | 265 |
| Manganese | ppm | ASTM D5185m | | <1 | <1 | <1 |
| Magnesium | ppm | ASTM D5185m | | 661 | 816 | 798 |
| Calcium | ppm | ASTM D5185m | | 1161 | 1352 | 1519 |
| Phosphorus | ppm | ASTM D5185m | | 746 | 939 | 832 |
| Zinc | ppm | ASTM D5185m | | 892 | 1084 | 949 |
| Sulfur | ppm | ASTM D5185m | | 2922 | 3025 | 2511 |
| Oxidation | Abs/.1mm | *ASTM D7414 | >25 | 13.4 | 15.3 | 23.6 |
| Base Number (BN) | mg KOH/g | ASTM D2896 | | 8.3 | 9.6 | 8.8 |
| Visc @ 100°C | cSt | ASTM D445 | | 12.6 | 13.0 | 14.0 |

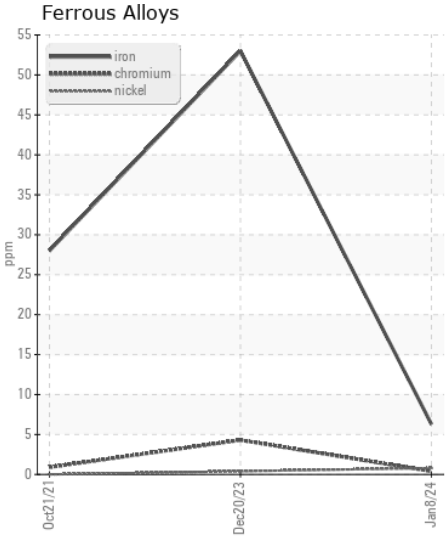
Base Number



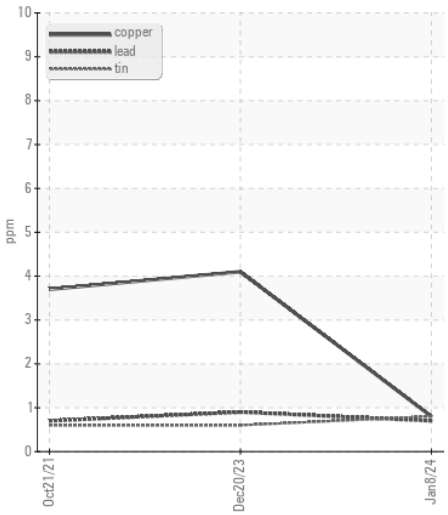

Viscosity @ 100°C



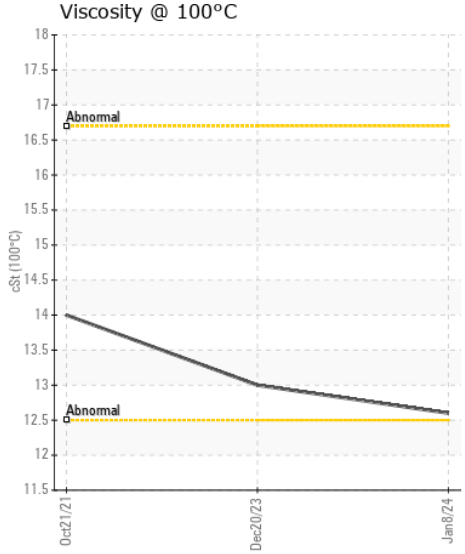

Ferrous Alloys



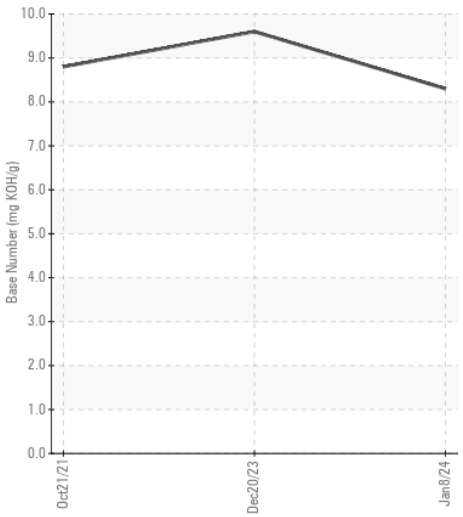

Non-ferrous Metals




Viscosity @ 100°C




Base Number




Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513
**Sample No.** : JR0194104 **Recieved** : 09 Jan 2024
**Lab Number** : 06055256 **Diagnosed** : 10 Jan 2024
**Unique Number** : 10821205 **Diagnostician** : Wes Davis
**Test Package** : CONST ( Additional Tests: 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)*

**JRE - GREENSBORO**
411 SOUTH REGIONAL ROAD
GREENSBORO, NC
US 27409
Contact: NICK GALLAHER
NGALLAHER@JRENET.COM
T: (336)668-2762
F: (336)665-9556