



OIL ANALYSIS REPORT

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

Area
ULTRACOOLANT [151369]
 Machine Id
INGERSOLL RAND IRN-40H BN1057U08253 - RBP CHEMICAL
 Component
Compressor

RECOMMENDATION

Resample at the next service interval to monitor.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|----------------|-----|-------------|-----------|--------------------|-------------|-------------|
| Sample Number | | Client Info | | UCZ06087496 | UCZ05763660 | UCZ05468866 |
| Sample Date | | Client Info | | 26 Jan 2024 | 31 Jan 2023 | 02 Feb 2022 |
| Machine Age | hrs | Client Info | | 25775 | 24033 | 22041 |
| Oil Age | hrs | Client Info | | 1740 | 0 | 5596 |
| Filter Age | hrs | Client Info | | 1740 | 1992 | 2620 |
| Oil Changed | | Client Info | | Not Changd | Changed | Not Changd |
| Filter Changed | | Client Info | | N/A | Changed | Changed |
| Sample Status | | | | NORMAL | NORMAL | SEVERE |

WEAR

All component wear rates are normal.

| | | | | | | |
|--------------|--------|-------------|------|--------------|------|------|
| Iron | ppm | ASTM D5185m | >50 | 0 | 2 | 2 |
| Chromium | ppm | ASTM D5185m | >5 | 0 | 0 | 0 |
| Nickel | ppm | ASTM D5185m | | 0 | 0 | <1 |
| Titanium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Silver | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m | >15 | 0 | 0 | <1 |
| Lead | ppm | ASTM D5185m | >65 | 0 | <1 | 2 |
| Copper | ppm | ASTM D5185m | >65 | 4 | 22 | 17 |
| Tin | ppm | ASTM D5185m | >10 | <1 | <1 | <1 |
| Vanadium | ppm | ASTM D5185m | | 0 | 0 | 0 |
| White Metal | scalar | *Visual | NONE | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE | NONE |

CONTAMINATION

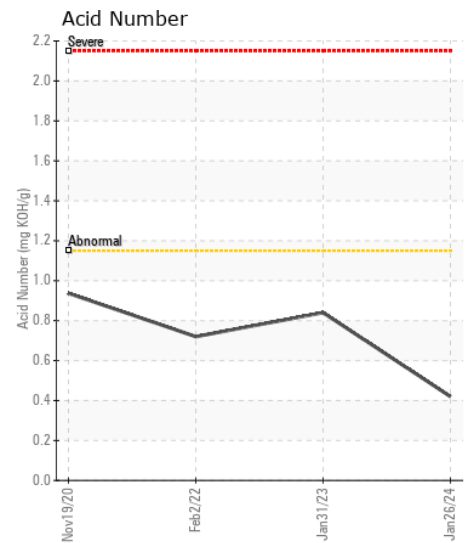
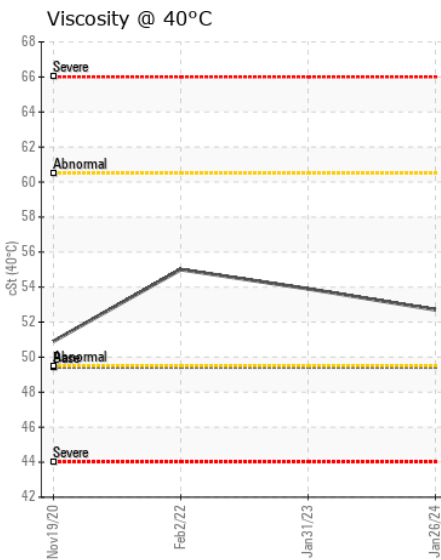
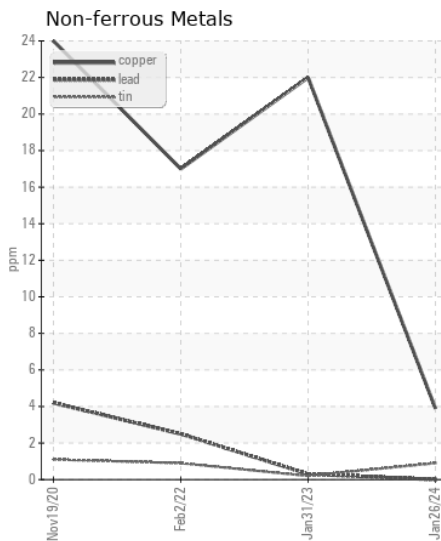
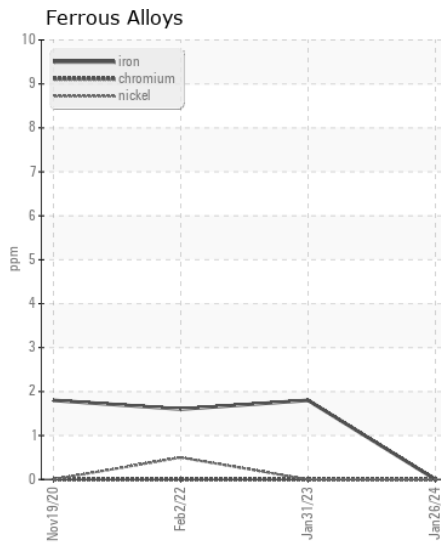
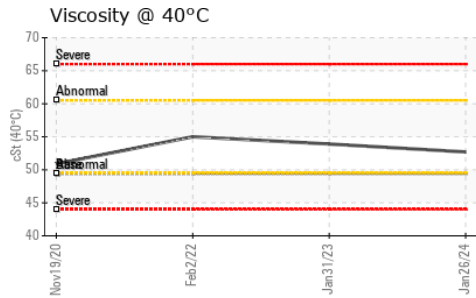
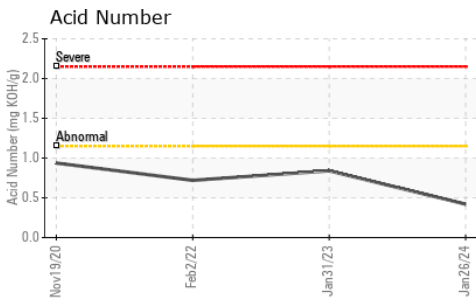
There is no indication of any contamination in the oil.

| | | | | | | |
|------------------|--------|-------------|-------|--------------|-------|-------|
| Silicon | ppm | ASTM D5185m | >35 | 2 | 6 | 7 |
| Potassium | ppm | ASTM D5185m | >20 | 5 | 7 | 3 |
| Water | | WC Method | >0.1 | NEG | NEG | NEG |
| Silt | scalar | *Visual | NONE | NONE | NONE | NONE |
| Debris | scalar | *Visual | NONE | NONE | NONE | MODER |
| 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 | >0.1 | NEG | NEG | 0.2% |

FLUID CONDITION

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

| | | | | | | |
|------------------|----------|-------------|------|-------------|------|------|
| Sodium | ppm | ASTM D5185m | | 23 | 35 | 13 |
| Boron | ppm | ASTM D5185m | 0 | 0 | 0 | 4 |
| Barium | ppm | ASTM D5185m | 500 | 98 | 186 | 256 |
| Molybdenum | ppm | ASTM D5185m | 0 | 0 | 0 | <1 |
| Manganese | ppm | ASTM D5185m | | 0 | 0 | 0 |
| Magnesium | ppm | ASTM D5185m | 0 | 0 | 1 | 5 |
| Calcium | ppm | ASTM D5185m | 0 | 6 | 12 | 8 |
| Phosphorus | ppm | ASTM D5185m | 20 | 18 | 21 | 25 |
| Zinc | ppm | ASTM D5185m | 0 | 149 | 359 | 135 |
| Sulfur | ppm | ASTM D5185m | 200 | 398 | 281 | 241 |
| Acid Number (AN) | mg KOH/g | ASTM D8045 | | 0.42 | 0.84 | 0.72 |
| Visc @ 40°C | cSt | ASTM D445 | 49.4 | 52.7 | 53.9 | 55.0 |



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : UCZ06087496
Lab Number : 06087496
Unique Number : 10874941
Test Package : IND 2

Received : 13 Feb 2024
Tested : 14 Feb 2024
Diagnosed : 14 Feb 2024 - Don Baldrige

ZORN COMP & EQUIPMENT INC - MAIN
 1335 E WISCONSIN AVE
 PEWAUKEE, WI
 US 53072
 Contact: CHRIS BOCK
 Chris.Bock@zornair.com
 T: (800)476-4637
 F: (262)695-7017

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)