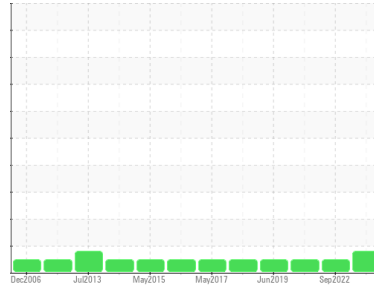




Machine Id
BM #039466 NORTH CHAIR LIFT
Component
Gearbox
Fluid
KLONDIKE INDUSTRIAL EP GEAR 68 (86 LTR)



DIAGNOSIS

Recommendation

We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.

Wear

Iron ppm levels are abnormal. The low ferrous density (PQ) index indicates the wear metal levels are due to corrosion.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

The oil is no longer serviceable as a result of the abnormal and/or severe wear.

SAMPLE INFORMATION

| | method | limit/base | current | history1 | history2 |
|---------------|-------------|-------------|--------------------|-------------|-------------|
| Sample Number | Client Info | | PC0064935 | PC0036765 | PC0018073 |
| Sample Date | Client Info | | 21 Sep 2023 | 02 Sep 2022 | 05 Aug 2020 |
| Machine Age | hrs | Client Info | 16423 | 15559 | 14538 |
| Oil Age | hrs | Client Info | 3393 | 2529 | 1508 |
| Oil Changed | Client Info | | Not Chngd | Not Chngd | N/A |
| Sample Status | | | ABNORMAL | NORMAL | NORMAL |

WEAR METALS

| | method | limit/base | current | history1 | history2 |
|-----------|-------------|--------------------|--------------|----------|----------|
| PQ | ASTM D8184* | | 0 | --- | --- |
| Iron | ppm | ASTM D5185(m) >200 | ▲ 250 | 56 | 43 |
| Chromium | ppm | ASTM D5185(m) >10 | 1 | 0 | 0 |
| Nickel | ppm | ASTM D5185(m) >10 | <1 | 0 | <1 |
| Titanium | ppm | ASTM D5185(m) | 0 | 0 | 0 |
| Silver | ppm | ASTM D5185(m) | <1 | 0 | 0 |
| Aluminum | ppm | ASTM D5185(m) >25 | <1 | 0 | <1 |
| Lead | ppm | ASTM D5185(m) >50 | <1 | 0 | 0 |
| Copper | ppm | ASTM D5185(m) >200 | 2 | <1 | <1 |
| Tin | ppm | ASTM D5185(m) >10 | 0 | 0 | 0 |
| Antimony | ppm | ASTM D5185(m) >5 | 6 | 3 | 1 |
| Vanadium | ppm | ASTM D5185(m) | 0 | 0 | 0 |
| Beryllium | ppm | ASTM D5185(m) | 0 | 0 | 0 |
| Cadmium | ppm | ASTM D5185(m) | 0 | 0 | 0 |

ADDITIVES

| | method | limit/base | current | history1 | history2 |
|------------|--------|---------------|--------------|----------|----------|
| Boron | ppm | ASTM D5185(m) | 15 | 8 | 8 |
| Barium | ppm | ASTM D5185(m) | 1 | 0 | 0 |
| Molybdenum | ppm | ASTM D5185(m) | <1 | <1 | <1 |
| Manganese | ppm | ASTM D5185(m) | 2 | <1 | <1 |
| Magnesium | ppm | ASTM D5185(m) | 1 | <1 | <1 |
| Calcium | ppm | ASTM D5185(m) | 5 | <1 | 1 |
| Phosphorus | ppm | ASTM D5185(m) | 244 | 233 | 218 |
| Zinc | ppm | ASTM D5185(m) | 10 | 5 | 3 |
| Sulfur | ppm | ASTM D5185(m) | 5274 | 5113 | 5261 |
| Lithium | ppm | ASTM D5185(m) | 24 | 6 | 3 |

CONTAMINANTS

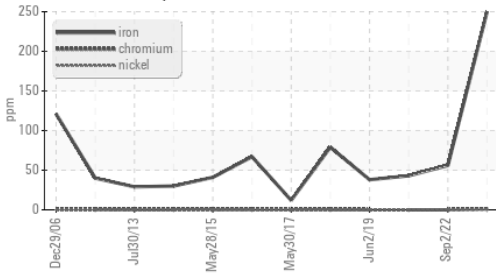
| | method | limit/base | current | history1 | history2 |
|-----------|--------|-------------------|--------------|----------|----------|
| Silicon | ppm | ASTM D5185(m) >50 | 21 | 8 | 8 |
| Sodium | ppm | ASTM D5185(m) | <1 | 0 | <1 |
| Potassium | ppm | ASTM D5185(m) >20 | 15 | 0 | 1 |

VISUAL

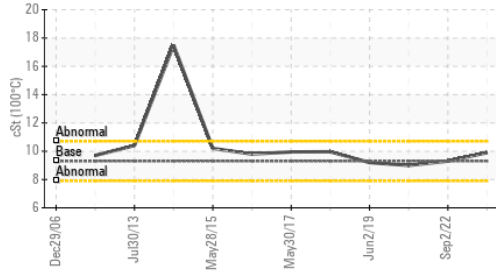
| | method | limit/base | current | history1 | history2 |
|------------------|--------|---------------|--------------|----------|----------|
| White Metal | scalar | Visual* NONE | NONE | NONE | VLITE |
| Yellow Metal | scalar | Visual* NONE | NONE | NONE | NONE |
| Precipitate | scalar | Visual* NONE | NONE | NONE | NONE |
| Silt | scalar | Visual* NONE | NONE | NONE | NONE |
| Debris | scalar | Visual* NONE | NONE | NONE | VLITE |
| 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 |
| Free Water | scalar | Visual* | NEG | NEG | NEG |

OIL ANALYSIS REPORT

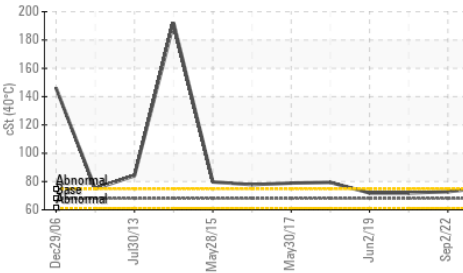
▲ Ferrous Alloys



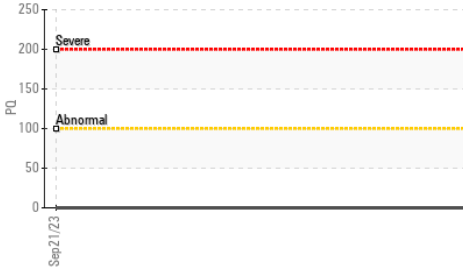
Viscosity @ 100°C



Viscosity @ 40°C



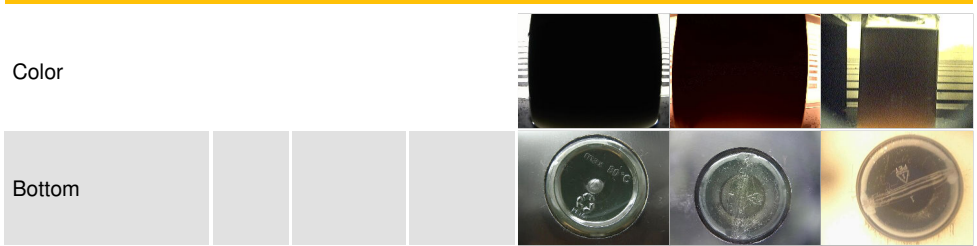
PQ



FLUID PROPERTIES

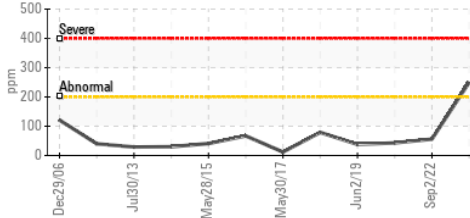
| method | limit/base | current | history1 | history2 |
|----------------------|-----------------------|---------|----------|----------|
| Visc @ 40°C | cSt ASTM D7279(m) 68 | 75.8 | 72.8 | 71.9 |
| Visc @ 100°C | cSt ASTM D7279(m) 9.3 | 9.9 | 9.3 | 9.0 |
| Viscosity Index (VI) | Scale ASTM D2270* 110 | 110 | 103 | 98 |

SAMPLE IMAGES

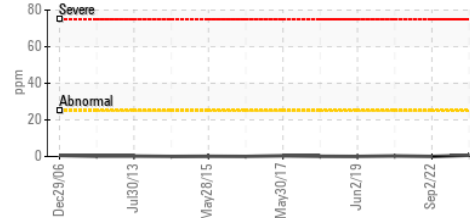


GRAPHS

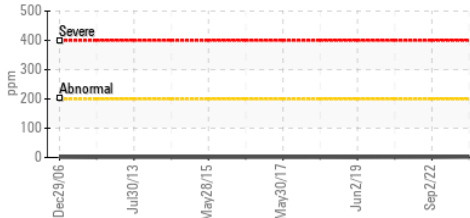
▲ Iron (ppm)



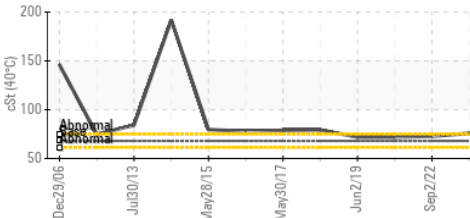
Aluminum (ppm)



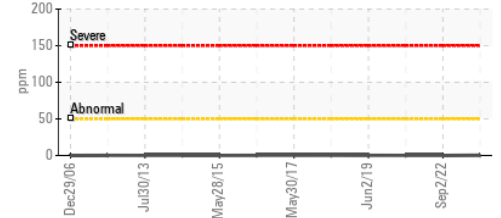
Copper (ppm)



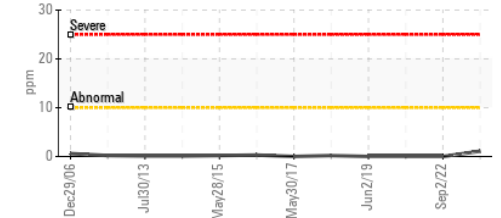
Viscosity @ 40°C



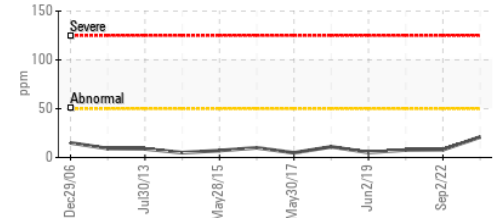
Lead (ppm)



Chromium (ppm)



Silicon (ppm)



PQ



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0064935
Lab Number : 02585269
Unique Number : 5646334
Test Package : MOB 1 (Additional Tests: KV100, PQ, VI)

Received : 26 Sep 2023
Diagnosed : 27 Sep 2023
Diagnostician : Kevin Marson

SKI CO DEVELOPMENT INC
 1800 LOCH LOMOMD RD.
 THUNDER BAY, ON
 CA P75 1E9
 Contact: Michael Winters
 michaelwinters382@gmail.com
 T: (807)631-7399
 F: (807)475-8066

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.