



Machine Id LIEBHERR L506 55808

Rear Differential

LIEBHERR GEAR BASIC 90 LS (--- LTR)

RECOMMENDATION

Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

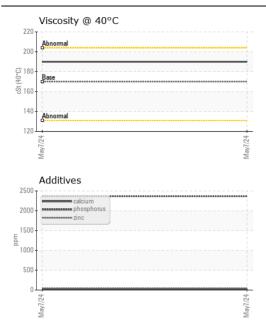
There is no indication of any contamination in the oil.

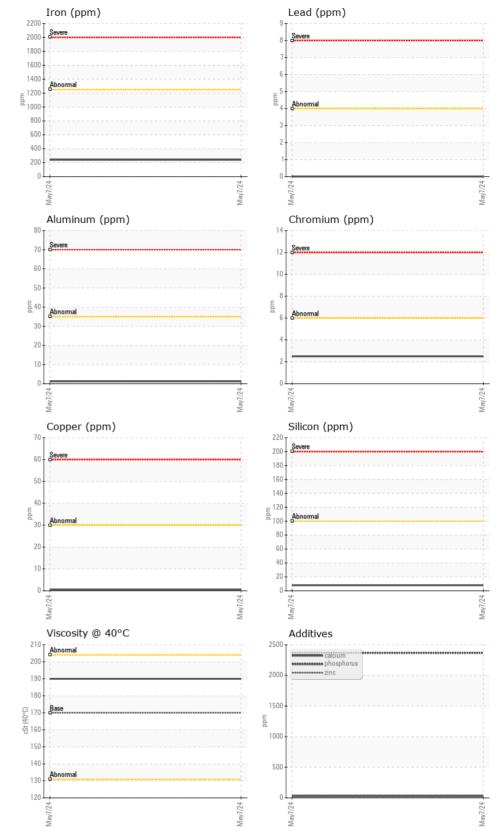
FLUID CONDITION

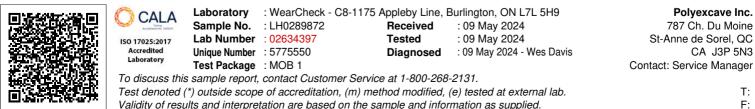
Additive levels indicate the addition of a different brand, or type of oil. The condition of the oil is acceptable for the time in service.

| Test | UOM | Method | Limit/Abn | Current | History1 | History2 |
|--|---|---|--|---|----------|----------|
| Sample Number | | Client Info | | LH0289872 | | |
| Sample Date | | Client Info | | 07 May 2024 | | |
| Machine Age | hrs | Client Info | | 447 | | |
| Oil Age | hrs | Client Info | | 0 | | |
| Filter Age | hrs | Client Info | | 0 | | |
| Oil Changed | | Client Info | | Changed | | |
| Filter Changed | | Client Info | | N/A | | |
| Sample Status | | | | NORMAL | | |
| | | | 1050 | 044 | | |
| Iron | ppm | ASTM D5185(m) | >1250 | 241 | | |
| Chromium | ppm | ASTM D5185(m) | >6 | 2 | | |
| Nickel | ppm | ASTM D5185(m) | >4 | <1 | | |
| Titanium | ppm | ASTM D5185(m) | | <1 | | |
| Silver | ppm | ASTM D5185(m) | . 05 | 0 | | |
| Aluminum | ppm | ASTM D5185(m) | >35 | 1 | | |
| Lead | ppm | ASTM D5185(m) | >4 | 0 | | |
| Copper | ppm | ASTM D5185(m) | >30 | <1 | | |
| Tin | ppm | ASTM D5185(m) | >4 | 0 | | |
| Vanadium | ppm | ASTM D5185(m) | NONE | 0 | | |
| White Metal | scalar | Visual* | NONE | NONE | | |
| Yellow Metal | scalar | Visual* | NONE | VLITE | | |
| | | | | | | |
| Silicon | ppm | ASTM D5185(m) | >100 | 8 | | |
| | | | | | | |
| Silicon | ppm | ASTM D5185(m) | >100 | 8 | | |
| Silicon Potassium | ppm | ASTM D5185(m) ASTM D5185(m) | >100 >20 | 8 4 | | |
| Silicon Potassium Water | ppm ppm | ASTM D5185(m) ASTM D5185(m) WC Method | >100 >20 >.2 | 8 4 NEG | | |
| Silicon Potassium Water Silt | ppm ppm scalar | ASTM D5185(m) ASTM D5185(m) WC Method Visual* | >100 >20 >.2 NONE | 8 4 NEG NONE | | |
| Silicon Potassium Water Silt Debris | ppm ppm scalar scalar | ASTM D5185(m) ASTM D5185(m) WC Method Visual* Visual* | >100 >20 >.2 NONE NONE | 8 4 NEG NONE NONE | | |
| Silicon Potassium Water Silt Debris Sand/Dirt | ppm ppm scalar scalar scalar | ASTM D5185(m) ASTM D5185(m) WC Method Visual* Visual* Visual* | >100 >20 >.2 NONE NONE NONE | 8 4 NEG NONE NONE NONE | | |
| Silicon Potassium Water Silt Debris Sand/Dirt Appearance | ppm ppm scalar scalar scalar scalar | ASTM D5185(m) ASTM D5185(m) WC Method Visual* Visual* Visual* Visual* | >100 >20 >.2 NONE NONE NONE NORML | 8 4 NEG NONE NONE NONE NORML | | |
| Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water | ppm ppm scalar scalar scalar scalar scalar scalar | ASTM D5185(m) ASTM D5185(m) WC Method Visual* Visual* Visual* Visual* Visual* Visual* | >100 >20 >.2 NONE NONE NONE NORML NORML | 8 4 NEG NONE NONE NONE NORML NORML NEG | | |
| Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium | ppm ppm scalar scalar scalar scalar scalar scalar | ASTM D5185(m) ASTM D5185(m) WC Method Visual* Visual* Visual* Visual* Visual* Visual* Visual* | >100 >20 >.2 NONE NONE NORML NORML >.2 | 8 4 NEG NONE NONE NORML NORML NEG 12 | | |
| Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron | ppm ppm scalar scalar scalar scalar scalar scalar gpm | ASTM D5185(m) ASTM D5185(m) WC Method Visual* Visual* Visual* Visual* Visual* Visual* ASTM D5185(m) ASTM D5185(m) | >100 >20 >.2 NONE NONE NORML >.2 | 8 4 NEG NONE NONE NORML NORML NEG 12 3 | | |
| Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium | ppm ppm scalar scalar scalar scalar scalar scalar ppm ppm | ASTM D5185(m) ASTM D5185(m) WC Method Visual* Visual* Visual* Visual* Visual* Visual* ASTM D5185(m) ASTM D5185(m) | >100 >20 >.2 NONE NONE NORML NORML >.2 | 8 4 NEG NONE NONE NORML NORML NEG 12 3 5 | | |
| Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum | ppm ppm scalar scalar scalar scalar scalar scalar ppm ppm | ASTM D5185(m) ASTM D5185(m) WC Method Visual* Visual* Visual* Visual* Visual* Visual* ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) | >100 >20 >.2 NONE NORME NORML >.2 0 0 0 | 8 4 NEG NONE NONE NORML NEG 12 3 5 0 | | |
| Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese | ppm ppm scalar scalar scalar scalar scalar scalar ppm ppm | ASTM D5185(m) ASTM D5185(m) WC Method Visual* Visual* Visual* Visual* Visual* Visual* ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) | >100 >20 >.2 NONE NONE NORML >.2 0 0 0 0 0 | 8 4 NEG NONE NONE NORML NORML NEG 12 3 5 0 8 | | |
| Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium | ppm ppm scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm | ASTM D5185(m) ASTM D5185(m) WC Method Visual* Visual* Visual* Visual* Visual* ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) | >100 >20 >.2 NONE NONE NORML >.2 0 0 0 0 0 0 0 0 0 2 | 8 4 NEG NONE NONE NORML NORML NEG 12 3 5 0 8 8 3 | | |
| Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Malybdenum Manganese Magnesium | ppm ppm scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm | ASTM D5185(m) ASTM D5185(m) WC Method Visual* Visual* Visual* Visual* Visual* ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) | >100 >20 >.2 NONE NONE NORML NORML >.2 0 0 0 0 0 0 0 1 2 1 | 8 4 NEG NONE NONE NORML NORML NEG 12 3 5 0 8 3 26 | | |
| Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium Calcium | ppm ppm scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm | ASTM D5185(m) ASTM D5185(m) WC Method Visual* Visual* Visual* Visual* Visual* Visual* ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) | >100 >20 >.2 NONE NONE NORML >.2 0 0 0 0 0 0 0 1 0 0 1 1 2 143 | 8 4 NEG NONE NONE NORML NORML NEG 12 3 5 0 8 3 2 6 2367 | | |
| Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc | ppm ppm scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm ppm | ASTM D5185(m) ASTM D5185(m) WC Method Visual* Visual* Visual* Visual* Visual* ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) | >100 >20 >.2 NONE NONE NORML >.2 0 0 0 0 0 0 0 0 2 1 2 143 <1 | 8 4 NEG NONE NONE NORML NORML NEG 12 3 5 0 8 3 5 0 8 3 26 2367 41 | | |
| Silicon Potassium Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium Calcium | ppm ppm scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm | ASTM D5185(m) ASTM D5185(m) WC Method Visual* Visual* Visual* Visual* Visual* Visual* ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) | >100 >20 >.2 NONE NONE NORML >.2 0 0 0 0 0 0 0 1 0 0 1 1 2 143 | 8 4 NEG NONE NONE NORML NORML NEG 12 3 5 0 8 3 2 6 2367 | | |

Contact/Location: Service Manager - POLSTA







Validity of results and interpretation are based on the sample and information as supplied.

Contact/Location: Service Manager - POLSTA Page 2 of 2