



PROBLEM SUMMARY

Sample Rating Trend



ISO



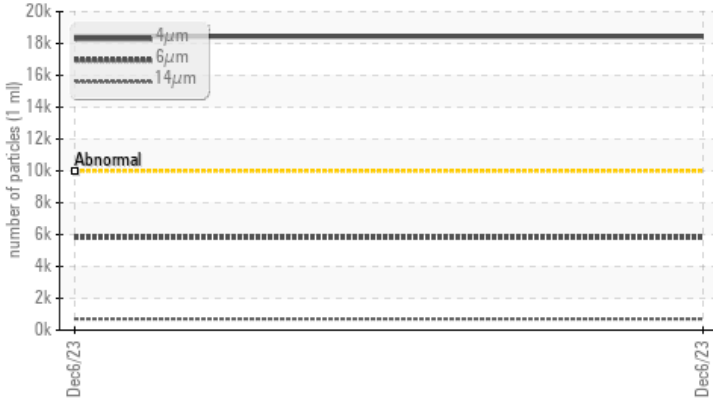
Machine Id
HITACHI 40M

Component
Hydraulic System

Fluid
MOBIL DTE ULTRA 24 ISO 32 (--- GAL)

COMPONENT CONDITION SUMMARY

▲ Particle Trend



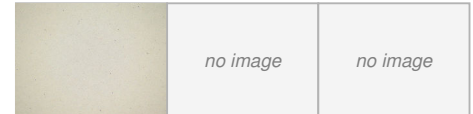
RECOMMENDATION

We recommend you service the filters on this component. Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

| Sample Status | | | ABNORMAL | --- | --- |
|-----------------|--------------|-----------|-------------------|-----|-----|
| Particles >4µm | ASTM D7647 | >10000 | ▲ 18443 | --- | --- |
| Particles >6µm | ASTM D7647 | >2500 | ▲ 5812 | --- | --- |
| Particles >14µm | ASTM D7647 | >320 | ▲ 704 | --- | --- |
| Particles >21µm | ASTM D7647 | >80 | ▲ 235 | --- | --- |
| Oil Cleanliness | ISO 4406 (c) | >20/18/15 | ▲ 21/20/17 | --- | --- |

PrtFilter



Customer Id: LINORA
Sample No.: PH0003750
Lab Number: 06029989
Test Package: PLANT



To manage this report scan the QR code

To discuss the diagnosis or test data:
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jhester@wearcheckusa.com

To change component or sample information:
Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

| Action | Status | Date | Done By | Description |
|---------------|--------|------|---------|---|
| Change Filter | --- | --- | ? | We recommend you service the filters on this component. |

HISTORICAL DIAGNOSIS



OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id
HITACHI 40M

Component
Hydraulic System

Fluid
MOBIL DTE ULTRA 24 ISO 32 (--- GAL)

DIAGNOSIS

▲ Recommendation

We recommend you service the filters on this component. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

▲ Contamination

There is a high amount of particulates present in the oil.

Fluid Condition

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

| SAMPLE INFORMATION | | method | limit/base | current | history1 | history2 |
|--------------------|-------------|-------------|------------|--------------------|----------|----------|
| Sample Number | Client Info | | | PH0003750 | --- | --- |
| Sample Date | Client Info | | | 06 Dec 2023 | --- | --- |
| Machine Age | yrs | Client Info | | 0 | --- | --- |
| Oil Age | yrs | Client Info | | 1 | --- | --- |
| Oil Changed | Client Info | | | N/A | --- | --- |
| Sample Status | | | | ABNORMAL | --- | --- |

| CONTAMINATION | | method | limit/base | current | history1 | history2 |
|---------------|-----------|--------|------------|------------|----------|----------|
| Water | WC Method | | >0.05 | NEG | --- | --- |

| WEAR METALS | | method | limit/base | current | history1 | history2 |
|-------------|-----|-------------|------------|--------------|----------|----------|
| Iron | ppm | ASTM D5185m | >20 | 2 | --- | --- |
| Chromium | ppm | ASTM D5185m | >20 | 0 | --- | --- |
| Nickel | ppm | ASTM D5185m | >20 | 0 | --- | --- |
| Titanium | ppm | ASTM D5185m | | <1 | --- | --- |
| Silver | ppm | ASTM D5185m | | 0 | --- | --- |
| Aluminum | ppm | ASTM D5185m | >20 | <1 | --- | --- |
| Lead | ppm | ASTM D5185m | >20 | 0 | --- | --- |
| Copper | ppm | ASTM D5185m | >20 | <1 | --- | --- |
| Tin | ppm | ASTM D5185m | >20 | 0 | --- | --- |
| Vanadium | ppm | ASTM D5185m | | 0 | --- | --- |
| Cadmium | ppm | ASTM D5185m | | 0 | --- | --- |

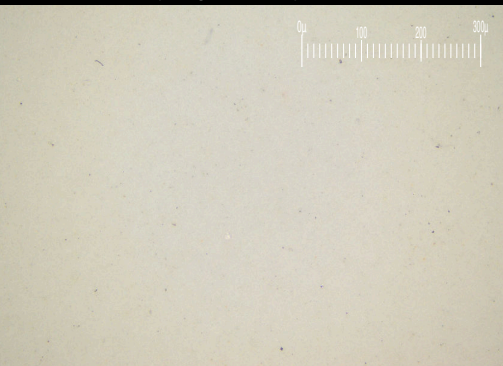
| ADDITIVES | | method | limit/base | current | history1 | history2 |
|------------|-----|-------------|------------|----------|----------|----------|
| Boron | ppm | ASTM D5185m | | 0 | --- | --- |
| Barium | ppm | ASTM D5185m | | 0 | --- | --- |
| Molybdenum | ppm | ASTM D5185m | | 2 | --- | --- |
| Manganese | ppm | ASTM D5185m | | 0 | --- | --- |
| Magnesium | ppm | ASTM D5185m | | 0 | --- | --- |
| Calcium | ppm | ASTM D5185m | | 0 | --- | --- |
| Phosphorus | ppm | ASTM D5185m | | 0 | --- | --- |
| Zinc | ppm | ASTM D5185m | | 0 | --- | --- |
| Sulfur | ppm | ASTM D5185m | | 0 | --- | --- |

| CONTAMINANTS | | method | limit/base | current | history1 | history2 |
|--------------|-----|-------------|------------|--------------|----------|----------|
| Silicon | ppm | ASTM D5185m | >15 | <1 | --- | --- |
| Sodium | ppm | ASTM D5185m | | 0 | --- | --- |
| Potassium | ppm | ASTM D5185m | >20 | 2 | --- | --- |

| FLUID CLEANLINESS | | method | limit/base | current | history1 | history2 |
|-------------------|--|--------------|------------|-------------------|----------|----------|
| Particles >4µm | | ASTM D7647 | >10000 | ▲ 18443 | --- | --- |
| Particles >6µm | | ASTM D7647 | >2500 | ▲ 5812 | --- | --- |
| Particles >14µm | | ASTM D7647 | >320 | ▲ 704 | --- | --- |
| Particles >21µm | | ASTM D7647 | >80 | ▲ 235 | --- | --- |
| Particles >38µm | | ASTM D7647 | >20 | 11 | --- | --- |
| Particles >71µm | | ASTM D7647 | >4 | 1 | --- | --- |
| Oil Cleanliness | | ISO 4406 (c) | >20/18/15 | ▲ 21/20/17 | --- | --- |

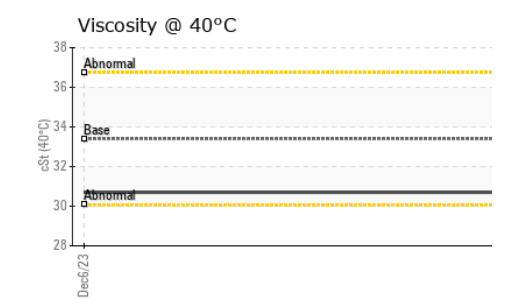
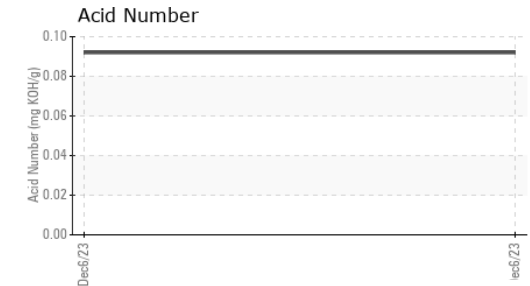
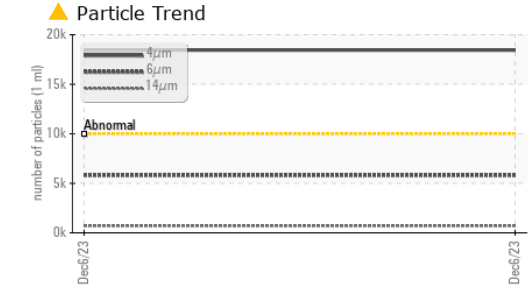
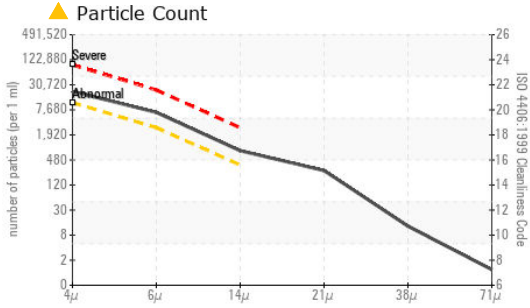
| FLUID DEGRADATION | | method | limit/base | current | history1 | history2 |
|-------------------|----------|------------|------------|--------------|----------|----------|
| Acid Number (AN) | mg KOH/g | ASTM D8045 | | 0.092 | --- | --- |

Particle Filter (Magn: 200 x)





OIL ANALYSIS REPORT



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PH0003750 **Received** : 08 Dec 2023
Lab Number : 06029989 **Diagnosed** : 13 Dec 2023
Unique Number : 10779780 **Diagnostician** : Jonathan Hester
Test Package : PLANT (Additional Tests: PrtFilter)

LINDE ADVANCED MATERIALS TECHNOLOGIES
 542 ROUTE 303
 ORANGEBURG, NY
 US 10920
 Contact: THOMAS BIGGIE
 thomas.biggie@linde.com

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)

| VISUAL | method | limit/base | current | history1 | history2 | |
|------------------|--------|------------|---------|----------|----------|-----|
| White Metal | scalar | *Visual | NONE | NONE | --- | --- |
| Yellow Metal | scalar | *Visual | NONE | NONE | --- | --- |
| Precipitate | scalar | *Visual | NONE | NONE | --- | --- |
| Silt | scalar | *Visual | NONE | NONE | --- | --- |
| Debris | scalar | *Visual | NONE | NONE | --- | --- |
| Sand/Dirt | scalar | *Visual | NONE | NONE | --- | --- |
| Appearance | scalar | *Visual | NORML | NORML | --- | --- |
| Odor | scalar | *Visual | NORML | NORML | --- | --- |
| Emulsified Water | scalar | *Visual | >0.05 | NEG | --- | --- |
| Free Water | scalar | *Visual | | NEG | --- | --- |

| FLUID PROPERTIES | method | limit/base | current | history1 | history2 | |
|------------------|--------|------------|---------|----------|----------|-----|
| Visc @ 40°C | cSt | ASTM D445 | 33.4 | 30.7 | --- | --- |

| SAMPLE IMAGES | method | limit/base | current | history1 | history2 |
|---------------|--------|------------|---------|----------|----------|
| Color | | | | | |
| Bottom | | | | | |
| PrtFilter | | | | | |

GRAPHS

