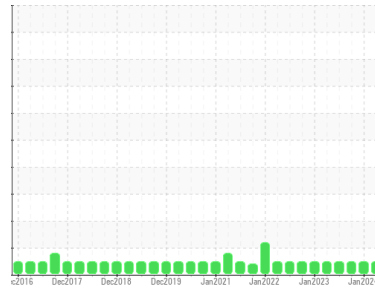




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area
RING CONTAINER
 Machine Id
EXTRUDER N - MAIN PLANT
 Component
Hydraulic System
 Fluid
{not provided} (--- GAL)

DIAGNOSIS

Recommendation

Little or no information is provided as to the component and lubricant being tested. Recommendations are therefore generic in nature and may not apply to the current application. Please forward information as to equipment type, reservoir capacity, lubricant type and any pertinent information to allow for a more accurate assessment. Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. Please specify the brand, type, and viscosity of the oil on your next sample.

Wear

All component wear rates are normal.

Contamination

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

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 | WC0892741 | WC0891191 | WC0855532 |
| Sample Date | Client Info | 02 Apr 2024 | 25 Jan 2024 | 18 Oct 2023 |
| Machine Age | hrs | 0 | 0 | 0 |
| Oil Age | hrs | 0 | 0 | 0 |
| Oil Changed | Client Info | Not Changed | Not Changed | Not Changed |
| Sample Status | | NORMAL | NORMAL | NORMAL |

CONTAMINATION

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

WEAR METALS

| method | limit/base | current | history1 | history2 | |
|----------|------------|-----------------|--------------|----------|----|
| Iron | ppm | ASTM D5185m >20 | 2 | 2 | 5 |
| Chromium | ppm | ASTM D5185m >20 | 0 | 0 | <1 |
| Nickel | ppm | ASTM D5185m >20 | 0 | 0 | 0 |
| Titanium | ppm | ASTM D5185m | 0 | <1 | 0 |
| Silver | ppm | ASTM D5185m | 0 | 0 | 0 |
| Aluminum | ppm | ASTM D5185m >20 | 0 | 0 | <1 |
| Lead | ppm | ASTM D5185m >20 | 0 | 0 | 0 |
| Copper | ppm | ASTM D5185m >20 | <1 | <1 | 3 |
| Tin | ppm | ASTM D5185m >20 | <1 | 0 | <1 |
| Vanadium | ppm | ASTM D5185m | <1 | 0 | 0 |
| Cadmium | ppm | ASTM D5185m | 0 | 0 | <1 |

ADDITIVES

| method | limit/base | current | history1 | history2 | |
|------------|------------|-------------|--------------|----------|------|
| Boron | ppm | ASTM D5185m | 0 | 0 | 0 |
| Barium | ppm | ASTM D5185m | 0 | 0 | <1 |
| Molybdenum | ppm | ASTM D5185m | 144 | 151 | 128 |
| Manganese | ppm | ASTM D5185m | <1 | 0 | 0 |
| Magnesium | ppm | ASTM D5185m | 0 | 0 | <1 |
| Calcium | ppm | ASTM D5185m | 43 | 33 | 40 |
| Phosphorus | ppm | ASTM D5185m | 452 | 459 | 417 |
| Zinc | ppm | ASTM D5185m | 424 | 415 | 397 |
| Sulfur | ppm | ASTM D5185m | 1955 | 1627 | 1693 |

CONTAMINANTS

| method | limit/base | current | history1 | history2 | |
|-----------|------------|-----------------|--------------|----------|----|
| Silicon | ppm | ASTM D5185m >15 | 2 | 2 | 4 |
| Sodium | ppm | ASTM D5185m | <1 | 0 | <1 |
| Potassium | ppm | ASTM D5185m >20 | 0 | 0 | <1 |

FLUID CLEANLINESS

| method | limit/base | current | history1 | history2 |
|-----------------|------------------------|-----------------|----------|----------|
| Particles >4µm | ASTM D7647 >5000 | 1029 | 711 | 1440 |
| Particles >6µm | ASTM D7647 >1300 | 87 | 98 | 288 |
| Particles >14µm | ASTM D7647 >160 | 9 | 4 | 19 |
| Particles >21µm | ASTM D7647 >40 | 3 | 1 | 4 |
| Particles >38µm | ASTM D7647 >10 | 0 | 0 | 0 |
| Particles >71µm | ASTM D7647 >3 | 0 | 0 | 0 |
| Oil Cleanliness | ISO 4406 (c) >19/17/14 | 17/14/10 | 17/14/9 | 18/15/11 |

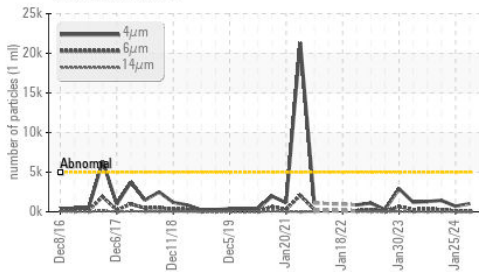
FLUID DEGRADATION

| method | limit/base | current | history1 | history2 | |
|------------------|------------|------------|-------------|----------|------|
| Acid Number (AN) | mg KOH/g | ASTM D8045 | 0.67 | 0.689 | 0.54 |

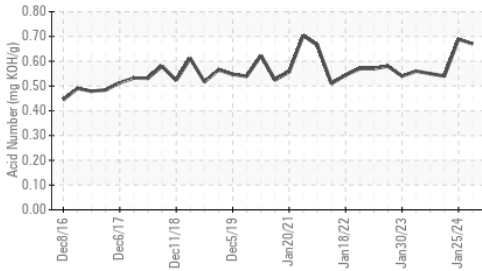


OIL ANALYSIS REPORT

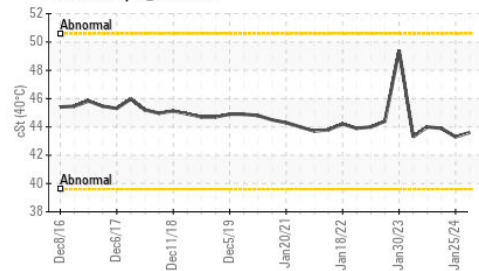
Particle Trend



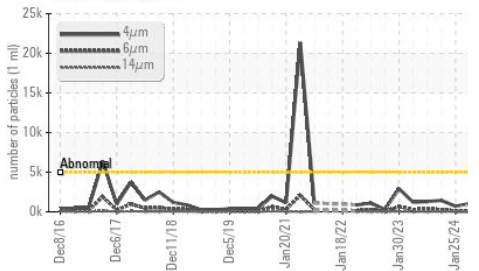
Acid Number



Viscosity @ 40°C



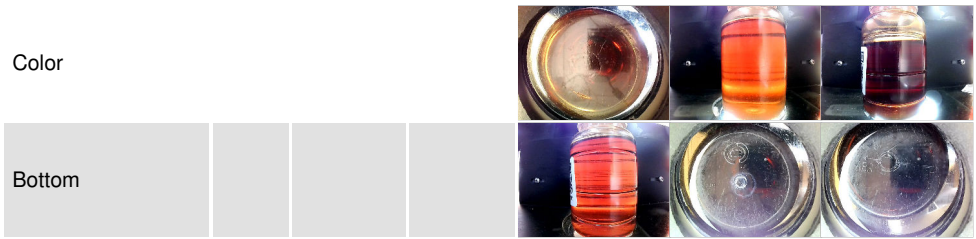
Particle Trend



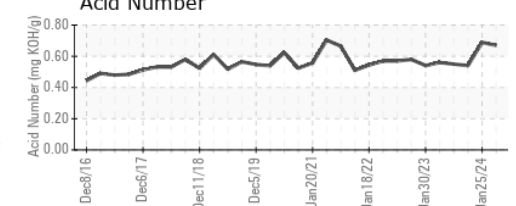
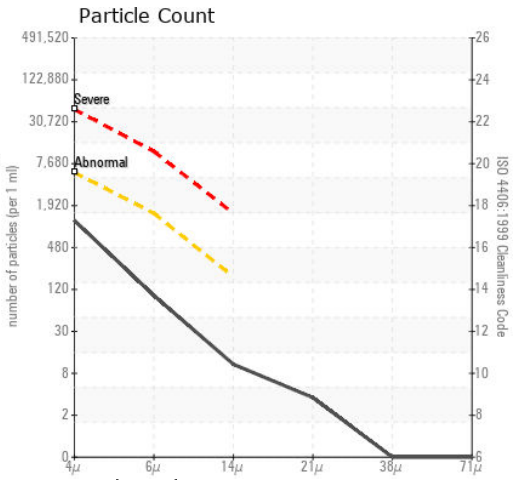
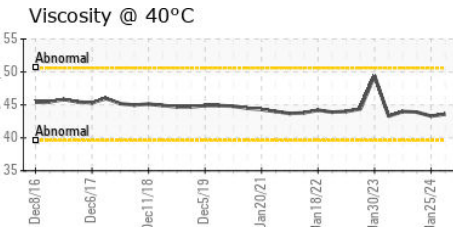
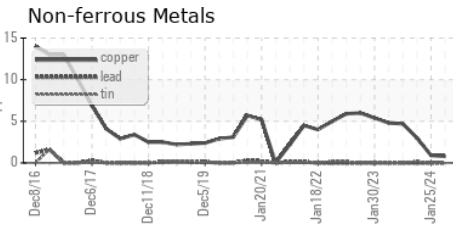
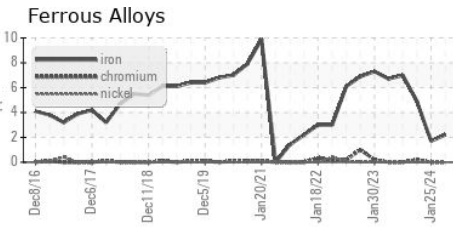
| VISUAL | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| White Metal | scalar | *Visual | NONE | NONE | NONE |
| Yellow Metal | scalar | *Visual | NONE | NONE | NONE |
| Precipitate | scalar | *Visual | NONE | NONE |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

| FLUID PROPERTIES | method | limit/base | current | history1 | history2 |
|------------------|--------|------------|---------|----------|----------|
| Visc @ 40°C | cSt | ASTM D445 | 43.6 | 43.3 | 43.9 |

| SAMPLE IMAGES | method | limit/base | current | history1 | history2 |
|---------------|--------|------------|---------|----------|----------|
|---------------|--------|------------|---------|----------|----------|



GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0892741 **Received** : 09 Apr 2024
Lab Number : 06143008 **Tested** : 10 Apr 2024
Unique Number : 10967816 **Diagnosed** : 10 Apr 2024 - Wes Davis
Test Package : IND 2

MOTOR TECHNOLOGY INC
 515 WILLOW SPRINGS LN
 YORK, PA
 US 17406
 Contact: Bill Trimmer
 btrimmer@motortechinc.com
 T: (717)266-4045
 F:

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)