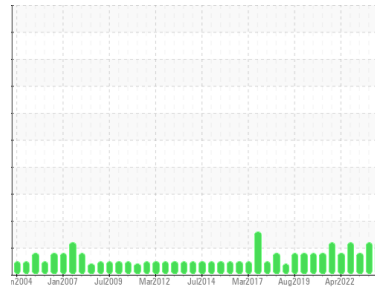




# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area

WCR [100000107837]

Machine Id

DIXNGEN3BRGNDE

Component

Non-Drive End Bearing

Fluid

MOBIL DTE OIL HVY MEDIUM (25 LTR)

## DIAGNOSIS

### Recommendation

We recommend you service the filters on this component. We recommend an early resample to monitor this condition.

### Wear

All component wear rates are normal.

### Contamination

There is a moderate amount of silt (particulates < 14 microns in size) present in the oil. The water content is negligible.

### Fluid Condition

The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

## SAMPLE INFORMATION

|               | method      | limit/base  | current     | history1    | history2    |
|---------------|-------------|-------------|-------------|-------------|-------------|
| Sample Number | Client Info |             | WC0908348   | WC0794336   | WC0794332   |
| Sample Date   | Client Info |             | 12 Mar 2024 | 17 Oct 2023 | 06 Mar 2023 |
| Machine Age   | hrs         | Client Info | 125966      | 125712      | 124591      |
| Oil Age       | hrs         | Client Info | 1375        | 1121        | 1712        |
| Oil Changed   | Client Info |             | Changed     | Filtered    | Changed     |
| Sample Status |             |             | ABNORMAL    | ABNORMAL    | ATTENTION   |

## WEAR METALS

|           | method      | limit/base        | current | history1 | history2 |
|-----------|-------------|-------------------|---------|----------|----------|
| PQ        | ASTM D8184* |                   | 0       | 0        | 0        |
| Iron      | ppm         | ASTM D5185(m) >20 | 0       | 0        | 0        |
| Chromium  | ppm         | ASTM D5185(m) >20 | 0       | 0        | 0        |
| Nickel    | ppm         | ASTM D5185(m) >20 | 0       | 0        | 0        |
| Titanium  | ppm         | ASTM D5185(m)     | 0       | 0        | 0        |
| Silver    | ppm         | ASTM D5185(m)     | 0       | <1       | 0        |
| Aluminum  | ppm         | ASTM D5185(m) >20 | 0       | 0        | 0        |
| Lead      | ppm         | ASTM D5185(m) >20 | <1      | 1        | 1        |
| Copper    | ppm         | ASTM D5185(m) >20 | 2       | 2        | 2        |
| Tin       | ppm         | ASTM D5185(m) >20 | 0       | 0        | 0        |
| Antimony  | ppm         | ASTM D5185(m)     | 0       | 0        | <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) | 0       | <1       | <1       |
| Barium     | ppm    | ASTM D5185(m) | 0       | <1       | 0        |
| Molybdenum | ppm    | ASTM D5185(m) | 0       | 0        | 0        |
| Manganese  | ppm    | ASTM D5185(m) | 0       | 0        | 0        |
| Magnesium  | ppm    | ASTM D5185(m) | <1      | 0        | <1       |
| Calcium    | ppm    | ASTM D5185(m) | <1      | <1       | 1        |
| Phosphorus | ppm    | ASTM D5185(m) | 126     | 132      | 138      |
| Zinc       | ppm    | ASTM D5185(m) | 82      | 84       | 83       |
| Sulfur     | ppm    | ASTM D5185(m) | 1709    | 1753     | 1181     |
| Lithium    | ppm    | ASTM D5185(m) | <1      | <1       | <1       |

## CONTAMINANTS

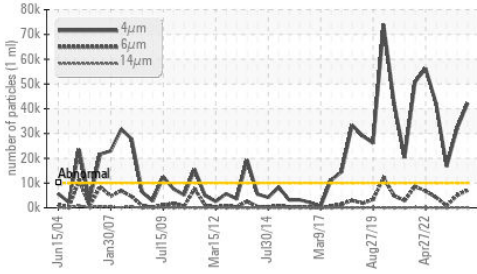
|           | method | limit/base        | current | history1 | history2 |
|-----------|--------|-------------------|---------|----------|----------|
| Silicon   | ppm    | ASTM D5185(m) >15 | 0       | 2        | 1        |
| Sodium    | ppm    | ASTM D5185(m)     | 0       | 0        | <1       |
| Potassium | ppm    | ASTM D5185(m) >20 | 0       | 0        | <1       |
| Water     | %      | ASTM D6304* >2    | 0.001   | 0.00     | 0.001    |
| ppm Water | ppm    | ASTM D6304*       | 4       | 0.00     | 4.5      |

## FLUID CLEANLINESS

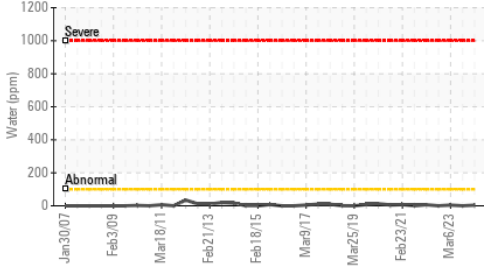
|                 | method     | limit/base | current | history1 | history2 |
|-----------------|------------|------------|---------|----------|----------|
| Particles >4µm  | ASTM D7647 | >10000     | ▲ 42270 | ▲ 32033  | ● 16710  |
| Particles >6µm  | ASTM D7647 | >2500      | ▲ 7096  | ● 4945   | ● 829    |
| Particles >14µm | ASTM D7647 | >160       | 134     | 71       | 6        |
| Particles >21µm | ASTM D7647 | >40        | 20      | 9        | 1        |
| Particles >38µm | ASTM D7647 | >10        | 1       | 1        | 0        |
| Particles >71µm | ASTM D7647 | >3         | 0       | 1        | 0        |

|                 |              |           |            |            |            |
|-----------------|--------------|-----------|------------|------------|------------|
| Oil Cleanliness | ISO 4406 (c) | >20/18/14 | ▲ 23/20/14 | ▲ 22/19/13 | ● 21/17/10 |
|-----------------|--------------|-----------|------------|------------|------------|

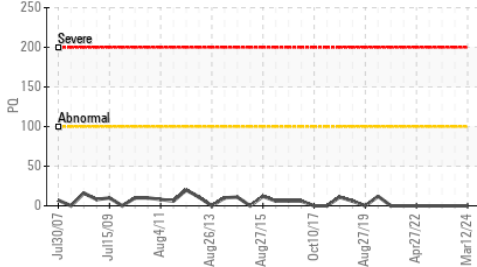
### Particle Trend



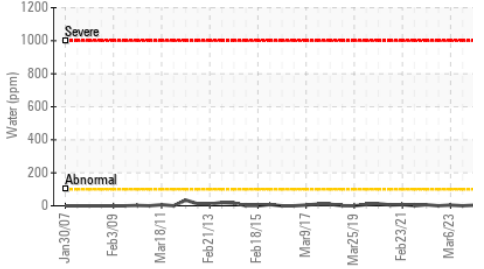
### Water (KF)



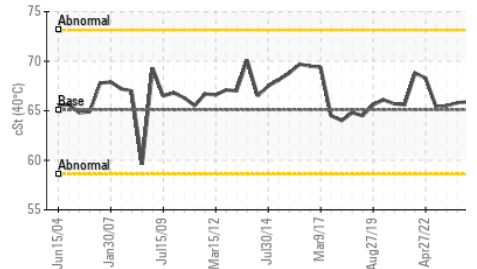
### PQ



### Water (KF)



### Viscosity @ 40°C



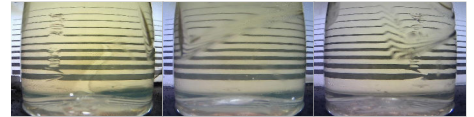
| FLUID DEGRADATION |          | method     | limit/base | current     | history1 | history2 |
|-------------------|----------|------------|------------|-------------|----------|----------|
| Acid Number (AN)  | mg KOH/g | ASTM D974* |            | <b>0.10</b> | 0.14     | 0.10     |

| VISUAL           |        | method  | limit/base | current      | history1 | history2 |
|------------------|--------|---------|------------|--------------|----------|----------|
| White Metal      | scalar | Visual* | NONE       | <b>NONE</b>  | NONE     | NONE     |
| Yellow Metal     | scalar | Visual* | NONE       | <b>NONE</b>  | NONE     | NONE     |
| Precipitate      | scalar | Visual* | NONE       | <b>NONE</b>  | NONE     | NONE     |
| Silt             | scalar | Visual* | NONE       | <b>NONE</b>  | NONE     | NONE     |
| Debris           | scalar | Visual* | NONE       | <b>NONE</b>  | NONE     | NONE     |
| Sand/Dirt        | scalar | Visual* | NONE       | <b>NONE</b>  | NONE     | NONE     |
| Appearance       | scalar | Visual* | NORML      | <b>NORML</b> | NORML    | NORML    |
| Odor             | scalar | Visual* | NORML      | <b>NORML</b> | NORML    | NORML    |
| Emulsified Water | scalar | Visual* | >2         | <b>NEG</b>   | NEG      | NEG      |
| Free Water       | scalar | Visual* |            | <b>NEG</b>   | NEG      | NEG      |

| FLUID PROPERTIES |     | method        | limit/base | current     | history1 | history2 |
|------------------|-----|---------------|------------|-------------|----------|----------|
| Visc @ 40°C      | cSt | ASTM D7279(m) | 65.1       | <b>65.9</b> | 65.8     | 65.5     |

### SAMPLE IMAGES

Color

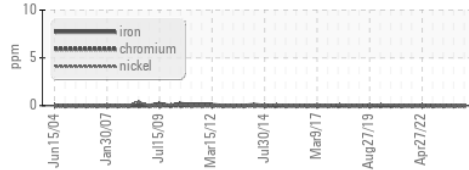


Bottom

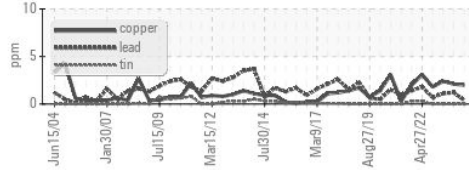


### GRAPHS

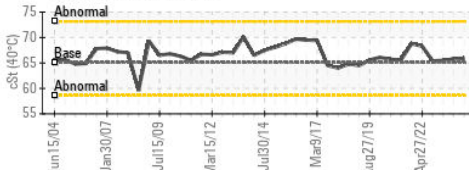
#### Ferrous Alloys



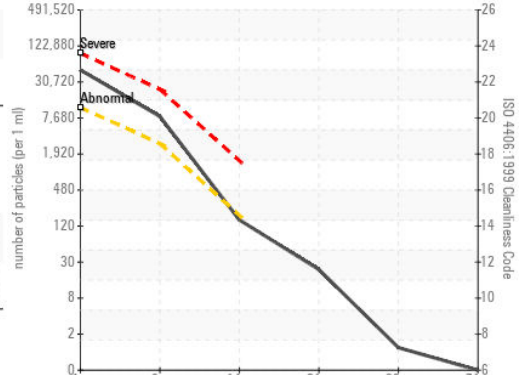
#### Non-ferrous Metals



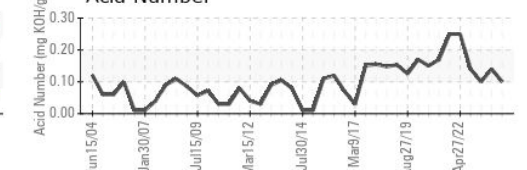
#### Viscosity @ 40°C



#### Particle Count



#### Acid Number



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0908348  
**Lab Number** : 02627013  
**Unique Number** : 5760145  
**Test Package** : IND 2 ( Additional Tests: KF, PQ, PrcCount, TAN Man )

**ALGONQUIN POWER SYSTEMS INC.**  
 354 DAVIS ROAD  
 OAKVILLE, ON  
 CA L6J 2X1

*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.*

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 T: (905)465-7065  
 F: x: