

OIL ANALYSIS REPORT

Area
Chem-Ecol A2406061

Hydraulic System

{not provided} (--- GAL)

Sample Rating Trend NORMAL

Recommendation

We certify that this oil is clean, that the additives are at acceptable levels, and that it is suitable for use.

| | Jun2024 | | | | | | | | |
|------------------|-------------------|-----------------------------|----------------|--------------|----------|----------|--|--|--|
| SAMPLE INFORM | /ATION | method | limit/base | current | history1 | history2 | | | |
| | /// TIOI T | | mmodasc | | | motoryz | | | |
| Batch # | | Client Info | | 2024 06 9030 | | | | | |
| Department | | Client Info | | Production | | | | | |
| Sample From | | Client Info | | Machine | | | | | |
| Production Stage | | Client Info | | Final | | | | | |
| Sent to WC | | Client Info | | 06/10/2024 | | | | | |
| Sample Number | | Client Info | | E30002361 | | | | | |
| Sample Date | | Client Info | | 07 Jun 2024 | | | | | |
| Machine Age | hrs | Client Info | | 0 | | | | | |
| Oil Age | hrs | Client Info | | 0 | | | | | |
| Oil Changed | | Client Info | | N/A | | | | | |
| Sample Status | | | | NORMAL | | | | | |
| WEAR METALS | | method | limit/base | current | history1 | history2 | | | |
| Iron | ppm | ASTM D5185(m) | >20 | 24 | | | | | |
| Chromium | ppm | ASTM D5185(m) | >20 | 0 | | | | | |
| Nickel | ppm | ASTM D5185(m) | >20 | <1 | | | | | |
| Titanium | ppm | ASTM D5185(m) | | 0 | | | | | |
| Silver | ppm | ASTM D5185(m) | | 0 | | | | | |
| Aluminum | ppm | ASTM D5185(m) | >20 | 3 | | | | | |
| Lead | ppm | ASTM D5185(m) | >20 | 0 | | | | | |
| Copper | ppm | ASTM D5185(m) | | 11 | | | | | |
| Tin | ppm | ASTM D5185(m) | >20 | 0 | | | | | |
| Antimony | ppm | ASTM D5185(m) | <i>></i> 20 | 0 | | | | | |
| Vanadium | | ASTM D5185(m) | | 0 | | | | | |
| | ppm | ASTM D5185(m) | | 0 | | | | | |
| Beryllium | ppm | . , | | - | | | | | |
| Cadmium | ppm | ASTM D5185(m) | | 0 | | | | | |
| ADDITIVES | | method | limit/base | current | history1 | history2 | | | |
| Boron | ppm | ASTM D5185(m) | | <1 | | | | | |
| Barium | ppm | ASTM D5185(m) | | 2 | | | | | |
| Molybdenum | ppm | ASTM D5185(m) | | 0 | | | | | |
| Manganese | ppm | ASTM D5185(m) | | 2 | | | | | |
| Magnesium | ppm | ASTM D5185(m) | | 8 | | | | | |
| Calcium | ppm | ASTM D5185(m) | | 153 | | | | | |
| Phosphorus | ppm | ASTM D5185(m) | | 561 | | | | | |
| Zinc | ppm | ASTM D5185(m) | | 642 | | | | | |
| Sulfur | ppm | ASTM D5185(m) | | 7236 | | | | | |
| Lithium | ppm | ASTM D5185(m) | | <1 | | | | | |
| CONTAMINANTS | | method | limit/base | current | history1 | history2 | | | |
| Silicon | ppm | ASTM D5185(m) | >15 | 2 | | | | | |
| Sodium | ppm | ASTM D5185(m) | | 5 | | | | | |
| Potassium | ppm | ASTM D5185(m) | >20 | <1 | | | | | |
| Water | % | ASTM D5103(III) ASTM D6304* | >0.05 | 0.005 | | | | | |
| vvaloi | 70 | AO 11VI D0304 | 20.03 | 0.005 | | | | | |

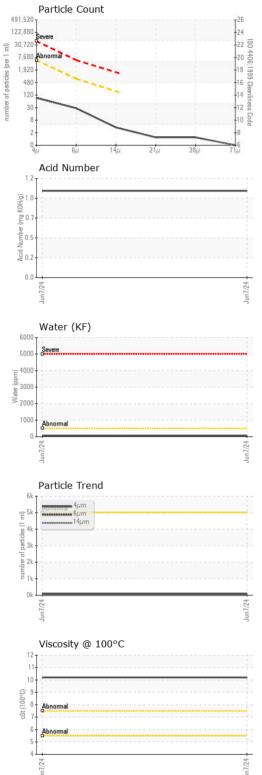
ppm Water

ppm ASTM D6304* >500

60



OIL ANALYSIS REPORT



| FLUID CLEANLIN | ESS | method | limit/base | current | history1 | history2 |
|----------------------|----------|---------------|------------|---------|----------|----------|
| Particles >4µm | | ASTM D7647 | >5000 | 77 | | |
| Particles >6µm | | ASTM D7647 | >640 | 25 | | |
| Particles >14µm | | ASTM D7647 | >160 | 3 | | |
| Particles >21µm | | ASTM D7647 | >40 | 1 | | |
| Particles >38µm | | ASTM D7647 | >10 | 1 | | |
| Particles >71µm | | ASTM D7647 | >3 | 0 | | |
| Oil Cleanliness | | ISO 4406 (c) | >19/16/14 | 13/12/9 | | |
| FLUID DEGRADA | TION | method | limit/base | current | history1 | history2 |
| Acid Number (AN) | mg KOH/g | ASTM D974* | | 1.05 | | |
| 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 PROPERT | IES | method | limit/base | current | history1 | history2 |
| Visc @ 40°C | cSt | ASTM D7279(m) | | 82.7 | | |
| Visc @ 100°C | cSt | ASTM D7279(m) | | 10.2 | | |
| Viscosity Index (VI) | Scale | ASTM D2270* | | 104 | | |
| SAMPLE IMAGES | 3 | method | limit/base | current | history1 | history2 |
| Color | | | | | no image | no image |
| Bottom | | | | | no image | no image |





Laboratory

Sample No.

Lab Number : 02641407 Unique Number : 5798946

: E30002361

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Received : 12 Jun 2024

Tested : 13 Jun 2024 Diagnosed : 14 Jun 2024 - Tatiana Sorkina

Test Package : IND 2 (Additional Tests: KF, KV100, VI) To discuss this sample report, contact Customer Service at 1-905-372-2251.

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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