



OIL ANALYSIS REPORT

Area
Concorde Precision Machining - 888105
 Machine Id
RB059
 Component
Unknown Component
 Fluid
SHELL TONNA 220 (--- GAL)

Sample Rating Trend



DIAGNOSIS

- Recommendation**
 The sample submitted is 2 times dirtier than the ISO dirt count recommendation of 19/16/14.
- Contamination**
 Oil Cleanliness are abnormally high. Particles >6µm are abnormally high. Particles >14µm are notably high. Particles >4µm are notably high.

SAMPLE INFORMATION

| | method | limit/base | current | history1 | history2 |
|------------------|-------------|-------------|--------------------|----------|----------|
| Department | Client Info | | Sales | --- | --- |
| Sample From | Client Info | | Drum | --- | --- |
| Production Stage | Client Info | | Virgin | --- | --- |
| Sent to WC | Client Info | | 07/10/2024 | --- | --- |
| Sample Number | Client Info | | E30002606 | --- | --- |
| Sample Date | Client Info | | 05 Jul 2024 | --- | --- |
| Machine Age | hrs | Client Info | 0 | --- | --- |
| Oil Age | hrs | Client Info | 0 | --- | --- |
| Oil Changed | Client Info | | N/A | --- | --- |
| Sample Status | | | ABNORMAL | --- | --- |

WEAR METALS

| | method | limit/base | current | history1 | history2 |
|-----------|--------|---------------|--------------|----------|----------|
| Iron | ppm | ASTM D5185(m) | <1 | --- | --- |
| Chromium | ppm | ASTM D5185(m) | 0 | --- | --- |
| Nickel | ppm | ASTM D5185(m) | <1 | --- | --- |
| Titanium | ppm | ASTM D5185(m) | 0 | --- | --- |
| Silver | ppm | ASTM D5185(m) | 0 | --- | --- |
| Aluminum | ppm | ASTM D5185(m) | <1 | --- | --- |
| Lead | ppm | ASTM D5185(m) | 0 | --- | --- |
| Copper | ppm | ASTM D5185(m) | <1 | --- | --- |
| Tin | ppm | ASTM D5185(m) | 0 | --- | --- |
| Antimony | ppm | ASTM D5185(m) | 0 | --- | --- |
| Vanadium | ppm | ASTM D5185(m) | 0 | --- | --- |
| Beryllium | ppm | ASTM D5185(m) | 0 | --- | --- |
| Cadmium | ppm | ASTM D5185(m) | 0 | --- | --- |

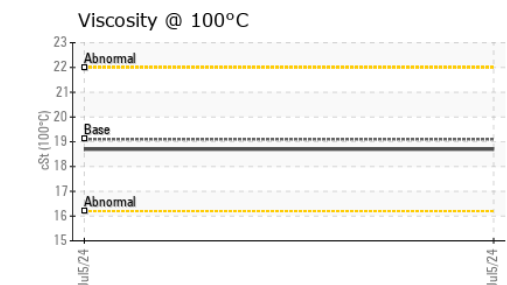
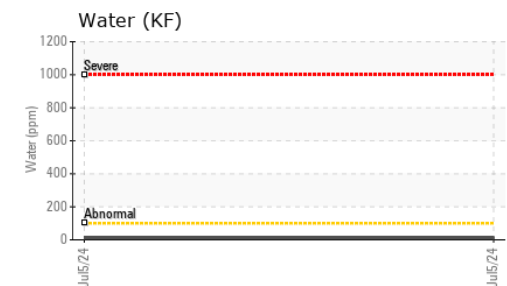
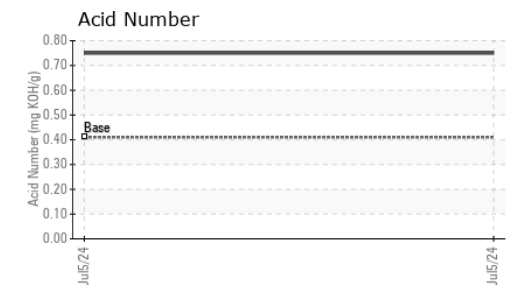
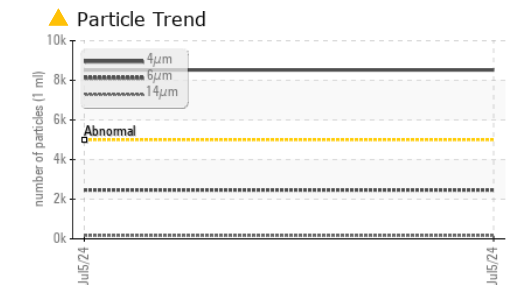
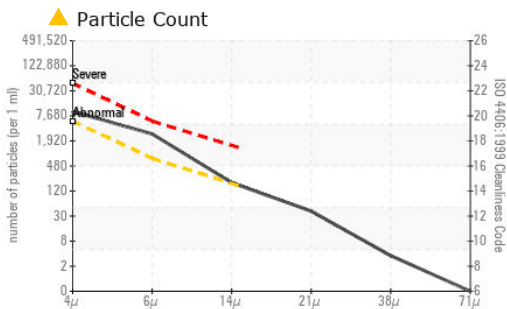
ADDITIVES

| | method | limit/base | current | history1 | history2 |
|------------|--------|---------------|--------------|----------|----------|
| Boron | ppm | ASTM D5185(m) | <1 | --- | --- |
| Barium | ppm | ASTM D5185(m) | 0 | --- | --- |
| Molybdenum | ppm | ASTM D5185(m) | 0 | --- | --- |
| Manganese | ppm | ASTM D5185(m) | 0 | --- | --- |
| Magnesium | ppm | ASTM D5185(m) | <1 | --- | --- |
| Calcium | ppm | ASTM D5185(m) | 2 | --- | --- |
| Phosphorus | ppm | ASTM D5185(m) | 222 | --- | --- |
| Zinc | ppm | ASTM D5185(m) | 2 | --- | --- |
| Sulfur | ppm | ASTM D5185(m) | 3469 | --- | --- |
| Lithium | ppm | ASTM D5185(m) | <1 | --- | --- |

CONTAMINANTS

| | method | limit/base | current | history1 | history2 |
|-----------|--------|---------------|---------------|----------|----------|
| Silicon | ppm | ASTM D5185(m) | 2 | --- | --- |
| Sodium | ppm | ASTM D5185(m) | <1 | --- | --- |
| Potassium | ppm | ASTM D5185(m) | >20 | --- | --- |
| Water | % | ASTM D6304* | 0.001 | --- | --- |
| ppm Water | ppm | ASTM D6304* | 12 | --- | --- |

OIL ANALYSIS REPORT



| FLUID CLEANLINESS | method | limit/base | current | history1 | history2 |
|-------------------|--------------|------------|-------------------|----------|----------|
| Particles >4µm | ASTM D7647 | >5000 | ● 8522 | --- | --- |
| Particles >6µm | ASTM D7647 | >640 | ▲ 2464 | --- | --- |
| Particles >14µm | ASTM D7647 | >160 | ● 168 | --- | --- |
| Particles >21µm | ASTM D7647 | >40 | 35 | --- | --- |
| Particles >38µm | ASTM D7647 | >10 | 3 | --- | --- |
| Particles >71µm | ASTM D7647 | >3 | 0 | --- | --- |
| Oil Cleanliness | ISO 4406 (c) | >19/16/14 | ▲ 20/18/15 | --- | --- |

| FLUID DEGRADATION | method | limit/base | current | history1 | history2 | |
|-------------------|----------|------------|---------|-------------|----------|-----|
| Acid Number (AN) | mg KOH/g | ASTM D974* | 0.41 | 0.75 | --- | --- |

| 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* | | NEG | --- | --- |
| Free Water | scalar | Visual* | | NEG | --- | --- |

| FLUID PROPERTIES | method | limit/base | current | history1 | history2 | |
|----------------------|--------|---------------|---------|-------------|----------|-----|
| Visc @ 40°C | cSt | ASTM D7279(m) | 217.1 | 217 | --- | --- |
| Visc @ 100°C | cSt | ASTM D7279(m) | 19.1 | 18.7 | --- | --- |
| Viscosity Index (VI) | Scale | ASTM D2270* | 99 | 95 | --- | --- |

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

| | | | | | |
|--------|--|--|--|----------|----------|
| Color | | | | no image | no image |
| Bottom | | | | no image | no image |



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : E30002606
Lab Number : **02647496**
Unique Number : 5813048
Test Package : IND 2 (Additional Tests: KF, KV100, PrtCount, TAN Man, VI)

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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.