



# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area

**BEKEVAR [46004111]**

Machine Id

**D622344 - SHELL OMALA S5 WIND 320 (S/N CM0073)**

Component

**New (Unused) Oil**

Fluid

**SHELL OMALA S5 WIND 320 (--- LTR)**

## DIAGNOSIS

### Recommendation

This is a baseline read-out on the submitted sample.

| SAMPLE INFORMATION |             | method      | limit/base | current            | history1 | history2 |
|--------------------|-------------|-------------|------------|--------------------|----------|----------|
| Sample Number      | Client Info |             |            | <b>NX014202</b>    | ---      | ---      |
| Sample Date        | Client Info |             |            | <b>27 Apr 2024</b> | ---      | ---      |
| Machine Age        | hrs         | Client Info |            | <b>0</b>           | ---      | ---      |
| Oil Age            | hrs         | Client Info |            | <b>0</b>           | ---      | ---      |
| Oil Changed        | Client Info |             |            | <b>Not Chngd</b>   | ---      | ---      |
| Sample Status      |             |             |            | <b>NORMAL</b>      | ---      | ---      |

| WEAR METALS |     | method      | limit/base | current      | history1 | history2 |
|-------------|-----|-------------|------------|--------------|----------|----------|
| PQ          |     | ASTM D8184  |            | <b>11</b>    | ---      | ---      |
| Iron        | ppm | ASTM D5185m |            | <b>2</b>     | ---      | ---      |
| Chromium    | ppm | ASTM D5185m |            | <b>0</b>     | ---      | ---      |
| Nickel      | ppm | ASTM D5185m |            | <b>0</b>     | ---      | ---      |
| Titanium    | ppm | ASTM D5185m |            | <b>0</b>     | ---      | ---      |
| Silver      | ppm | ASTM D5185m |            | <b>0</b>     | ---      | ---      |
| Aluminum    | ppm | ASTM D5185m |            | <b>1</b>     | ---      | ---      |
| Lead        | ppm | ASTM D5185m |            | <b>0</b>     | ---      | ---      |
| Copper      | ppm | ASTM D5185m |            | <b>&lt;1</b> | ---      | ---      |
| Tin         | ppm | ASTM D5185m |            | <b>0</b>     | ---      | ---      |
| Vanadium    | ppm | ASTM D5185m |            | <b>0</b>     | ---      | ---      |
| Cadmium     | ppm | ASTM D5185m |            | <b>0</b>     | ---      | ---      |

| ADDITIVES  |     | method      | limit/base | current      | history1 | history2 |
|------------|-----|-------------|------------|--------------|----------|----------|
| Boron      | ppm | ASTM D5185m |            | <b>0</b>     | ---      | ---      |
| Barium     | ppm | ASTM D5185m |            | <b>0</b>     | ---      | ---      |
| Molybdenum | ppm | ASTM D5185m |            | <b>0</b>     | ---      | ---      |
| Manganese  | ppm | ASTM D5185m |            | <b>&lt;1</b> | ---      | ---      |
| Magnesium  | ppm | ASTM D5185m |            | <b>0</b>     | ---      | ---      |
| Calcium    | ppm | ASTM D5185m |            | <b>0</b>     | ---      | ---      |
| Phosphorus | ppm | ASTM D5185m |            | <b>475</b>   | ---      | ---      |
| Zinc       | ppm | ASTM D5185m |            | <b>0</b>     | ---      | ---      |
| Sulfur     | ppm | ASTM D5185m |            | <b>3841</b>  | ---      | ---      |

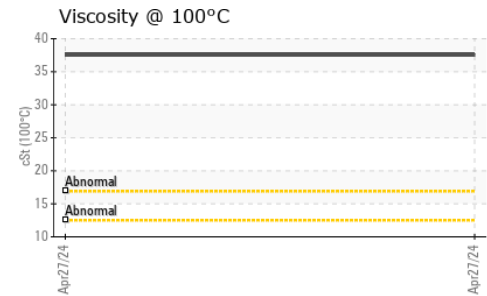
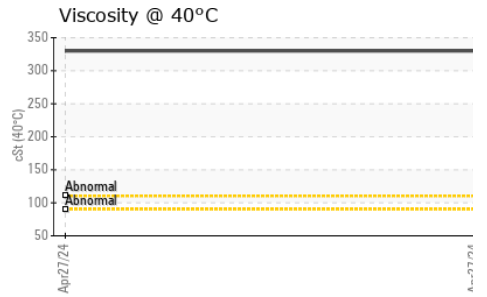
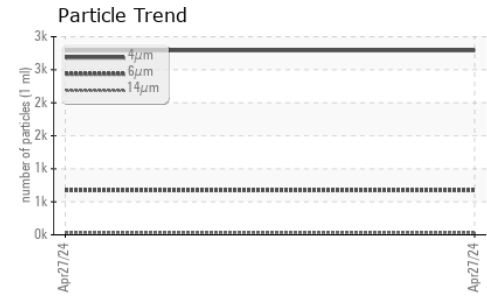
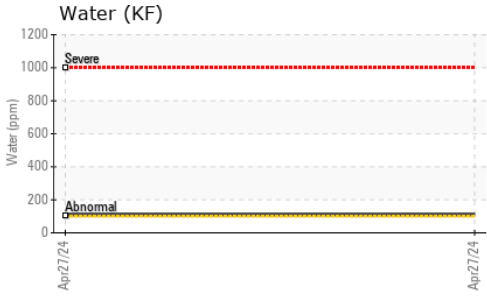
| CONTAMINANTS |     | method      | limit/base | current      | history1 | history2 |
|--------------|-----|-------------|------------|--------------|----------|----------|
| Silicon      | ppm | ASTM D5185m |            | <b>1</b>     | ---      | ---      |
| Sodium       | ppm | ASTM D5185m |            | <b>&lt;1</b> | ---      | ---      |
| Potassium    | ppm | ASTM D5185m | >20        | <b>0</b>     | ---      | ---      |
| Water        | %   | ASTM D6304  |            | <b>0.010</b> | ---      | ---      |
| ppm Water    | ppm | ASTM D6304  |            | <b>109</b>   | ---      | ---      |

| FLUID CLEANLINESS |  | method       | limit/base | current      | history1 | history2 |
|-------------------|--|--------------|------------|--------------|----------|----------|
| Particles >4µm    |  | ASTM D7647   |            | <b>2791</b>  | ---      | ---      |
| Particles >6µm    |  | ASTM D7647   | >1300      | <b>673</b>   | ---      | ---      |
| Particles >14µm   |  | ASTM D7647   | >160       | <b>32</b>    | ---      | ---      |
| Particles >21µm   |  | ASTM D7647   | >40        | <b>5</b>     | ---      | ---      |
| Particles >38µm   |  | ASTM D7647   | >10        | <b>1</b>     | ---      | ---      |
| Particles >71µm   |  | ASTM D7647   | >3         | <b>1</b>     | ---      | ---      |
| Oil Cleanliness   |  | ISO 4406 (c) | >17/14     | <b>17/12</b> | ---      | ---      |

| FLUID DEGRADATION |          | method     | limit/base | current     | history1 | history2 |
|-------------------|----------|------------|------------|-------------|----------|----------|
| Acid Number (AN)  | mg KOH/g | ASTM D8045 |            | <b>0.95</b> | ---      | ---      |



# OIL ANALYSIS REPORT



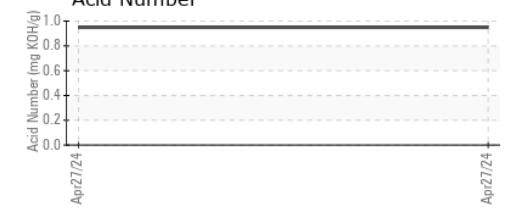
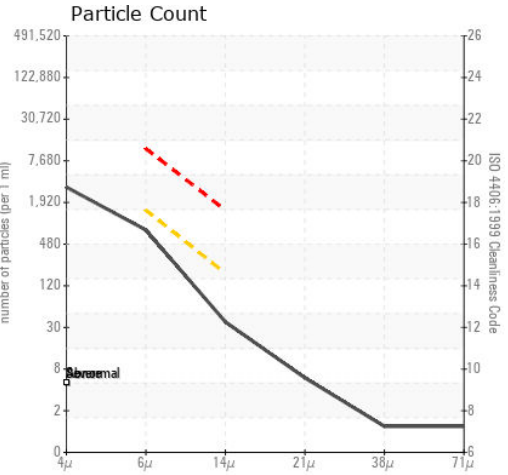
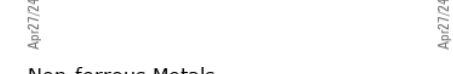
| VISUAL           | method | limit/base | current | history1     | history2 |     |
|------------------|--------|------------|---------|--------------|----------|-----|
| White Metal      | scalar | *Visual    | NONE    | <b>NONE</b>  | ---      | --- |
| Yellow Metal     | scalar | *Visual    | NONE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

| FLUID PROPERTIES     | method | limit/base | current      | history1 | history2 |
|----------------------|--------|------------|--------------|----------|----------|
| Visc @ 40°C          | cSt    | ASTM D445  | <b>330.0</b> | ---      | ---      |
| Visc @ 100°C         | cSt    | ASTM D445  | <b>37.53</b> | ---      | ---      |
| Viscosity Index (VI) | Scale  | ASTM D2270 | <b>162</b>   | ---      | ---      |

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

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

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : NX014202  
**Lab Number** : **06181870**  
**Unique Number** : 11033196  
**Test Package** : IND 2 ( Additional Tests: FT-IR, ICP-NewOil, KF, KV100, PQ, PrtCount, VI )

**NORDEX USA - Chicago**  
 300 SOUTH WACKER DRIVE, SUITE 1500  
 CHICAGO, IL  
 US 60606  
 Contact: KEVIN REGAN  
 KRegan@nordex-online.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)

F: (312)386-7102