



# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area

**40 MILE [46004111]**

Machine Id

**TGY001233 - SHELL OMALA S5 WIND 320 (S/N BM0043)**

Component

**New (Unused) Oil**

Fluid

**{not provided} (--- 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>NX016823</b>	---	---
Sample Date	Client Info			<b>14 Jun 2024</b>	---	---
Machine Age	hrs	Client Info		<b>0</b>	---	---
Oil Age	hrs	Client Info		<b>0</b>	---	---
Oil Changed	Client Info			<b>N/A</b>	---	---
Sample Status				<b>NORMAL</b>	---	---

WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184		<b>20</b>	---	---
Iron	ppm	ASTM D5185m		<b>0</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>0</b>	---	---
Lead	ppm	ASTM D5185m		<b>0</b>	---	---
Copper	ppm	ASTM D5185m		<b>0</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>1</b>	---	---
Manganese	ppm	ASTM D5185m		<b>0</b>	---	---
Magnesium	ppm	ASTM D5185m		<b>11</b>	---	---
Calcium	ppm	ASTM D5185m		<b>5</b>	---	---
Phosphorus	ppm	ASTM D5185m		<b>504</b>	---	---
Zinc	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
Sulfur	ppm	ASTM D5185m		<b>4071</b>	---	---

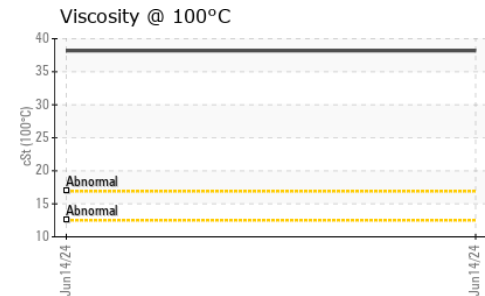
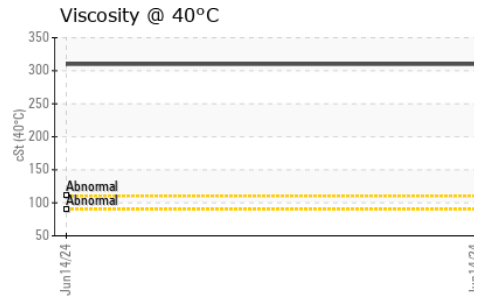
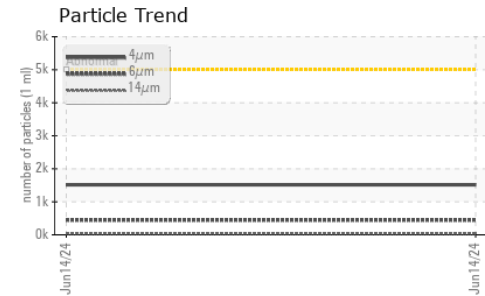
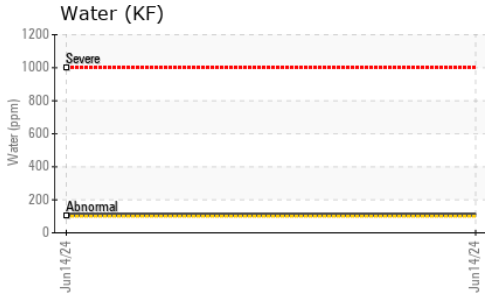
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m		<b>2</b>	---	---
Sodium	ppm	ASTM D5185m		<b>1</b>	---	---
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	---	---
Water	%	ASTM D6304		<b>0.010</b>	---	---
ppm Water	ppm	ASTM D6304		<b>108</b>	---	---

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	<b>1514</b>	---	---
Particles >6µm		ASTM D7647	>1300	<b>447</b>	---	---
Particles >14µm		ASTM D7647	>160	<b>39</b>	---	---
Particles >21µm		ASTM D7647	>40	<b>10</b>	---	---
Particles >38µm		ASTM D7647	>10	<b>3</b>	---	---
Particles >71µm		ASTM D7647	>3	<b>2</b>	---	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<b>18/16/12</b>	---	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.96</b>	---	---



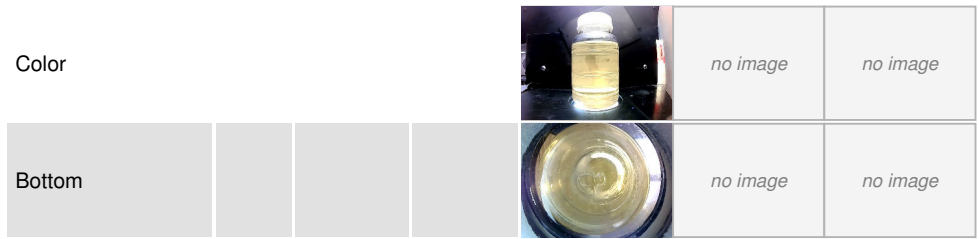
# OIL ANALYSIS REPORT



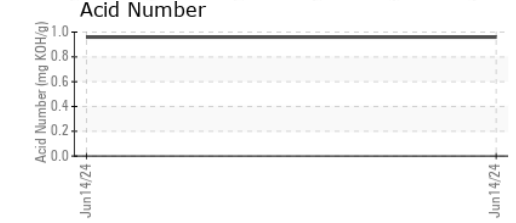
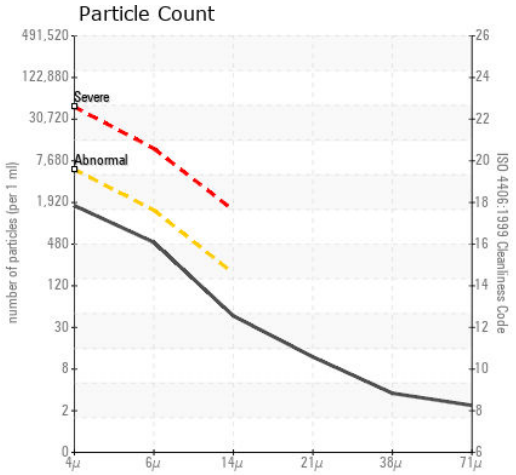
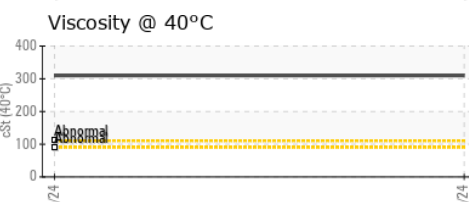
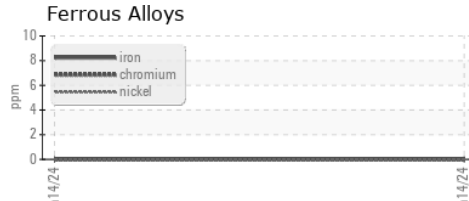
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*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 D445	309.9	---	---
Visc @ 100°C	cSt	ASTM D445	38.18	---	---
Viscosity Index (VI)	Scale	ASTM D2270	174	---	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
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## GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : NX016823

Lab Number : 06234373

Unique Number : 11123207

Test Package : IND 2 ( Additional Tests: FT-IR, ICP-NewOil, KF, KV100, PQ, PrtCount, VI )

Received : 11 Jul 2024

Tested : 16 Jul 2024

Diagnosed : 16 Jul 2024 - Jonathan Hester

NORDEX USA - Chicago

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CHICAGO, IL

US 60606

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F: (312)386-7102

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)