



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	SEVERE
FLUID CONDITION	NORMAL

Machine Id  
**5074**  
 Component  
**Tank Bearing**  
 Fluid  
**SHELL OMALA S2 GX 220 (--- GAL)**

## RECOMMENDATION

We advise that you check for the source of water entry. We advise that you follow the water drain-off procedure for this component. Else, we recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0873549	---	---
Sample Date		Client Info		16 Jul 2024	---	---
Machine Age	hrs	Client Info		2624	---	---
Oil Age	hrs	Client Info		1465	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		Not Changd	---	---
Filter Changed		Client Info		N/A	---	---
Sample Status				SEVERE	---	---

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>200	87	---	---
Chromium	ppm	ASTM D5185m	>5	1	---	---
Nickel	ppm	ASTM D5185m	>5	0	---	---
Titanium	ppm	ASTM D5185m	>5	<1	---	---
Silver	ppm	ASTM D5185m		0	---	---
Aluminum	ppm	ASTM D5185m	>25	11	---	---
Lead	ppm	ASTM D5185m	>50	0	---	---
Copper	ppm	ASTM D5185m	>150	0	---	---
Tin	ppm	ASTM D5185m	>10	<1	---	---
Vanadium	ppm	ASTM D5185m		0	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

## CONTAMINATION

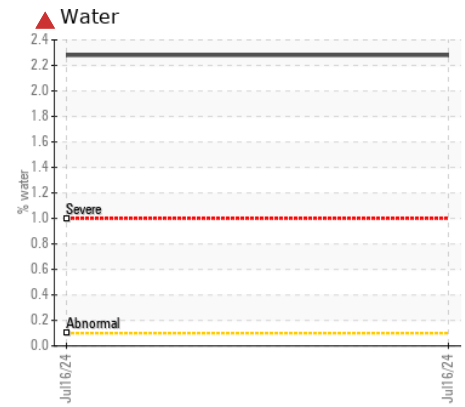
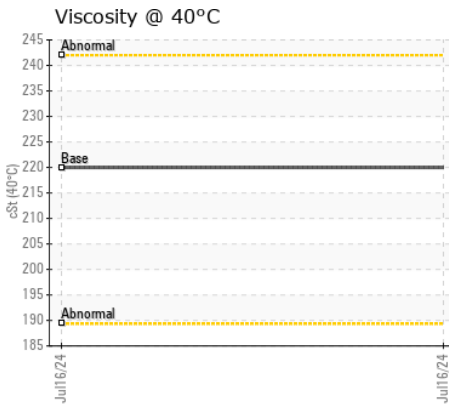
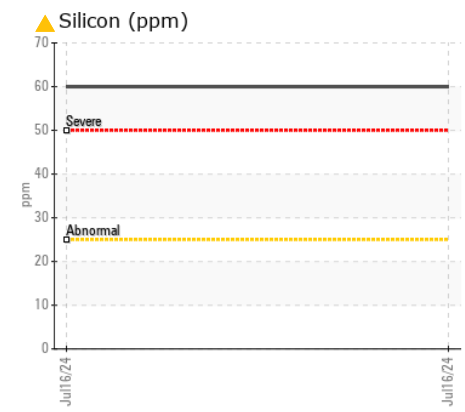
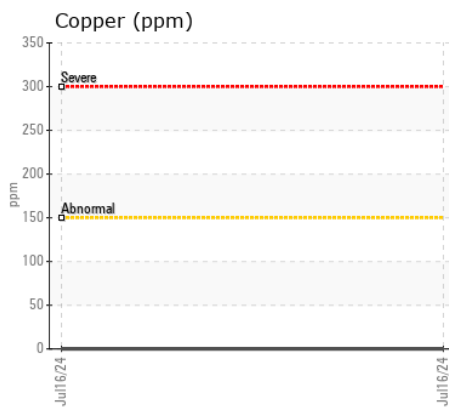
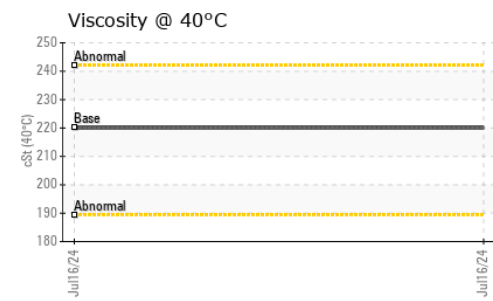
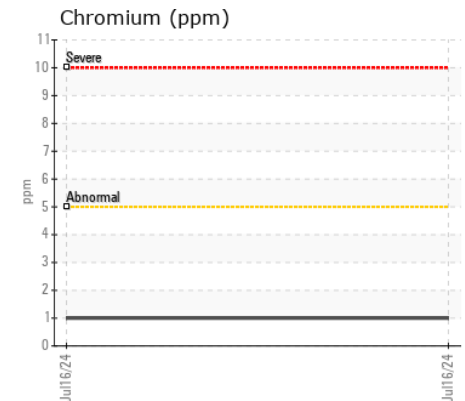
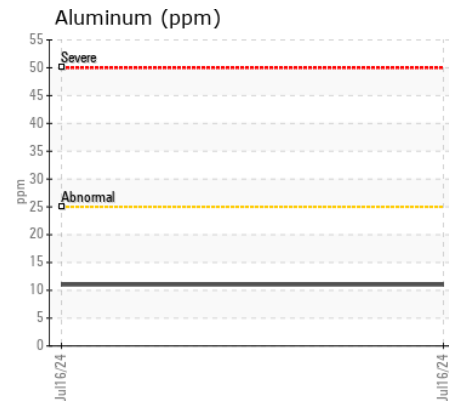
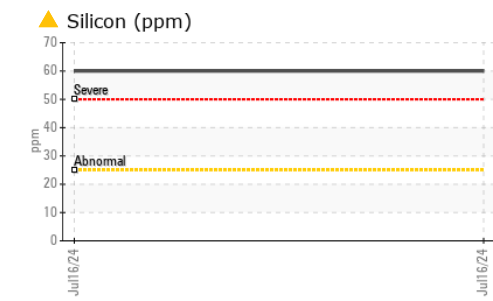
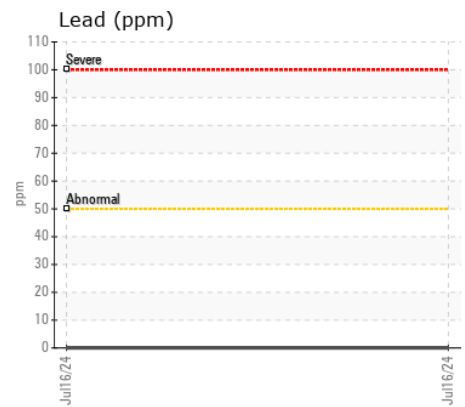
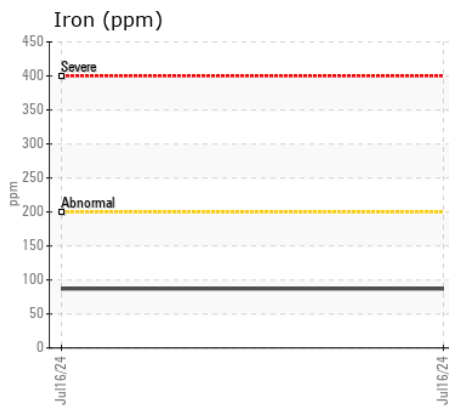
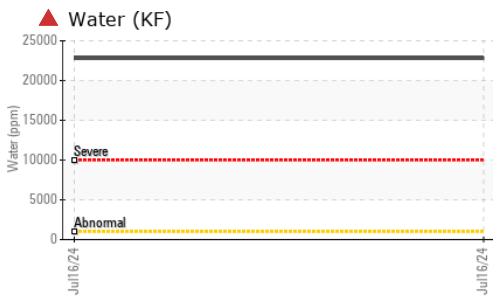
Appearance is unacceptable. There is a high concentration of water present in the oil. Elemental level of silicon (Si) above normal indicating ingress of dirt/seal material.

Silicon	ppm	ASTM D5185m	>25	▲ 60	---	---
Potassium	ppm	ASTM D5185m	>20	6	---	---
Water	%	ASTM D6304	>0.1	▲ 2.28	---	---
ppm Water	ppm	ASTM D6304	>1000	▲ 22800	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	● MILKY	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual	>0.1	▲ 0.2%	---	---

## FLUID CONDITION

The oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185m		4	---	---
Boron	ppm	ASTM D5185m	6.2	2	---	---
Barium	ppm	ASTM D5185m	0.0	0	---	---
Molybdenum	ppm	ASTM D5185m	0	0	---	---
Manganese	ppm	ASTM D5185m		<1	---	---
Magnesium	ppm	ASTM D5185m	0	2	---	---
Calcium	ppm	ASTM D5185m	0.0	12	---	---
Phosphorus	ppm	ASTM D5185m	290	276	---	---
Zinc	ppm	ASTM D5185m	3.8	7	---	---
Sulfur	ppm	ASTM D5185m	8167	12510	---	---
Visc @ 40°C	cSt	ASTM D445	220	220	---	---



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0873549 **Received** : 17 Jul 2024  
**Lab Number** : 06239478 **Tested** : 18 Jul 2024  
**Unique Number** : 11128312 **Diagnosed** : 18 Jul 2024 - Doug Bogart  
**Test Package** : MOB 1 ( Additional Tests: KF )

**WAKE STONE CORPORATION-KNIGHTDALE**  
 PO BOX 190  
 KNIGHTDALE, NC  
 US 27545  
 Contact: AL PARKER  
 alparker@wakestonecorp.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)

T:  
F: (919)266-1149