



OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
7 MILL DISCHARGE END
 Component
Discharge Trunnion Bearing
 Fluid
SHELL OMALA S2 GX 320 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.
 NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			WC0898808	---	---
Sample Date	Client Info			24 Jun 2024	---	---
Machine Age	hrs	Client Info		0	---	---
Oil Age	hrs	Client Info		0	---	---
Oil Changed	Client Info			Not Chngd	---	---
Sample Status				NORMAL	---	---

CONTAMINATION		method	limit/base	current	history1	history2
Water	WC Method		>2	NEG	---	---

WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184*		0	---	---
Iron	ppm	ASTM D5185(m)	>20	4	---	---
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	<1	---	---
Lead	ppm	ASTM D5185(m)	>20	3	---	---
Copper	ppm	ASTM D5185(m)	>20	2	---	---
Tin	ppm	ASTM D5185(m)	>20	<1	---	---
Antimony	ppm	ASTM D5185(m)		1	---	---
Vanadium	ppm	ASTM D5185(m)		0	---	---
Beryllium	ppm	ASTM D5185(m)		0	---	---
Cadmium	ppm	ASTM D5185(m)		0	---	---

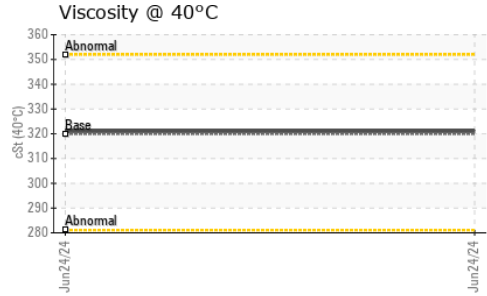
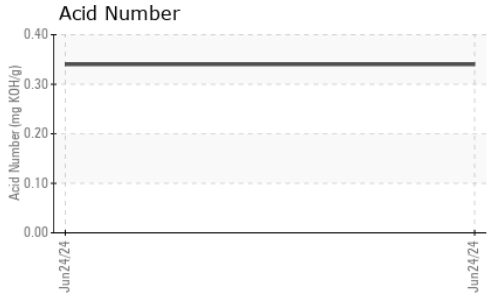
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	6.2	<1	---	---
Barium	ppm	ASTM D5185(m)	0.0	0	---	---
Molybdenum	ppm	ASTM D5185(m)	0	0	---	---
Manganese	ppm	ASTM D5185(m)		0	---	---
Magnesium	ppm	ASTM D5185(m)	0	<1	---	---
Calcium	ppm	ASTM D5185(m)	0.0	2	---	---
Phosphorus	ppm	ASTM D5185(m)	290	209	---	---
Zinc	ppm	ASTM D5185(m)	3.8	31	---	---
Sulfur	ppm	ASTM D5185(m)	8167	8151	---	---
Lithium	ppm	ASTM D5185(m)		<1	---	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>15	1	---	---
Sodium	ppm	ASTM D5185(m)		<1	---	---
Potassium	ppm	ASTM D5185(m)	>20	0	---	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*		0.34	---	---



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VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	VLITE	---
Yellow Metal	scalar	Visual*	NONE	NONE	---
Precipitate	scalar	Visual*	NONE	NONE	---
Silt	scalar	Visual*	NONE	VLITE	---
Debris	scalar	Visual*	NONE	VLITE	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---
Appearance	scalar	Visual*	NORML	NORML	---
Odor	scalar	Visual*	NORML	NORML	---
Emulsified Water	scalar	Visual*	>2	NEG	---
Free Water	scalar	Visual*		NEG	---

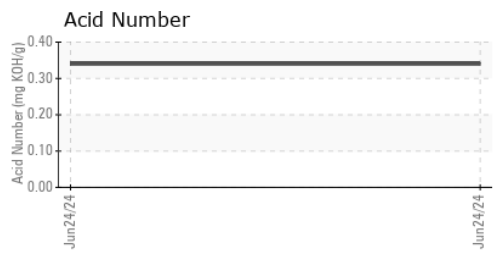
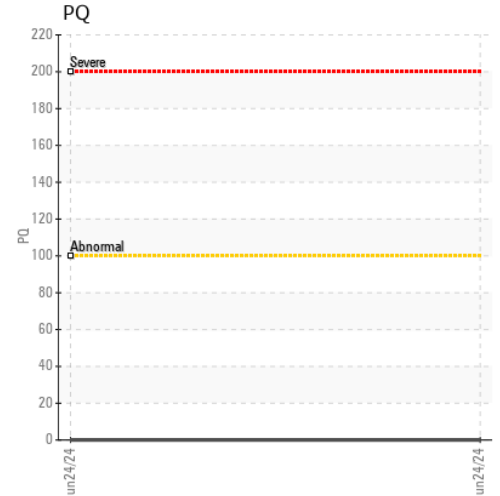
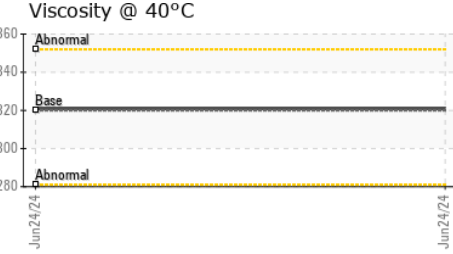
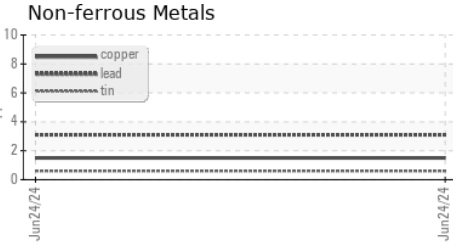
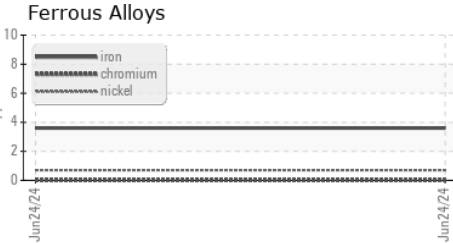
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	320	321	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color

	no image	no image
Bottom		no image

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0898808 **Received** : 02 Jul 2024
Lab Number : **02645005** **Tested** : 04 Jul 2024
Unique Number : 5802544 **Diagnosed** : 04 Jul 2024 - Kevin Marson
Test Package : IND 2

Vale - Clarabelle Mill
 MTW (Mill, Tailings & Water)
 COPPER CLIFF, ON
 CA P0M 1N0
 Contact: Guy Gauthier
 guy.gauthier@vale.com
 T: (705)682-5646
 F: (705)682-6273

To discuss this sample report, contact Customer Service at 1-800-268-2131.
 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.