



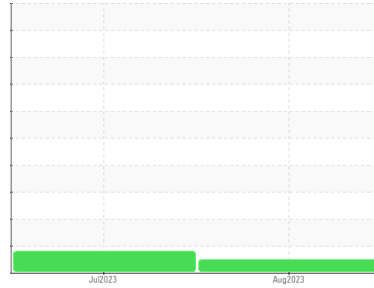
OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Area
DELTA VICTOR 104 MANGUSTA
 Machine Id
KONGSBERG KAMEWA PORT HPP (S/N 53404)
 Component
Port Hydraulic Power Pack
 Fluid
CALTEX MEROPA 68 (--- GAL)



DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. Please note that this is a corrected copy for laboratory data update for water content.

Wear

All component wear rates are normal.

Contamination

The water content is negligible. There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

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		WC0713631	WC0713633	---
Sample Date	Client Info		18 Aug 2023	09 Jul 2023	---
Machine Age	hrs	Client Info	481	418	---
Oil Age	hrs	Client Info	481	418	---
Oil Changed	Client Info		Not Chngd	Changed	---
Sample Status			NORMAL	ATTENTION	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >20	3	8	---
Chromium	ppm	ASTM D5185m >20	0	0	---
Nickel	ppm	ASTM D5185m >20	0	0	---
Titanium	ppm	ASTM D5185m	0	0	---
Silver	ppm	ASTM D5185m	0	0	---
Aluminum	ppm	ASTM D5185m >20	0	0	---
Lead	ppm	ASTM D5185m >20	0	0	---
Copper	ppm	ASTM D5185m >20	<1	1	---
Tin	ppm	ASTM D5185m >20	0	0	---
Vanadium	ppm	ASTM D5185m	0	0	---
Cadmium	ppm	ASTM D5185m	0	0	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	13	3	---
Barium	ppm	ASTM D5185m 0	2	2	---
Molybdenum	ppm	ASTM D5185m 0	<1	<1	---
Manganese	ppm	ASTM D5185m	0	<1	---
Magnesium	ppm	ASTM D5185m 0	3	8	---
Calcium	ppm	ASTM D5185m 0	16	13	---
Phosphorus	ppm	ASTM D5185m 200	251	225	---
Zinc	ppm	ASTM D5185m 100	10	35	---
Sulfur	ppm	ASTM D5185m 3500	12531	21731	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >15	<1	2	---
Sodium	ppm	ASTM D5185m	14	62	---
Potassium	ppm	ASTM D5185m >20	2	4	---
Water	%	ASTM D6304 >0.05	0.021	0.032	---
ppm Water	ppm	ASTM D6304 >500	216.1	324.0	---

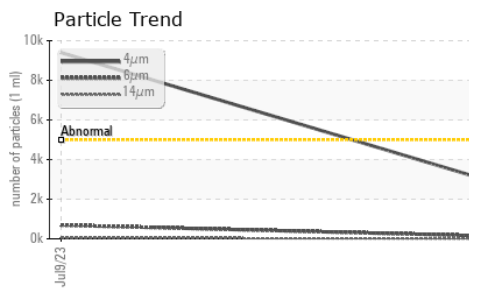
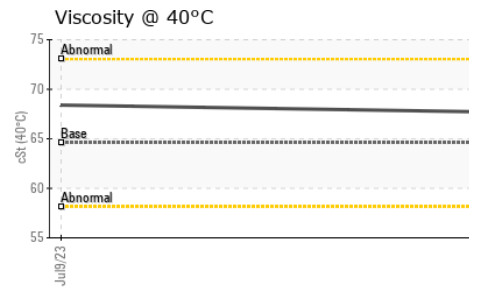
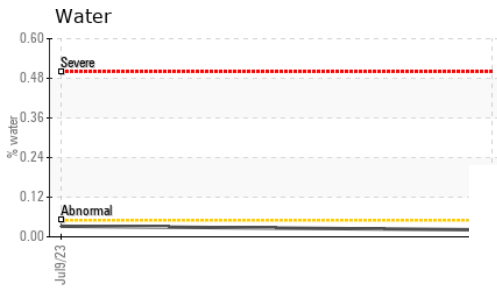
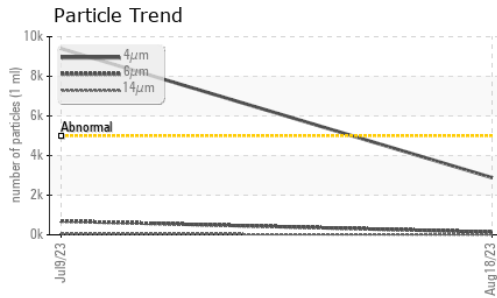
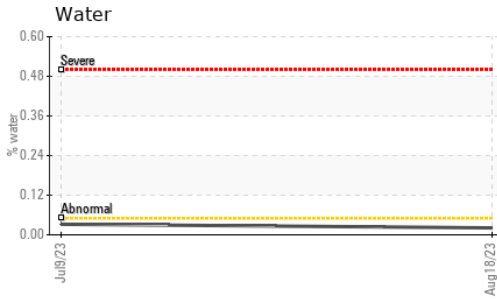
FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	2884	▲ 9400	---
Particles >6µm	ASTM D7647	>1300	137	690	---
Particles >14µm	ASTM D7647	>160	11	43	---
Particles >21µm	ASTM D7647	>40	3	13	---
Particles >38µm	ASTM D7647	>10	0	0	---
Particles >71µm	ASTM D7647	>3	0	0	---
Oil Cleanliness	ISO 4406 (c)	>19/17/14	19/14/11	▲ 20/17/13	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.64	0.32	---

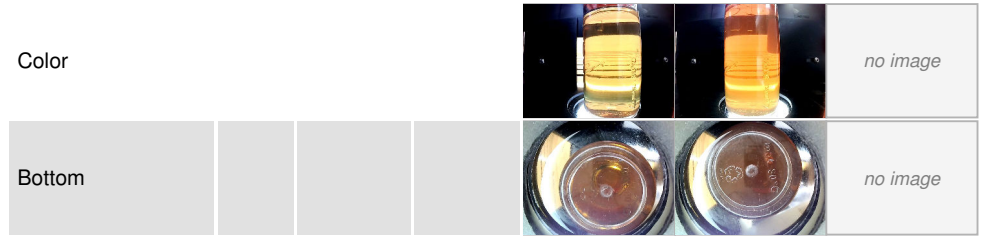
OIL ANALYSIS REPORT



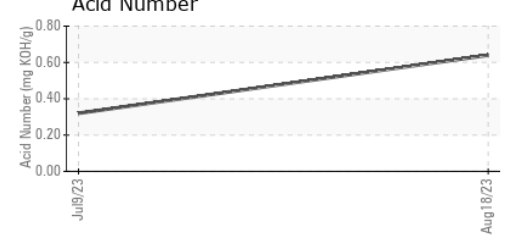
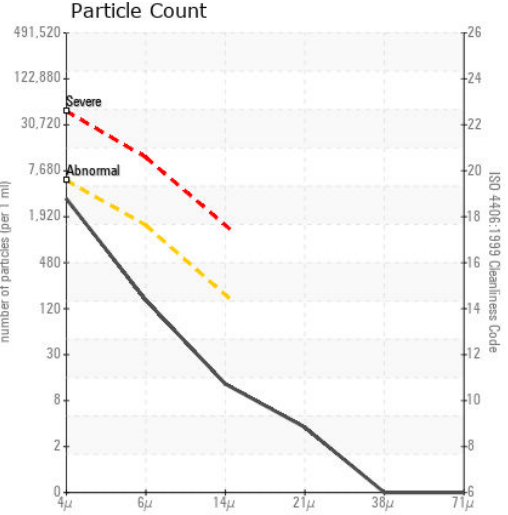
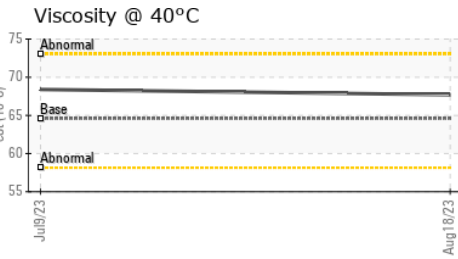
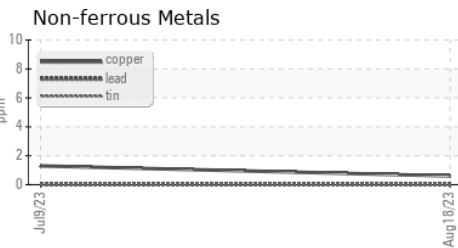
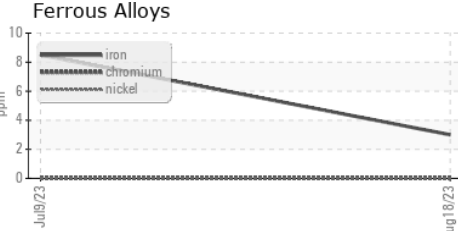
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual NONE	NONE	LIGHT	---
Yellow Metal	scalar	*Visual NONE	NONE	NONE	---
Precipitate	scalar	*Visual NONE	NONE	NONE	---
Silt	scalar	*Visual NONE	NONE	NONE	---
Debris	scalar	*Visual NONE	NONE	NONE	---
Sand/Dirt	scalar	*Visual NONE	NONE	NONE	---
Appearance	scalar	*Visual NORML	NORML	NORML	---
Odor	scalar	*Visual NORML	NORML	NORML	---
Emulsified Water	scalar	*Visual >0.05	NEG	NEG	---
Free Water	scalar	*Visual	NEG	NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 64.6	67.7	68.4	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0713631 **Received** : 24 Aug 2023
Lab Number : 05933466 **Diagnosed** : 29 Aug 2023
Unique Number : 10618737 **Diagnostician** : Doug Bogart
Test Package : MAR 2 (Additional Tests: KF)

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)

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