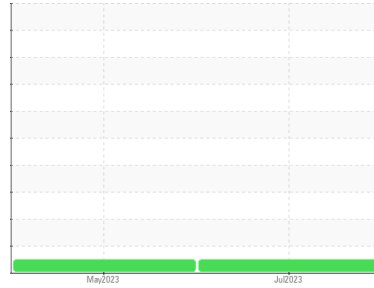




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
102-LYO-901

Component
Hydraulic System

Fluid
NAVI-GUARD PREMIUM AW-32 HYDRAULIC (--- LTR)

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

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is 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			WC0789087	WC0770764	---
Sample Date	Client Info			17 Jul 2023	28 May 2023	---
Machine Age	yrs	Client Info		0	0	---
Oil Age	yrs	Client Info		0	0	---
Oil Changed	Client Info			N/A	N/A	---
Sample Status				NORMAL	---	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	0	0	---
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		<1	<1	---
Cadmium	ppm	ASTM D5185m		0	0	---

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		3	0	---
Barium	ppm	ASTM D5185m		0	0	---
Molybdenum	ppm	ASTM D5185m		5	4	---
Manganese	ppm	ASTM D5185m		0	0	---
Magnesium	ppm	ASTM D5185m		24	8	---
Calcium	ppm	ASTM D5185m		135	80	---
Phosphorus	ppm	ASTM D5185m		321	272	---
Zinc	ppm	ASTM D5185m		400	342	---
Sulfur	ppm	ASTM D5185m		4822	4353	---

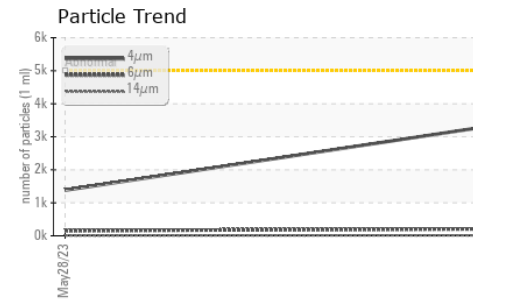
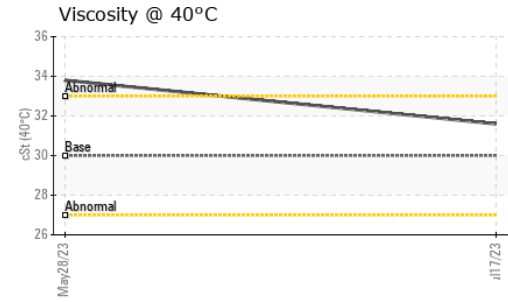
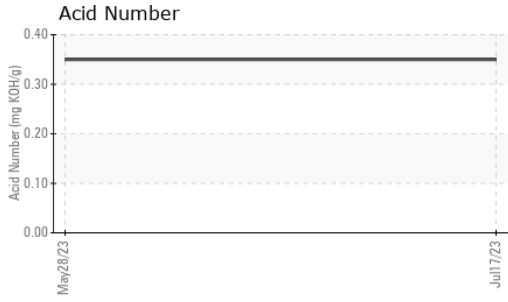
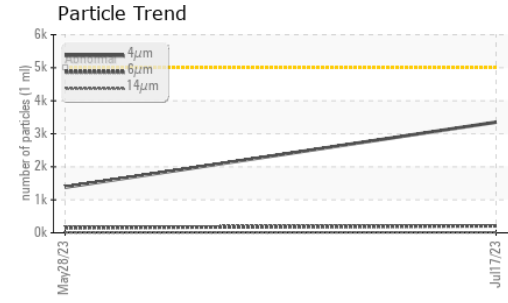
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	1	1	---
Sodium	ppm	ASTM D5185m		<1	<1	---
Potassium	ppm	ASTM D5185m	>20	<1	<1	---

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	3351	1381	---
Particles >6µm		ASTM D7647	>1300	211	157	---
Particles >14µm		ASTM D7647	>160	13	8	---
Particles >21µm		ASTM D7647	>40	3	2	---
Particles >38µm		ASTM D7647	>10	0	0	---
Particles >71µm		ASTM D7647	>3	0	0	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	19/15/11	18/14/10	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		0.35	0.35	---



OIL ANALYSIS REPORT



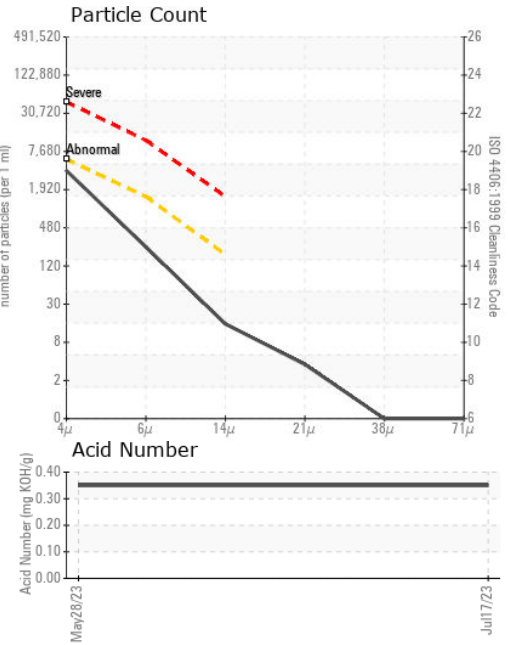
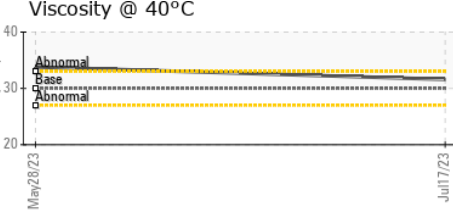
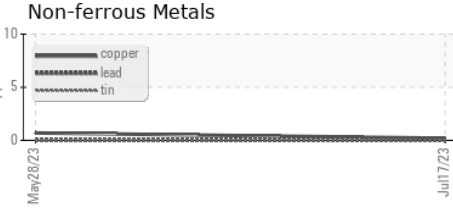
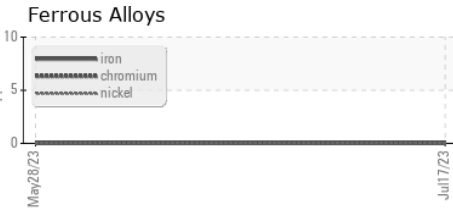
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 30	31.6	33.8	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color			no image
Bottom			no image
MPC	no image	no image	no image

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0789087 **Received** : 17 Aug 2023
Lab Number : **05927817** **Diagnosed** : 18 Aug 2023
Unique Number : 10607764 **Diagnostician** : Wes Davis
Test Package : IND 2

MERCK & COMPANY
 5325 OLD OXFORD RD
 DURHAM, NC
 US 27712
 Contact: Mark Montalvo
 mark_montalvo@merck.com
 T: (919)884-4103
 F:

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)