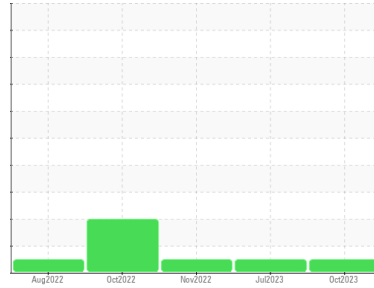


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
STARBOARD
Component
Starboard Hydraulic System
Fluid
PHILLIPS 66 Powerflow NZ AW46 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

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

Fluid Condition

Confirm oil type. 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			Y2K0001549	Y2K0001541	Y2K0001363
Sample Date	Client Info			24 Oct 2023	19 Jul 2023	08 Nov 2022
Machine Age	hrs	Client Info		5	0	0
Oil Age	hrs	Client Info		0	0	100
Oil Changed	Client Info			N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	42	39	35
Chromium	ppm	ASTM D5185m	>20	0	0	0
Nickel	ppm	ASTM D5185m	>20	<1	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		<1	<1	1
Aluminum	ppm	ASTM D5185m	>20	0	0	0
Lead	ppm	ASTM D5185m	>20	0	<1	<1
Copper	ppm	ASTM D5185m	>20	55	49	42
Tin	ppm	ASTM D5185m	>20	1	1	<1
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	<1

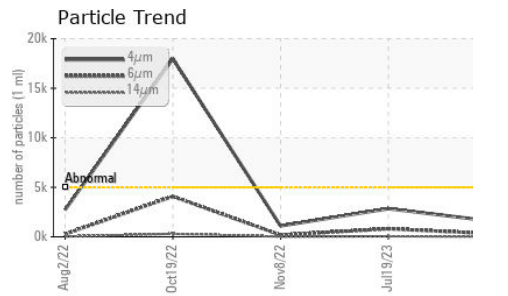
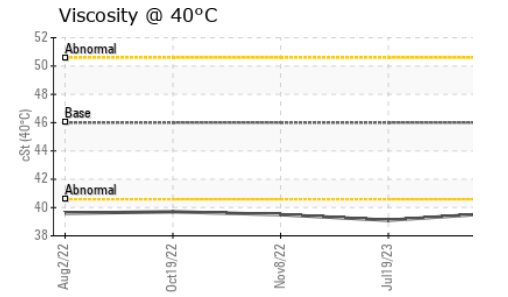
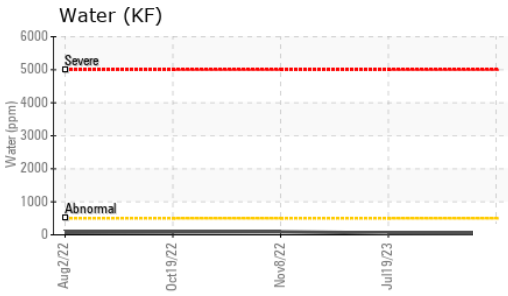
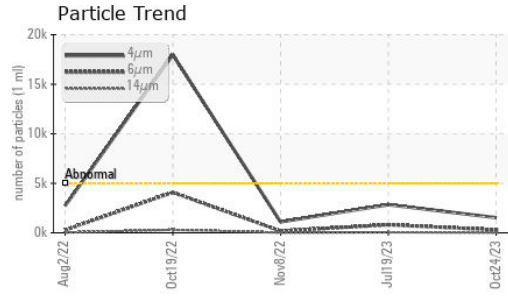
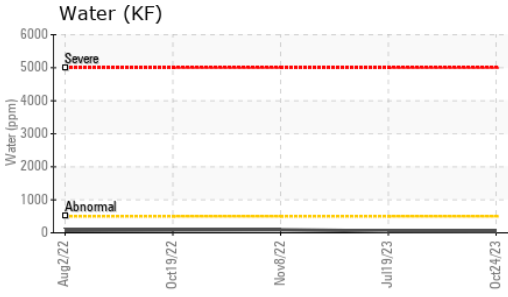
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	0	<1
Barium	ppm	ASTM D5185m		0	<1	0
Molybdenum	ppm	ASTM D5185m		0	<1	<1
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		4	2	3
Calcium	ppm	ASTM D5185m		80	85	88
Phosphorus	ppm	ASTM D5185m		332	338	345
Zinc	ppm	ASTM D5185m		431	442	452
Sulfur	ppm	ASTM D5185m		928	1092	1154

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	1	<1	<1
Sodium	ppm	ASTM D5185m		3	0	<1
Potassium	ppm	ASTM D5185m	>20	<1	<1	<1
Water	%	ASTM D6304	>0.05	0.003	0.005	0.009
ppm Water	ppm	ASTM D6304	>500	35.6	54.5	93.6

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	1530	2844	1101
Particles >6µm		ASTM D7647	>1300	299	808	180
Particles >14µm		ASTM D7647	>160	13	56	15
Particles >21µm		ASTM D7647	>40	3	14	6
Particles >38µm		ASTM D7647	>10	0	1	0
Particles >71µm		ASTM D7647	>3	0	1	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	18/15/11	19/17/13	17/15/11

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.22	0.21	0.27	0.31

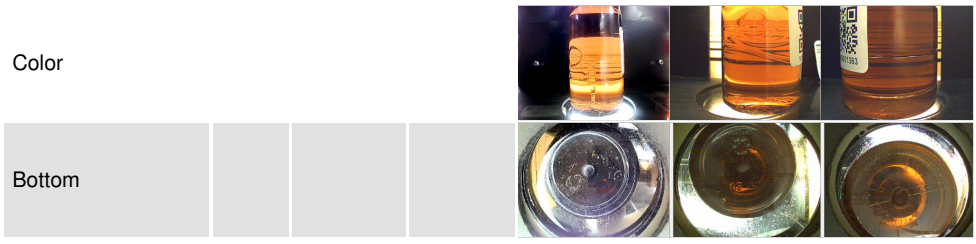
OIL ANALYSIS REPORT



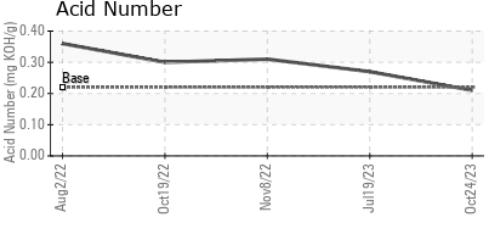
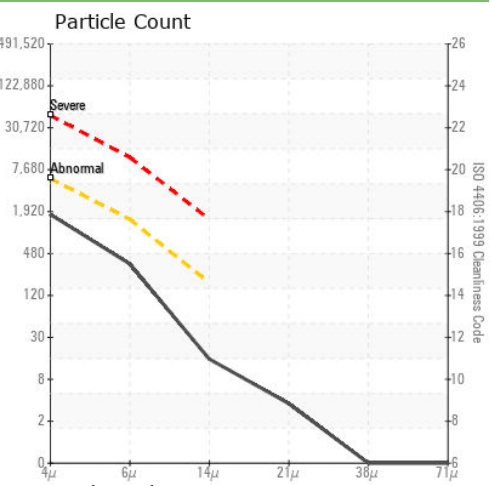
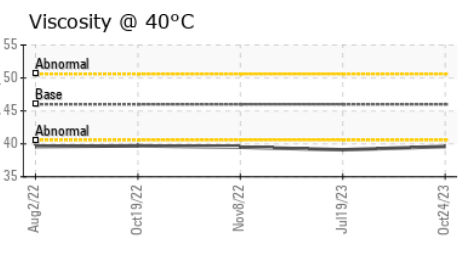
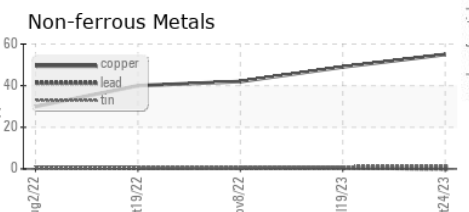
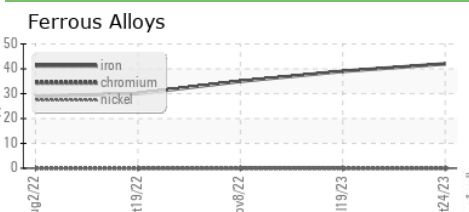
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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 46	39.6	39.1	39.5

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : Y2K0001549 **Received** : 01 Nov 2023
Lab Number : 05995560 **Diagnosed** : 02 Nov 2023
Unique Number : 10723920 **Diagnostician** : Don Baldrige
Test Package : MOB 2 (Additional Tests: KF)

LACROSSE QUEEN
 2713 HEMSTOCK ST
 LACROSSE, WI
 US 54603
 Contact: Service Manager

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)