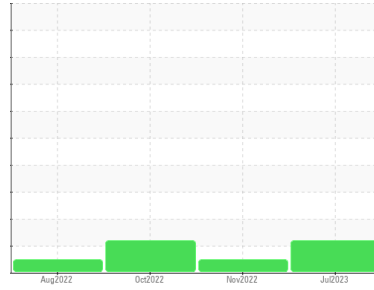


OIL ANALYSIS REPORT

Sample Rating Trend



WEAR



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

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample.

Wear

An increase in the copper level is noted. All other component wear rates are normal.

Contamination

Moderate concentration of visible dirt/debris present in the oil.

Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	Y2K0001540	Y2K0001362	Y2K0001360
Sample Date	Client Info	19 Jul 2023	08 Nov 2022	19 Oct 2022
Machine Age	hrs	Client Info	0	0
Oil Age	hrs	Client Info	0	100
Oil Changed	Client Info	N/A	Filtered	Not Changd
Sample Status		ABNORMAL	NORMAL	ABNORMAL

WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >20	18	25	17
Chromium	ppm	ASTM D5185m >20	0	0	0
Nickel	ppm	ASTM D5185m >20	0	0	0
Titanium	ppm	ASTM D5185m	0	0	0
Silver	ppm	ASTM D5185m	<1	1	0
Aluminum	ppm	ASTM D5185m >20	0	0	0
Lead	ppm	ASTM D5185m >20	<1	0	<1
Copper	ppm	ASTM D5185m >20	▲ 48	41	38
Tin	ppm	ASTM D5185m >20	2	1	1
Vanadium	ppm	ASTM D5185m	0	0	0
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m	0	1	0
Barium	ppm	ASTM D5185m	<1	0	0
Molybdenum	ppm	ASTM D5185m	<1	0	<1
Manganese	ppm	ASTM D5185m	0	<1	<1
Magnesium	ppm	ASTM D5185m	<1	<1	1
Calcium	ppm	ASTM D5185m	68	71	75
Phosphorus	ppm	ASTM D5185m	333	344	331
Zinc	ppm	ASTM D5185m	438	447	436
Sulfur	ppm	ASTM D5185m	1136	1256	1202

CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >15	0	1	<1
Sodium	ppm	ASTM D5185m	0	<1	0
Potassium	ppm	ASTM D5185m >20	<1	1	<1
Water	%	ASTM D6304 >0.05	0.005	0.012	0.004
ppm Water	ppm	ASTM D6304 >500	52.6	123.9	46.5

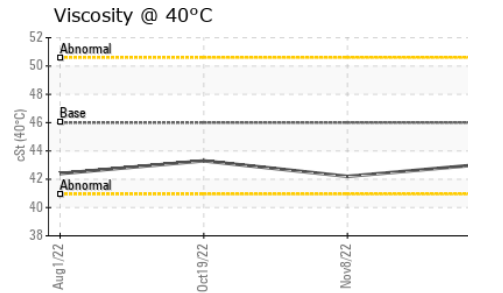
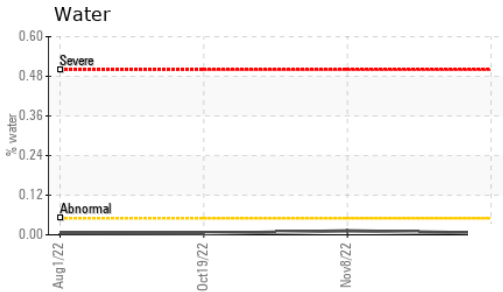
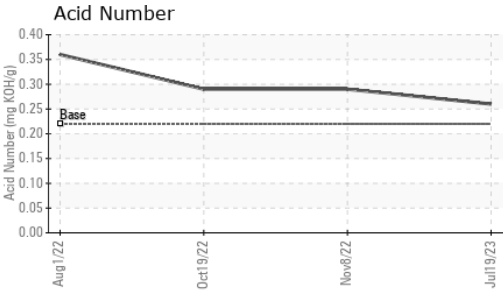
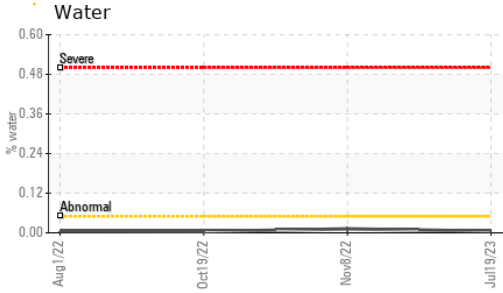
FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >5000	---	1570	▲ 33591
Particles >6µm	ASTM D7647 >1300	---	321	▲ 6346
Particles >14µm	ASTM D7647 >160	---	34	150
Particles >21µm	ASTM D7647 >40	---	10	16
Particles >38µm	ASTM D7647 >10	---	1	1
Particles >71µm	ASTM D7647 >3	---	0	0
Oil Cleanliness	ISO 4406 (c) >19/17/14	---	18/16/12	▲ 22/20/14

FLUID DEGRADATION

method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045 0.22	0.26	0.29	0.29

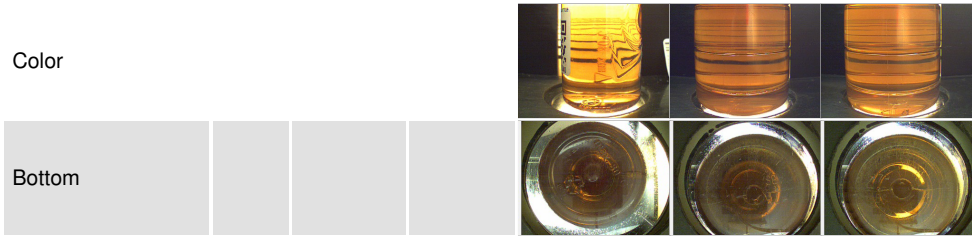
OIL ANALYSIS REPORT



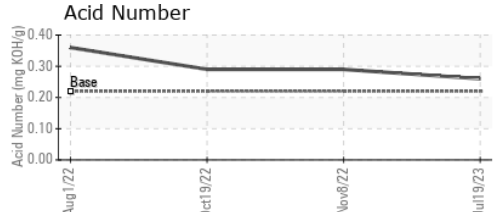
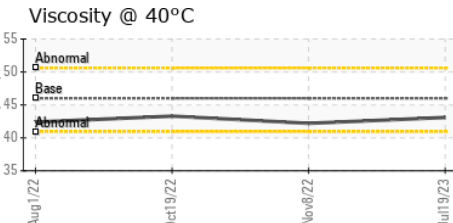
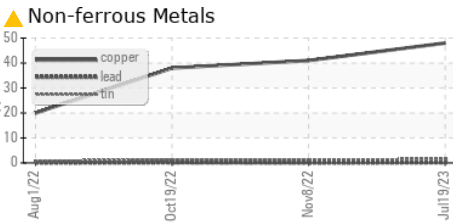
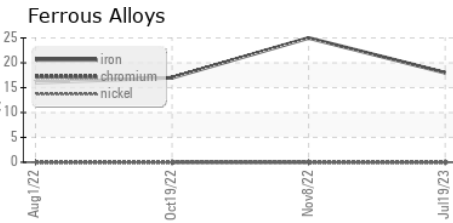
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	▲ MODER	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	43.1	42.2	43.3

SAMPLE IMAGES	method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : Y2K0001540 **Received** : 24 Jul 2023
Lab Number : 05905457 **Diagnosed** : 25 Jul 2023
Unique Number : 10566813 **Diagnostician** : Angela Borella
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)

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