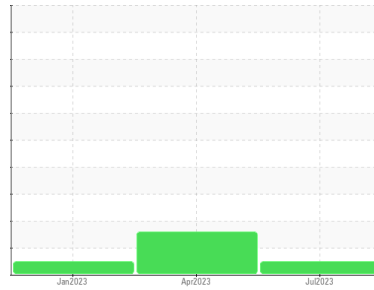




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Area
LOHT
 Machine Id
[LOHT] LOHT-P-G0047A GRBX,ON CHRG PMP (A)
 Component
Gearbox
 Fluid
ROYAL PURPLE SYNFILM GT220 (--- QTS)

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 water content is negligible. 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		RP0034839	RP0031626	RP0031647
Sample Date	Client Info		19 Jul 2023	05 Apr 2023	10 Jan 2023
Machine Age	hrs	Client Info	0	0	0
Oil Age	hrs	Client Info	0	0	0
Oil Changed	Client Info		Not Changed	Not Changd	Not Changed
Sample Status			NORMAL	ABNORMAL	NORMAL

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >200	8	36	40
Chromium	ppm	ASTM D5185m >15	0	0	0
Nickel	ppm	ASTM D5185m >15	0	0	0
Titanium	ppm	ASTM D5185m	<1	0	0
Silver	ppm	ASTM D5185m	0	0	0
Aluminum	ppm	ASTM D5185m >25	<1	0	<1
Lead	ppm	ASTM D5185m >100	0	0	0
Copper	ppm	ASTM D5185m >200	<1	0	<1
Tin	ppm	ASTM D5185m >25	0	0	0
Vanadium	ppm	ASTM D5185m	<1	0	0
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	0	0
Barium	ppm	ASTM D5185m	0	0	0
Molybdenum	ppm	ASTM D5185m	0	<1	<1
Manganese	ppm	ASTM D5185m	<1	<1	<1
Magnesium	ppm	ASTM D5185m 90	90	84	98
Calcium	ppm	ASTM D5185m	3	5	<1
Phosphorus	ppm	ASTM D5185m	5	0	0
Zinc	ppm	ASTM D5185m	<1	0	0

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >50	2	1	4
Sodium	ppm	ASTM D5185m	1	0	<1
Potassium	ppm	ASTM D5185m >20	0	<1	0
Water	%	ASTM D6304 >0.2	0.045	0.080	0.027
ppm Water	ppm	ASTM D6304 >2000	452.3	800	274.8

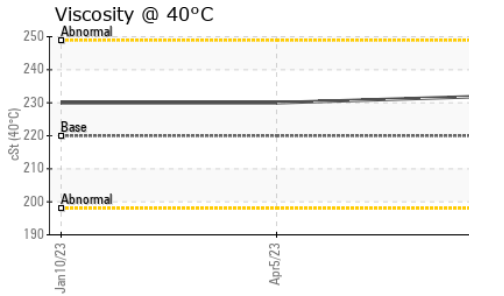
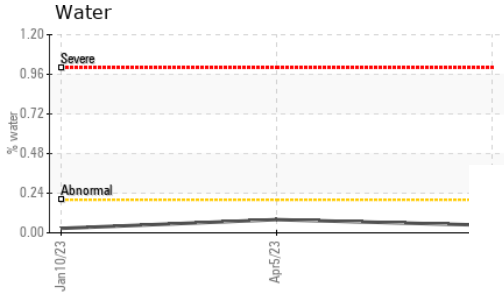
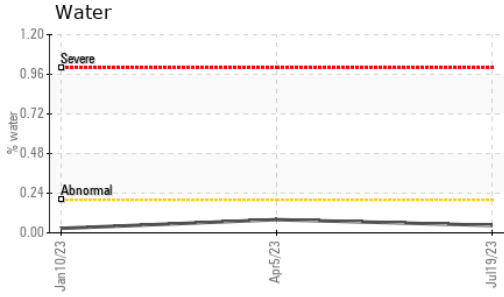
FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.25	0.42	0.33	0.47

VISUAL

	method	limit/base	current	history1	history2
White Metal	scalar	*Visual NONE	NONE	NONE	LIGHT
Yellow Metal	scalar	*Visual NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual NONE	NONE	NONE	NONE
Silt	scalar	*Visual NONE	NONE	NONE	NONE
Debris	scalar	*Visual NONE	LIGHT	LIGHT	LIGHT
Sand/Dirt	scalar	*Visual NONE	NONE	NONE	NONE
Appearance	scalar	*Visual NORML	NORML	NORML	NORML
Odor	scalar	*Visual NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual >0.2	NEG	0.2%	NEG
Free Water	scalar	*Visual	NEG		

OIL ANALYSIS REPORT

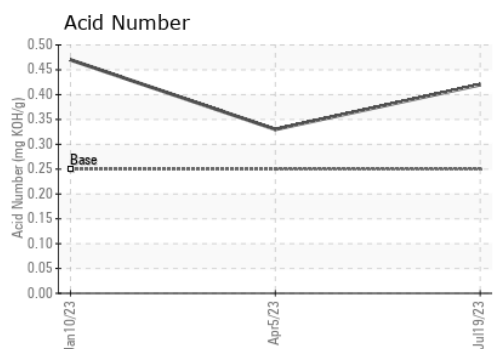
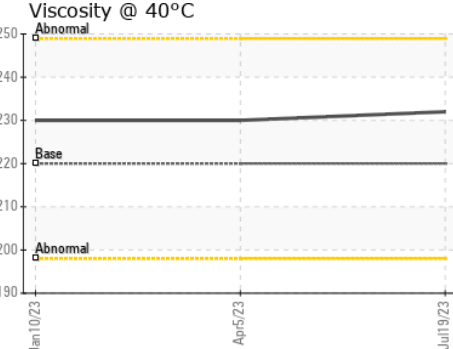
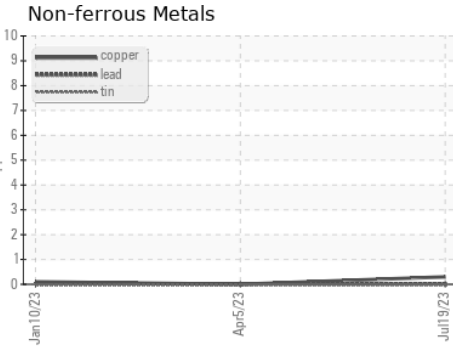
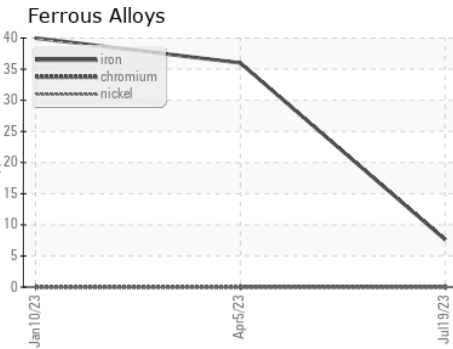


FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	220	232	230	230

SAMPLE IMAGES		method	limit/base	current	history1	history2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : RP0034839 **Received** : 21 Jul 2023
Lab Number : **05904436** **Diagnosed** : 24 Jul 2023
Unique Number : 10565792 **Diagnostician** : Wes Davis
Test Package : IND 2

CALUMET
 3333 MIDWAY AVENUE
 SHREVEPORT, LA
 US 71109
 Contact: NICHOLAS LESAGE
 nicholas.lesage@clmt.com
 T:
 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)