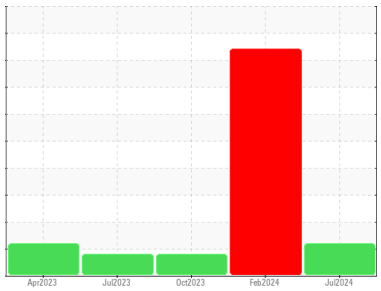
OIL ANALYSIS REPORT

Sample Rating Trend



ISO

Area
CDW
Machine Id
[CDW] CDW-Z-U0001 - ROYAL PURPLE 100 NO DYE
Component
New (Unused) Oil
Fluid
ROYAL PURPLE SYNFILM GT 100 (--- QTS)

DIAGNOSIS

Recommendation
This is a baseline read-out on the submitted sample.

Contamination
There is a high amount of silt (particulates < 14 microns in size) present in the oil.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**RP0042849**	RP0038937	RP0038999
Sample Date		Client Info		**12 Jul 2024**	06 Feb 2024	17 Oct 2023
Machine Age	hrs	Client Info		**0**	0	0
Oil Age	hrs	Client Info		**0**	0	0
Oil Changed		Client Info		**Not Changd**	Not Changd	Not Changd
Sample Status				**ABNORMAL**	SEVERE	ATTENTION

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>5	**0**	0	0
Chromium	ppm	ASTM D5185m	>5	**0**	0	<1
Nickel	ppm	ASTM D5185m	>5	**0**	0	0
Titanium	ppm	ASTM D5185m		**0**	<1	0
Silver	ppm	ASTM D5185m	>5	**0**	0	0
Aluminum	ppm	ASTM D5185m	>5	**<1**	<1	2
Lead	ppm	ASTM D5185m	>5	**0**	9	<1
Copper	ppm	ASTM D5185m	>5	**0**	4	0
Tin	ppm	ASTM D5185m	>5	**0**	<1	<1
Vanadium	ppm	ASTM D5185m		**0**	<1	0
Cadmium	ppm	ASTM D5185m		**0**	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**18**	0	2
Barium	ppm	ASTM D5185m		**<1**	0	0
Molybdenum	ppm	ASTM D5185m		**12**	2	3
Manganese	ppm	ASTM D5185m		**0**	0	0
Magnesium	ppm	ASTM D5185m	90	**169**	79	103
Calcium	ppm	ASTM D5185m		**132**	13	50
Phosphorus	ppm	ASTM D5185m	35	**90**	18	42
Zinc	ppm	ASTM D5185m		**109**	19	22

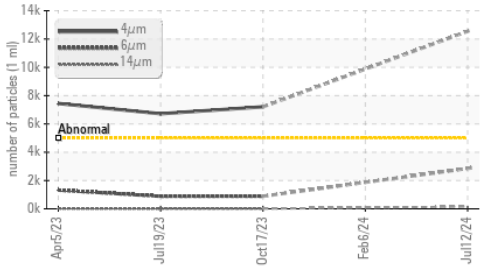
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	**4**	2	3
Sodium	ppm	ASTM D5185m		**1**	<1	0
Potassium	ppm	ASTM D5185m	>20	**1**	0	<1
Water	%	ASTM D6304		**0.030**	▲ 0.131	0.033
ppm Water	ppm	ASTM D6304		**304**	▲ 1310	335.0

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	▲ **12548**	---	● 7208
Particles >6µm		ASTM D7647	>1300	▲ **2854**	---	890
Particles >14µm		ASTM D7647	>160	**147**	---	13
Particles >21µm		ASTM D7647	>40	**34**	---	3
Particles >38µm		ASTM D7647	>10	**2**	---	0
Particles >71µm		ASTM D7647	>3	**0**	---	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ **21/19/14**	---	● 20/17/11

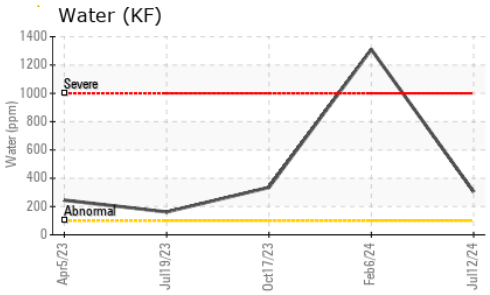
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.388	**0.40**	0.41	0.39

OIL ANALYSIS REPORT

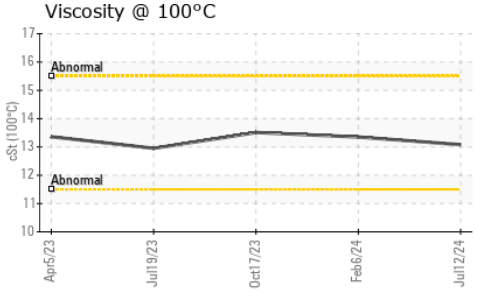
Particle Trend



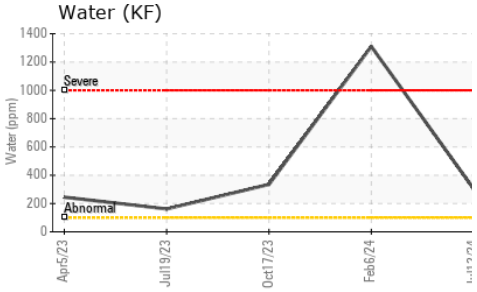
Water (KF)



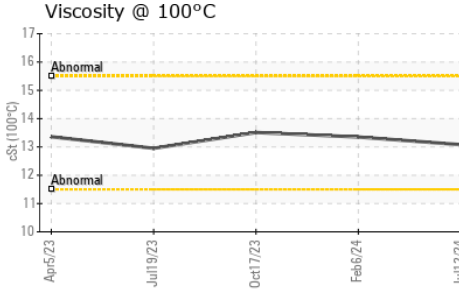
Viscosity @ 100°C



Water (KF)

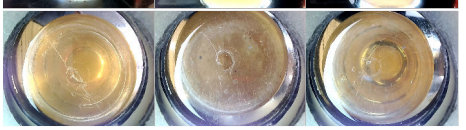


Viscosity @ 100°C



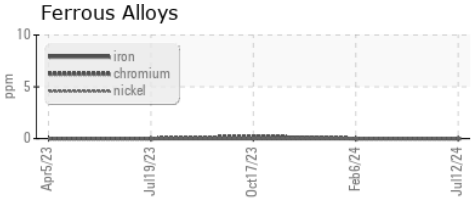
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	▲ MODER	NONE
Debris	scalar	*Visual	NONE	**NONE**	▲ MODER	NONE
Sand/Dirt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Appearance	scalar	*Visual	NORML	**NORML**	● HAZY	NORML
Odor	scalar	*Visual	NORML	**NORML**	NORML	NORML
Emulsified Water	scalar	*Visual		**NEG**	▲ 0.2%	NEG
Free Water	scalar	*Visual		**NEG**	▲ 10.0	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	103	**99.6**	110.4	101.6
Visc @ 100°C	cSt	ASTM D445		**13.08**	13.35	13.51
Viscosity Index (VI)	Scale	ASTM D2270		**128**	117	132

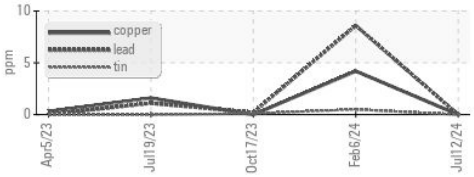
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS

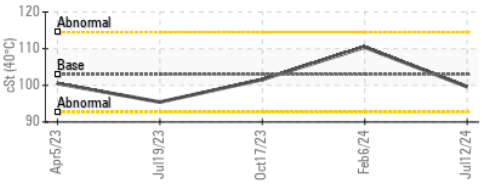
Ferrous Alloys



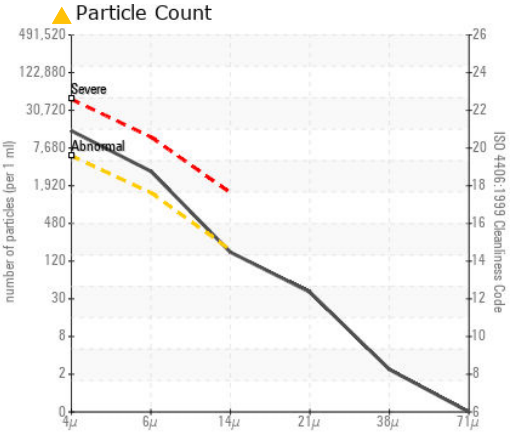
Non-ferrous Metals



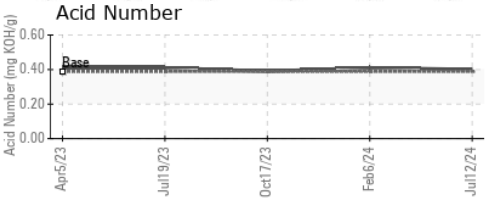
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : RP0042849 **Received** : 16 Jul 2024
Lab Number : 06238299 **Tested** : 19 Jul 2024
Unique Number : 11127133 **Diagnosed** : 19 Jul 2024 - Jonathan Hester
Test Package : IND 2 (Additional Tests: FT-IR, KV100, PrtCount, VI)

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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Report Id: CALSHR [WUSCAR] 06238299 (Generated: 07/21/2024 12:51:22) Rev: 1

Submitted By: CODY COMPTON