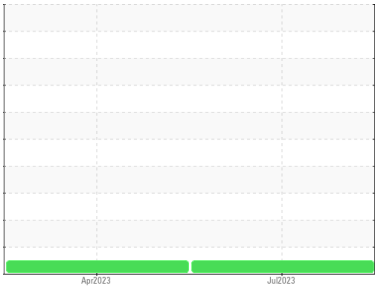
OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL

Area
4VAC
Machine Id
[4VAC] 4VAC-Z-0001 - ROYAL PURPLE 100 NO DYE
Component
New (Unused) Oil
Fluid
{not provided} (--- QTS)

DIAGNOSIS

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

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**RP0034818**	RP0034816	---
Sample Date		Client Info		**19 Jul 2023**	05 Apr 2023	---
Machine Age	hrs	Client Info		**0**	0	---
Oil Age	hrs	Client Info		**0**	0	---
Oil Changed		Client Info		**Not Changd**	N/A	---
Sample Status				**NORMAL**	NORMAL	---

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

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**0**	0	---
Barium	ppm	ASTM D5185m		**0**	0	---
Molybdenum	ppm	ASTM D5185m		**<1**	0	---
Manganese	ppm	ASTM D5185m		**<1**	<1	---
Magnesium	ppm	ASTM D5185m		**95**	63	---
Calcium	ppm	ASTM D5185m		**8**	<1	---
Phosphorus	ppm	ASTM D5185m		**3**	158	---
Zinc	ppm	ASTM D5185m		**1**	15	---

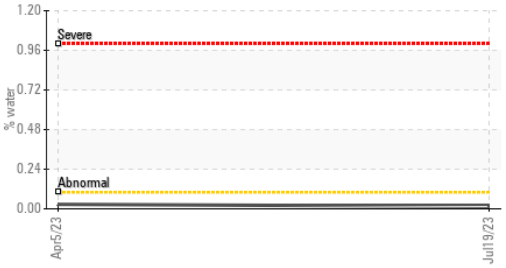
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	**2**	3	---
Sodium	ppm	ASTM D5185m		**1**	<1	---
Potassium	ppm	ASTM D5185m	>20	**0**	0	---
Water	%	ASTM D6304		**0.015**	0.027	---
ppm Water	ppm	ASTM D6304		**158.3**	274.7	---

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	**2837**	2232	---
Particles >6µm		ASTM D7647	>1300	**395**	891	---
Particles >14µm		ASTM D7647	>160	**11**	85	---
Particles >21µm		ASTM D7647	>40	**3**	6	---
Particles >38µm		ASTM D7647	>10	**0**	0	---
Particles >71µm		ASTM D7647	>3	**0**	0	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	**19/16/11**	18/17/14	---

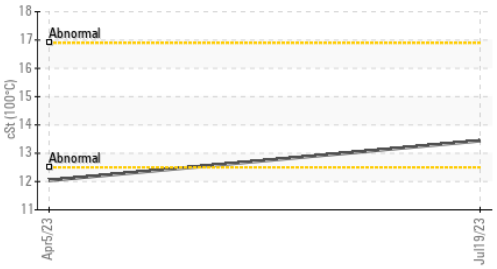
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		**0.40**	0.30	---

OIL ANALYSIS REPORT

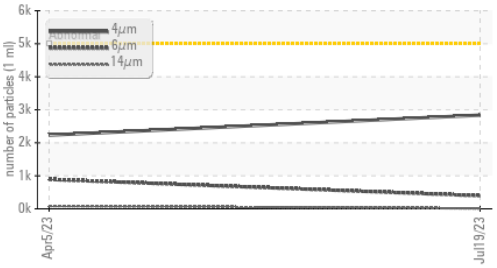
Water



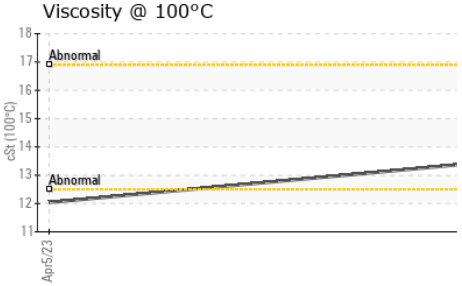
Viscosity @ 100°C



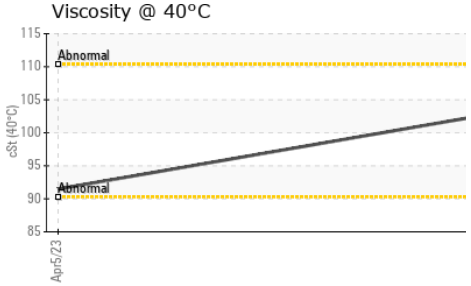
Particle Trend



Viscosity @ 100°C

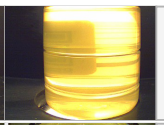
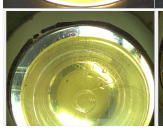
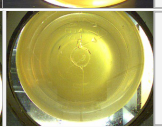


Viscosity @ 40°C



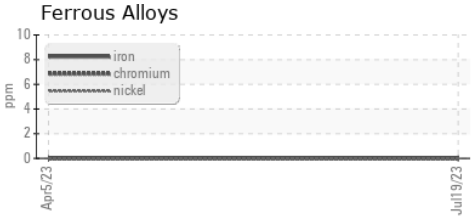
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	---
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	---
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	---
Silt	scalar	*Visual	NONE	**NONE**	NONE	---
Debris	scalar	*Visual	NONE	**NONE**	NONE	---
Sand/Dirt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

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445		**102.8**	91.48	---
Visc @ 100°C	cSt	ASTM D445		**13.44**	12.04	---
Viscosity Index (VI)	Scale	ASTM D2270		**129**	123	---

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

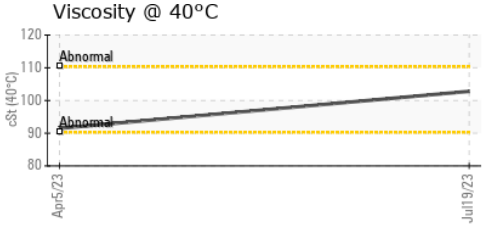
GRAPHS

Ferrous Alloys

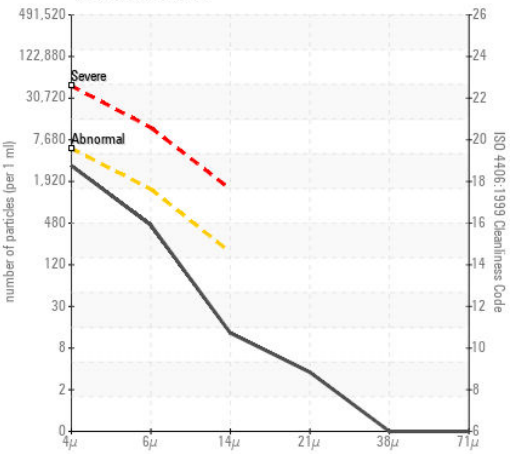


Non-ferrous Metals

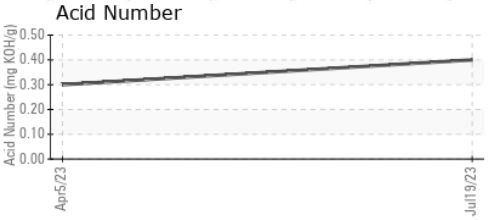
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : RP0034818 **Received** : 21 Jul 2023
Lab Number : 05904716 **Diagnosed** : 02 Aug 2023
Unique Number : 10566072 **Diagnostician** : Doug Bogart
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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