CONST

WEAR CHECK

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	SEVERE
FLUID CONDITION	NORMAL

Machine Id
4140027
Component
Hydraulic System
Fluid
RANDO (--- GAL)

RECOMMENDATION

Check seals and/or filters for points of contaminant entry. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. The filter change at the time of sampling has been noted. Resample in 30-45 days to monitor this situation. Please specify the component make and model with your next sample.

WEAR

All component wear rates are normal.

CONTAMINATION

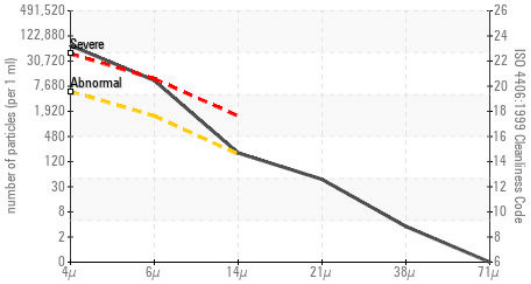
There is a high amount of silt (particulates < 14 microns in size) present in the oil.

FLUID CONDITION

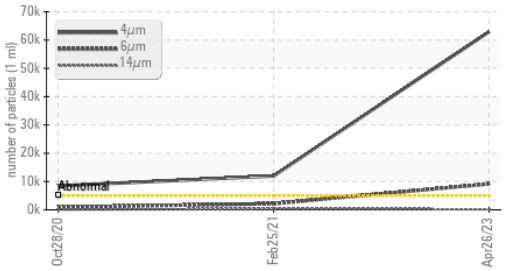
The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0774619	WC0531546	WC0485520
Sample Date		Client Info		26 Apr 2023	25 Feb 2021	28 Oct 2020
Machine Age	hrs	Client Info		4192	2264	1939
Oil Age	hrs	Client Info		0	2264	1939
Filter Age	hrs	Client Info		0	330	1939
Oil Changed		Client Info		Not Changd	N/A	N/A
Filter Changed		Client Info		Changed	N/A	N/A
Sample Status				SEVERE	ABNORMAL	ATTENTION
Iron	ppm	ASTM D5185m	>20	8	6	5
Chromium	ppm	ASTM D5185m	>10	<1	<1	<1
Nickel	ppm	ASTM D5185m	>10	0	1	0
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m		0	0	<1
Aluminum	ppm	ASTM D5185m	>10	0	2	1
Lead	ppm	ASTM D5185m	>10	<1	1	<1
Copper	ppm	ASTM D5185m	>75	2	1	1
Tin	ppm	ASTM D5185m	>10	0	0	<1
Vanadium	ppm	ASTM D5185m		0	2	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>20	6	3	2
Potassium	ppm	ASTM D5185m	>20	1	0	<1
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>5000	62905	11951	8486
Particles >6µm		ASTM D7647	>1300	9156	2174	916
Particles >14µm		ASTM D7647	>160	170	309	54
Particles >21µm		ASTM D7647	>40	40	138	18
Particles >38µm		ASTM D7647	>10	3	23	1
Particles >71µm		ASTM D7647	>3	0	3	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	23/20/15	21/18/15	20/17/13
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	>0.1	NEG	NEG	NEG
Sodium	ppm	ASTM D5185m		<1	<1	2
Boron	ppm	ASTM D5185m		4	0	1
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		2	0	<1
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		6	0	<1
Calcium	ppm	ASTM D5185m		93	147	130
Phosphorus	ppm	ASTM D5185m		415	568	553
Zinc	ppm	ASTM D5185m		347	287	259
Sulfur	ppm	ASTM D5185m		1065	938	910
Acid Number (AN)	mg KOH/g	ASTM D8045		0.47	0.378	0.364
Visc @ 40°C	cSt	ASTM D445		43.6	45.4	44.9

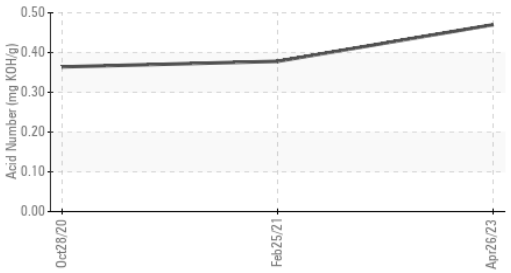
Particle Count



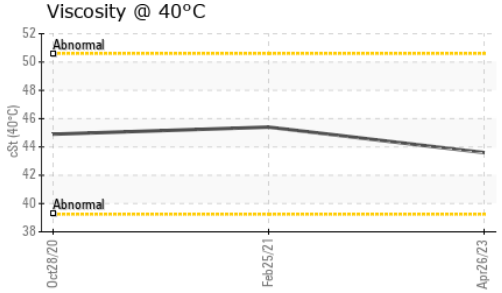
Particle Trend



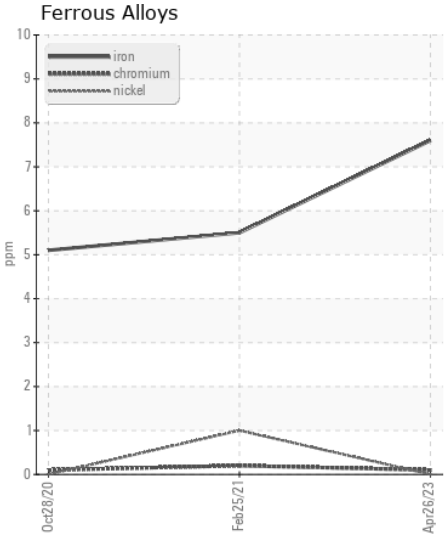
Acid Number



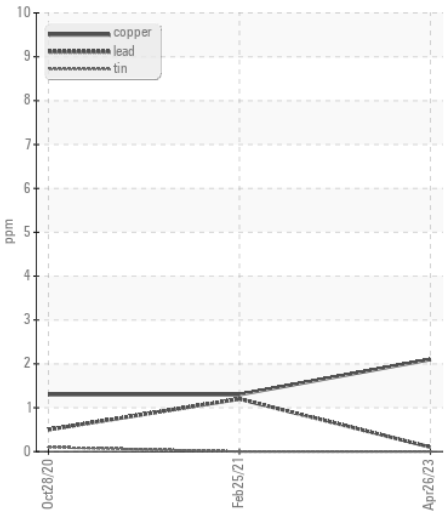
Viscosity @ 40°C



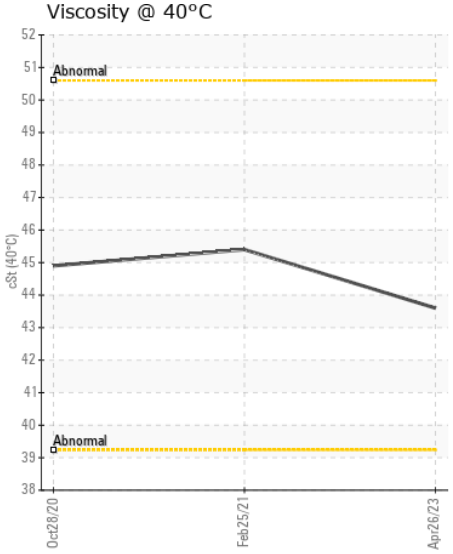
Ferrous Alloys



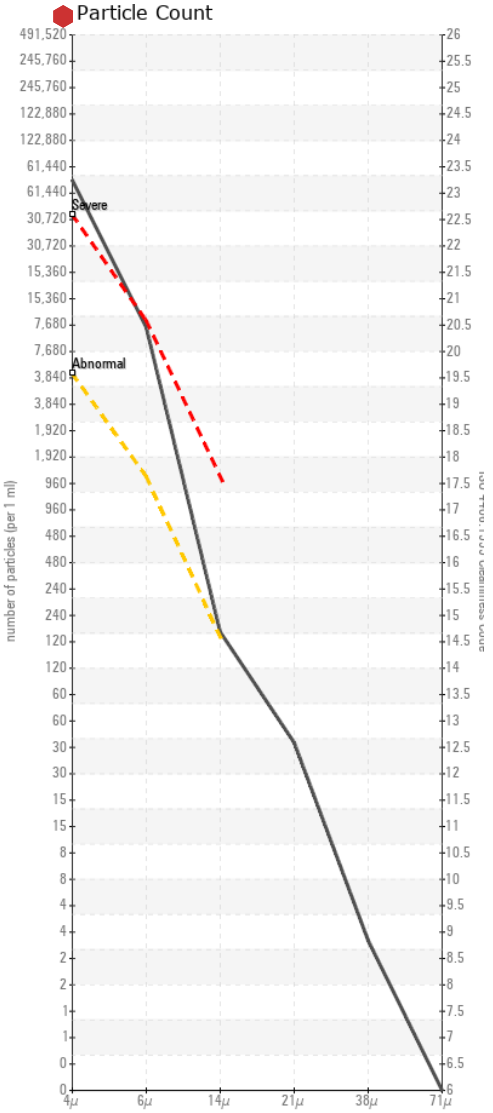
Non-ferrous Metals



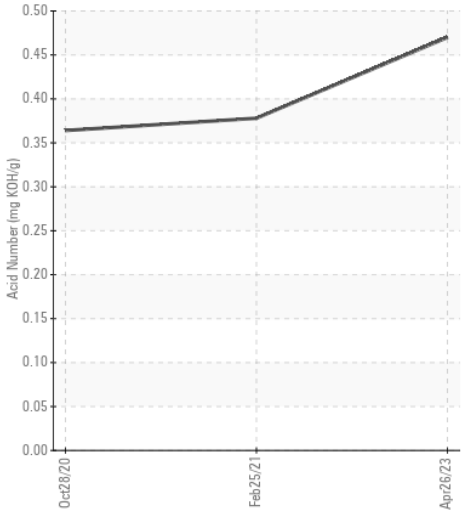
Viscosity @ 40°C



Particle Count



Acid Number



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0774619
Lab Number : 05838358
Unique Number : 10457161
Test Package : CONST

Recieved : 04 May 2023
Diagnosed : 05 May 2023
Diagnostician : Wes Davis

Certificate L2367

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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)