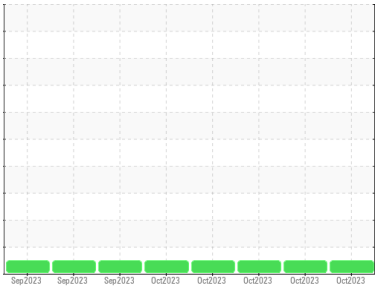
OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL

Machine Id
T3Y00201
Component
Diesel Engine
Fluid
NOT GIVEN (--- QTS)

DIAGNOSIS

Recommendation
Resample at the next service interval to monitor. Please specify the component make and model with your next sample. Please specify the brand, type, and viscosity of the oil on your next sample.

Wear
Metal levels are typical for a new component breaking in.

Contamination
The water content is negligible. There is no indication of any contamination in the oil.

Fluid Condition
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**WC0863769**	WC0863770	WC0863771
Sample Date		Client Info		**12 Oct 2023**	09 Oct 2023	06 Oct 2023
Machine Age	hrs	Client Info		**460**	410	360
Oil Age	hrs	Client Info		**360**	310	260
Oil Changed		Client Info		**Not Changd**	Not Changd	Not Changd
Sample Status				**NORMAL**	NORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Fuel		WC Method	>5	**<1.0**	<1.0	<1.0
Glycol		WC Method		**NEG**	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	**2**	5	4
Chromium	ppm	ASTM D5185m	>20	**0**	<1	<1
Nickel	ppm	ASTM D5185m	>4	**0**	0	0
Titanium	ppm	ASTM D5185m		**0**	<1	<1
Silver	ppm	ASTM D5185m	>3	**0**	0	0
Aluminum	ppm	ASTM D5185m	>20	**<1**	<1	<1
Lead	ppm	ASTM D5185m	>40	**0**	<1	0
Copper	ppm	ASTM D5185m	>330	**2**	2	2
Tin	ppm	ASTM D5185m	>15	**<1**	<1	<1
Vanadium	ppm	ASTM D5185m		**0**	<1	<1
Cadmium	ppm	ASTM D5185m		**0**	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**55**	59	58
Barium	ppm	ASTM D5185m		**<1**	0	0
Molybdenum	ppm	ASTM D5185m		**39**	41	38
Manganese	ppm	ASTM D5185m		**<1**	<1	<1
Magnesium	ppm	ASTM D5185m		**537**	517	477
Calcium	ppm	ASTM D5185m		**1624**	1645	1559
Phosphorus	ppm	ASTM D5185m		**967**	932	871
Zinc	ppm	ASTM D5185m		**1146**	1133	1068
Sulfur	ppm	ASTM D5185m		**2969**	2946	2776

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	**4**	4	4
Sodium	ppm	ASTM D5185m		**1**	2	2
Potassium	ppm	ASTM D5185m	>20	**0**	<1	<1
Water	%	ASTM D6304	>0.2	**0.036**	0.051	0.056
ppm Water	ppm	ASTM D6304	>2000	**365.2**	510.0	567.9

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	**0.1**	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	**5.8**	5.6	5.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	**21.3**	21.2	21.3

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	**19.2**	19.1	19.1
Base Number (BN)	mg KOH/g	ASTM D2896		**9.6**	9.7	10.0

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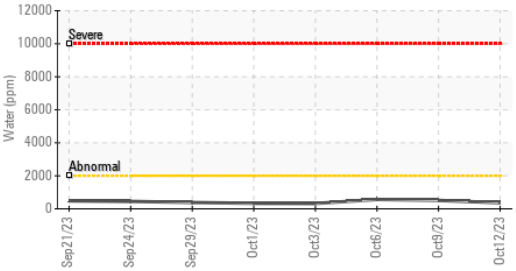
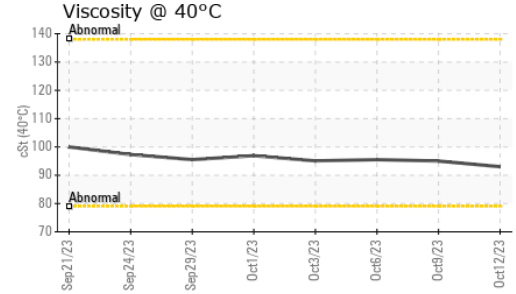
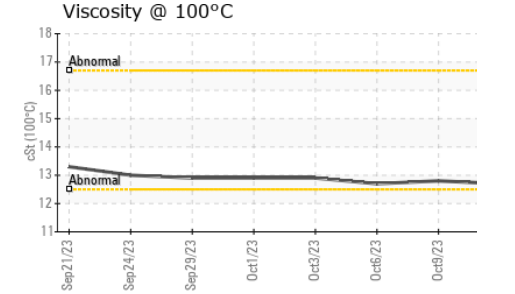
Water (KF)



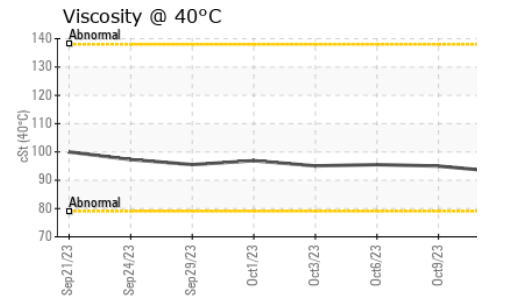
Viscosity @ 40°C



Viscosity @ 100°C



Viscosity @ 40°C

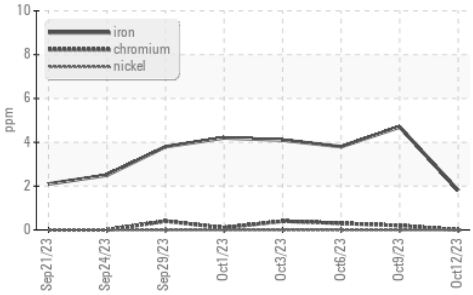


VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	NONE
Sand/Dirt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

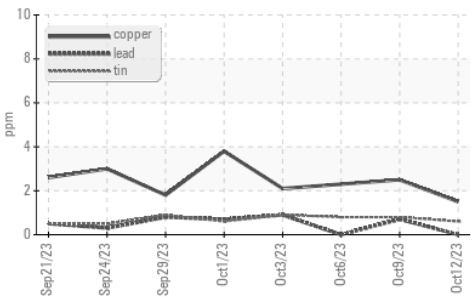
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445		**93.01**	95.01	95.51
Visc @ 100°C	cSt	ASTM D445		**12.7**	12.8	12.7
Viscosity Index (VI)	Scale	ASTM D2270		**132**	131	128

GRAPHS

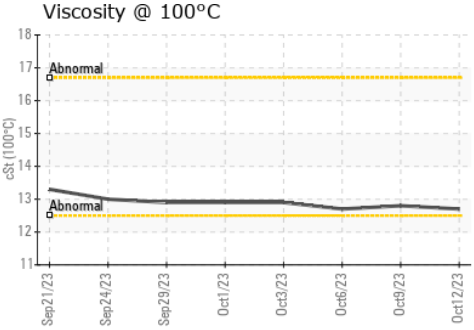
Ferrous Alloys



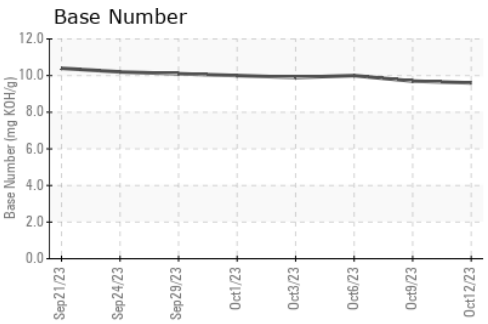
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0863769 **Received** : 18 Oct 2023
Lab Number : 05982231 **Diagnosed** : 09 Nov 2023
Unique Number : 10699526 **Diagnostician** : Wes Davis
Test Package : CONST (Additional Tests: KF, KV40, TBN, 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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