



WEAR CHECK

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
22143
Component
Diesel Engine
Fluid
SHELL ROTELLA T 10W30 (--- QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0909707	WC0866864	WC0832014
Sample Date		Client Info		12 Jun 2024	08 Feb 2024	09 Oct 2023
Machine Age	mls	Client Info		24631	7345	9969
Oil Age	mls	Client Info		7317	7345	9969
Filter Age	mls	Client Info		0	7345	9969
Oil Changed		Client Info		N/A	N/A	Changed
Filter Changed		Client Info		N/A	N/A	Changed
Sample Status				NORMAL	NORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	10	23	71
Chromium	ppm	ASTM D5185m	>20	1	2	3
Nickel	ppm	ASTM D5185m	>4	0	0	<1
Titanium	ppm	ASTM D5185m		0	<1	<1
Silver	ppm	ASTM D5185m	>3	0	<1	<1
Aluminum	ppm	ASTM D5185m	>20	12	11	32
Lead	ppm	ASTM D5185m	>40	<1	1	6
Copper	ppm	ASTM D5185m	>330	2	9	35
Tin	ppm	ASTM D5185m	>15	<1	<1	3
Vanadium	ppm	ASTM D5185m		<1	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

There is no indication of any contamination in the oil.

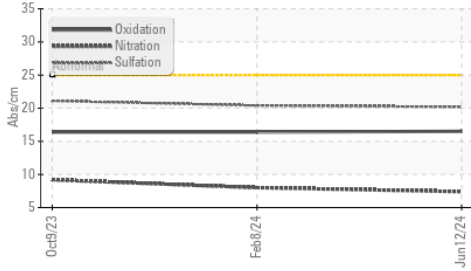
Silicon	ppm	ASTM D5185m	>25	4	11	49
Potassium	ppm	ASTM D5185m	>20	32	33	114
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.2	0.2	0.3
Nitration	Abs/cm	*ASTM D7624	>20	7.4	8.0	9.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.2	20.4	21.1
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

FLUID CONDITION

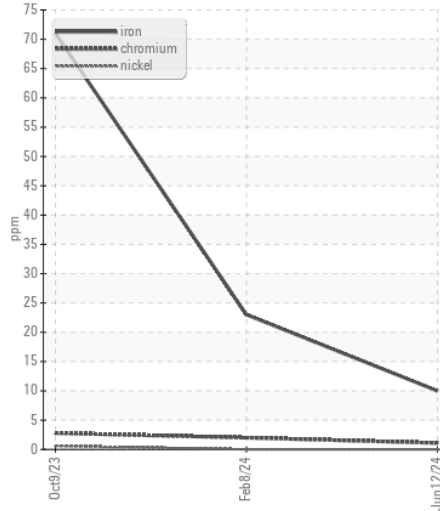
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		2	2	6
Boron	ppm	ASTM D5185m	269	139	146	40
Barium	ppm	ASTM D5185m		0	11	0
Molybdenum	ppm	ASTM D5185m	0	4	17	54
Manganese	ppm	ASTM D5185m		<1	<1	6
Magnesium	ppm	ASTM D5185m	20	42	136	597
Calcium	ppm	ASTM D5185m	1521	2336	2205	1458
Phosphorus	ppm	ASTM D5185m	948	1007	939	757
Zinc	ppm	ASTM D5185m	893	1209	1311	931
Sulfur	ppm	ASTM D5185m		4049	4068	2872
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.5	16.4	16.4
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	7.1	6.4	5.3
Visc @ 100°C	cSt	ASTM D445	11.0	11.4	11.1	10.7

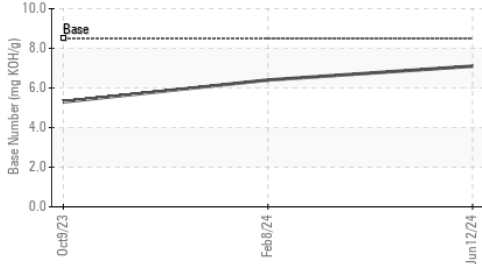
FT-IR (Direct Trend)



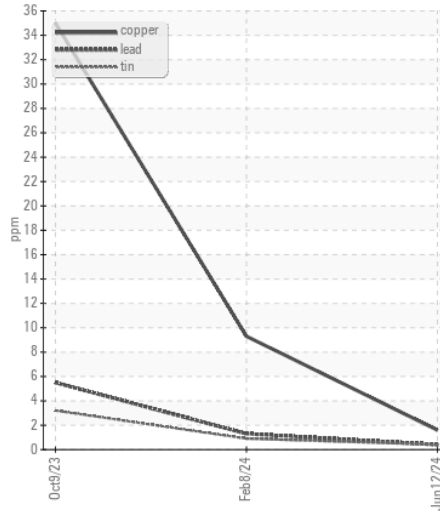
Ferrous Alloys



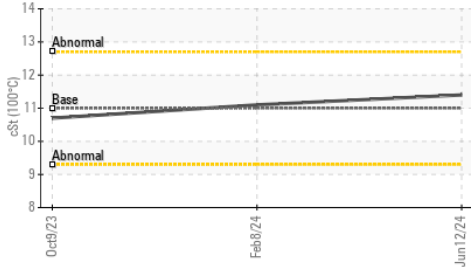
Base Number



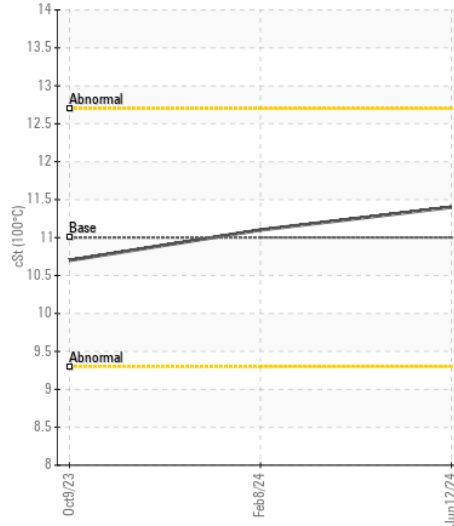
Non-ferrous Metals



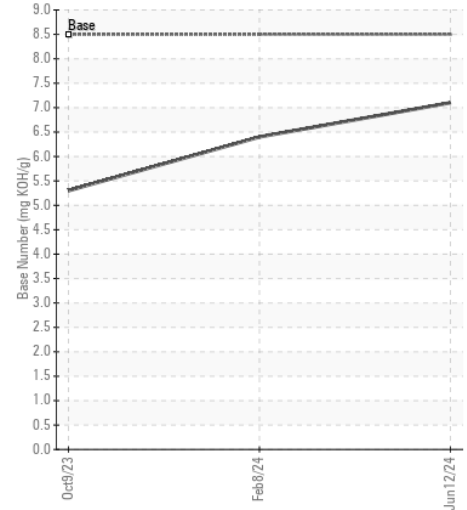
Viscosity @ 100°C



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0909707
Lab Number : 06211078
Unique Number : 11083942
Test Package : FLEET

Received : 14 Jun 2024
Tested : 19 Jun 2024
Diagnosed : 19 Jun 2024 - Sean Felton

GUY M TURNER & TURNER TRANSFER
 4505 SOUTH HOLDEN ROAD
 GREENSBORO, NC
 US 27406

Contact: ROGER HIXSON
 rhixson@guyturner.com

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)

T: (336)294-4660
 F: (336)294-6644