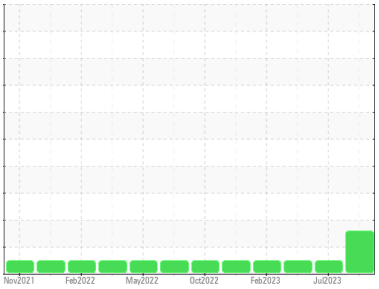
PROBLEM SUMMARY

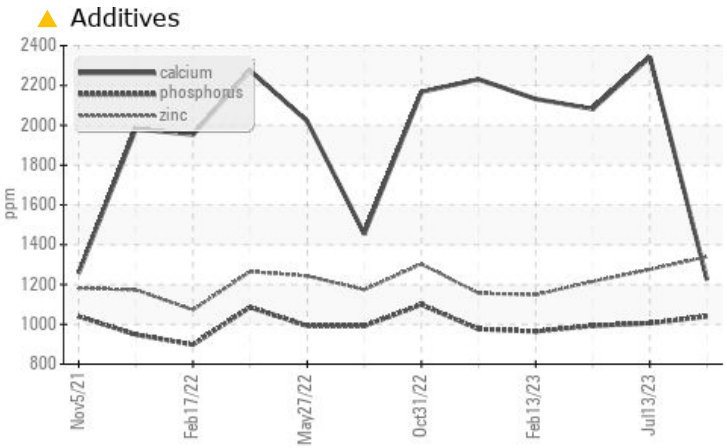
Sample Rating Trend



ADDITIVES

Machine Id
C1116
Component
Diesel Engine
Fluid
SHELL ROTELLA T4 15W40 (--- QTS)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status				ATTENTION	NORMAL	NORMAL
Boron	ppm	ASTM D5185m		▲ **2**	130	122
Magnesium	ppm	ASTM D5185m		▲ **1089**	83	56
Calcium	ppm	ASTM D5185m		▲ **1224**	2343	2082
Sulfur	ppm	ASTM D5185m		▲ **2675**	4373	4217

Customer Id: GUYGRE
Sample No.: WC0831958
Lab Number: 05964037
Test Package: FLEET

To manage this report scan the QR code

To discuss the diagnosis or test data:
Don Baldridge +1
don.b505@comcast.net

To change component or sample information:
Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Fluid	---	---	?	Oil and filter change at the time of sampling has been noted.
Change Filter	---	---	?	Oil and filter change at the time of sampling has been noted.

HISTORICAL DIAGNOSIS

13 Jul 2023 Diag: Don Baldridge

NORMAL

Resample at the next service interval to monitor.All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

view report

03 May 2023 Diag: Wes Davis

NORMAL

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

view report

13 Feb 2023 Diag: Wes Davis

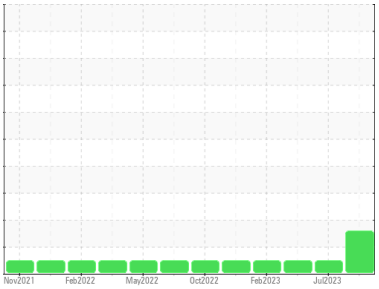
NORMAL

Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. Please specify the component make and model with your next sample.All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

view report

OIL ANALYSIS REPORT

Sample Rating Trend



ADDITIVES

Machine Id
C1116
Component
Diesel Engine
Fluid
SHELL ROTELLA T4 15W40 (--- QTS)

DIAGNOSIS

Recommendation
Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Wear
All component wear rates are normal.

Contamination
There is no indication of any contamination in the oil.

Fluid Condition
The oil viscosity is higher than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Additive levels indicate the addition of a different brand, or type of oil. Confirm oil type.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**WC0831958**	WC0832024	WC0801672
Sample Date		Client Info		**25 Sep 2023**	13 Jul 2023	03 May 2023
Machine Age	hrs	Client Info		**3903**	3476	3119
Oil Age	hrs	Client Info		**250**	250	250
Oil Changed		Client Info		**Changed**	Changed	Changed
Sample Status				**ATTENTION**	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	**43**	6	6
Chromium	ppm	ASTM D5185m	>20	**1**	<1	<1
Nickel	ppm	ASTM D5185m	>4	**0**	0	<1
Titanium	ppm	ASTM D5185m		**<1**	<1	<1
Silver	ppm	ASTM D5185m	>3	**0**	0	0
Aluminum	ppm	ASTM D5185m	>20	**9**	3	0
Lead	ppm	ASTM D5185m	>40	**<1**	22	<1
Copper	ppm	ASTM D5185m	>330	**36**	<1	0
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		▲ **2**	130	122
Barium	ppm	ASTM D5185m		**0**	0	0
Molybdenum	ppm	ASTM D5185m		**68**	15	11
Manganese	ppm	ASTM D5185m		**2**	<1	<1
Magnesium	ppm	ASTM D5185m		▲ **1089**	83	56
Calcium	ppm	ASTM D5185m		▲ **1224**	2343	2082
Phosphorus	ppm	ASTM D5185m		**1040**	1006	993
Zinc	ppm	ASTM D5185m		**1339**	1275	1215
Sulfur	ppm	ASTM D5185m		▲ **2675**	4373	4217

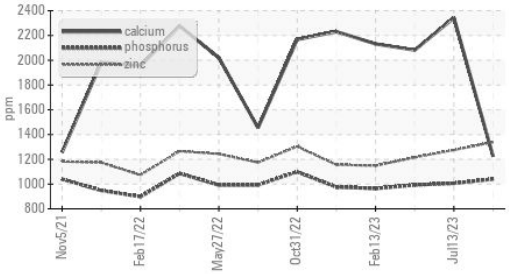
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	**7**	4	4
Sodium	ppm	ASTM D5185m		**6**	1	2
Potassium	ppm	ASTM D5185m	>20	**21**	10	10

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	**0.3**	0.3	0.2
Nitration	Abs/cm	*ASTM D7624	>20	**8.1**	8.0	7.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	**21.0**	21.2	18.5

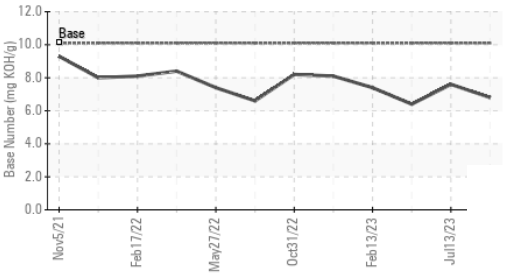
FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	**17.2**	17.4	15.6
Base Number (BN)	mg KOH/g	ASTM D2896	10.1	**6.8**	7.6	6.4

OIL ANALYSIS REPORT

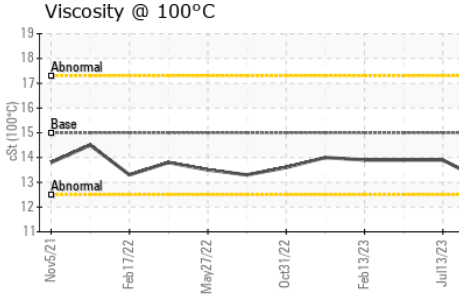
Additives



Base Number



Viscosity @ 100°C

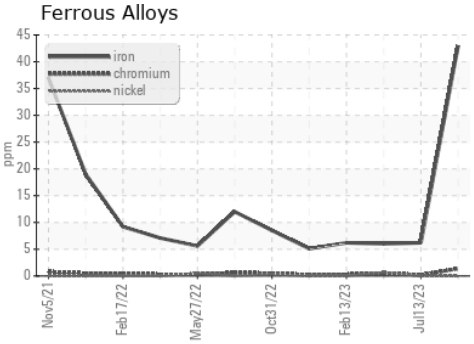


VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	NONE
Sand/Dirt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

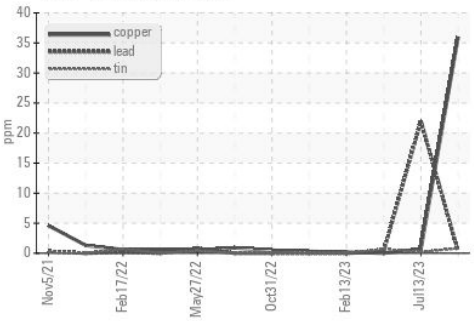
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15	**13.1**	13.9	13.9

GRAPHS

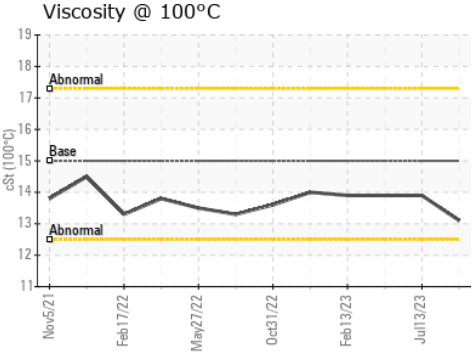
Ferrous Alloys



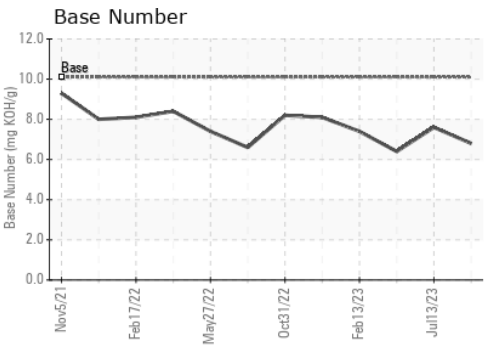
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0831958
Lab Number : 05964037
Unique Number : 10670588
Test Package : FLEET

Received : 28 Sep 2023
Diagnosed : 01 Oct 2023
Diagnostician : Don Baldridge

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)

GUY M TURNER & TURNER TRANSFER
4505 SOUTH HOLDEN ROAD
GREENSBORO, NC
US 27406
Contact: ROGER HIXSON
rhixson@guymturner.com
T: (336)294-4660
F: (336)294-6644