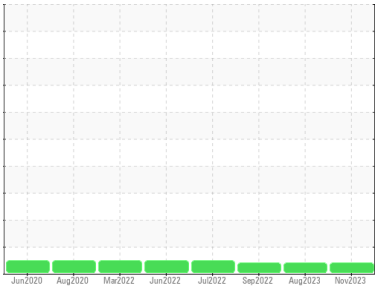
PROBLEM SUMMARY

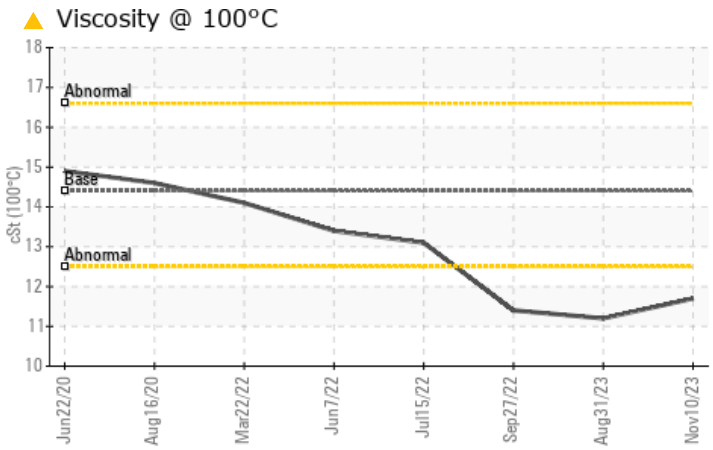
Sample Rating Trend



VISCOSITY

Machine Id
CR3314
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 5W40 (--- GAL)

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**	ATTENTION	ATTENTION
Visc @ 100°C	cSt	ASTM D445	14.4	▲ **11.7**	▲ 11.2	▲ 11.4

Customer Id: BUCWILTX
Sample No.: WC0867415
Lab Number: 06015643
Test Package: CONST

To manage this report scan the QR code

To discuss the diagnosis or test data:
Sean Felton +1 919-379-4092
sfelton@wearcheckusa.com

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

31 Aug 2023 Diag: Sean Felton

VISCOSITY

Oil and filter change at the time of sampling has been noted. 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 oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

view report

27 Sep 2022 Diag: Jonathan Hester

VISCOSITY

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.All component wear rates are normal. Fuel content negligible. There is no indication of any contamination in the oil. The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

view report

15 Jul 2022 Diag: Wes Davis

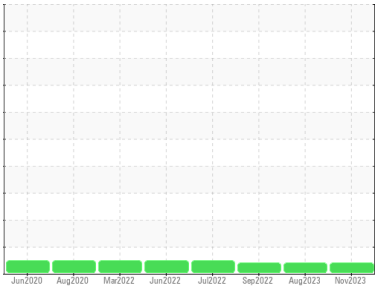
NORMAL

Little or no information is provided as to the component and lubricant being tested. Recommendations are therefore generic in nature and may not apply to the current application. Please forward information as to equipment type, reservoir capacity, lubricant type and any pertinent information to allow for a more accurate assessment. 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. Please specify the brand, type, and viscosity of the oil on 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



VISCOSITY

Machine Id
CR3314
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 5W40 (--- GAL)

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 lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**WC0867415**	WC0833325	WC0555934
Sample Date		Client Info		**10 Nov 2023**	31 Aug 2023	27 Sep 2022
Machine Age	hrs	Client Info		**8421**	8290	7219
Oil Age	hrs	Client Info		**0**	0	442
Oil Changed		Client Info		**Changed**	Changed	Changed
Sample Status				**ATTENTION**	ATTENTION	ATTENTION

CONTAMINATION		method	limit/base	current	history1	history2
Water		WC Method	>0.2	**NEG**	NEG	NEG
Glycol		WC Method		**NEG**	NEG	NEG

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

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	250	**188**	120	13
Barium	ppm	ASTM D5185m	10	**0**	<1	0
Molybdenum	ppm	ASTM D5185m	100	**2**	61	59
Manganese	ppm	ASTM D5185m		**<1**	<1	<1
Magnesium	ppm	ASTM D5185m	450	**112**	460	842
Calcium	ppm	ASTM D5185m	3000	**2097**	1810	1156
Phosphorus	ppm	ASTM D5185m	1150	**1032**	1073	1011
Zinc	ppm	ASTM D5185m	1350	**1238**	1285	1224
Sulfur	ppm	ASTM D5185m	4250	**3662**	4004	3570

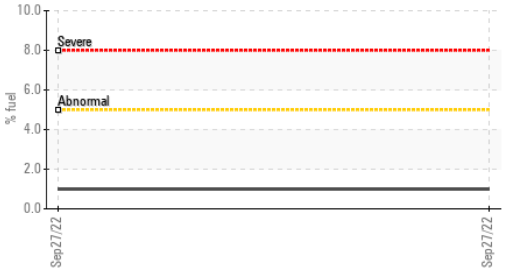
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	**6**	6	4
Sodium	ppm	ASTM D5185m	>44	**1**	1	2
Potassium	ppm	ASTM D5185m	>20	**7**	6	2
Fuel	%	ASTM D3524	>5	**<1.0**	<1.0	1.0

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	**0**	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	**5.8**	6.0	8.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	**19.9**	18.5	19.7

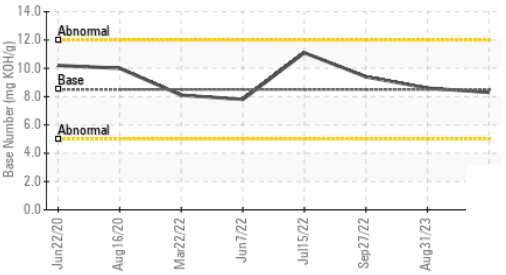
FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	**15.5**	14.3	15.4
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	**8.3**	8.6	9.4

OIL ANALYSIS REPORT

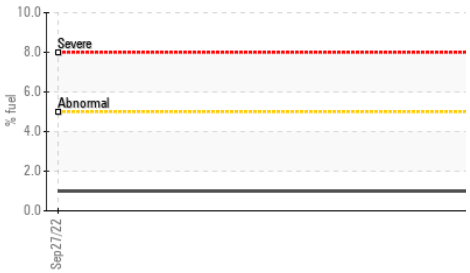
Fuel Dilution



Base Number



Fuel Dilution

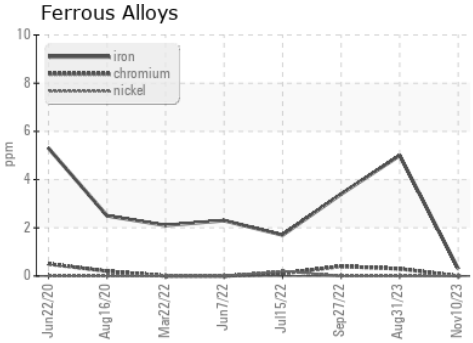


VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	NONE
Sand/Dirt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

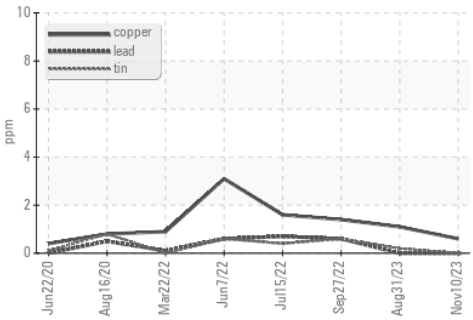
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	14.4	▲ **11.7**	▲ 11.2	▲ 11.4

GRAPHS

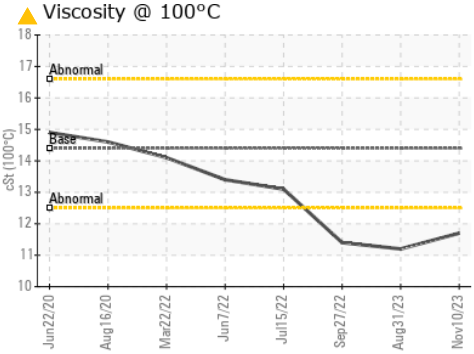
Ferrous Alloys



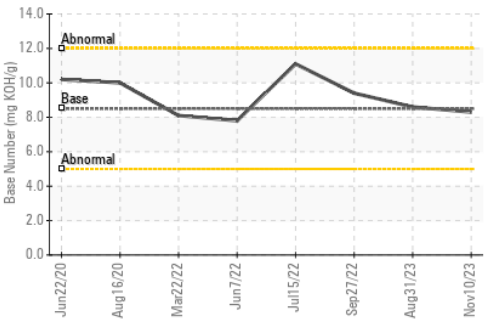
Non-ferrous Metals



▲ Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0867415 **Received** : 22 Nov 2023
Lab Number : 06015643 **Diagnosed** : 27 Nov 2023
Unique Number : 10754787 **Diagnostician** : Sean Felton
Test Package : CONST (Additional Tests: FuelDilution, PercentFuel, TBN)

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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