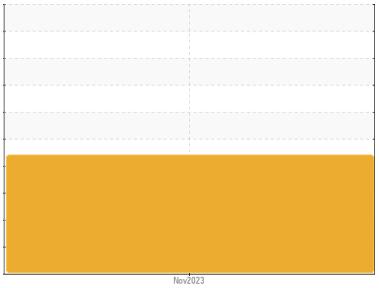
PROBLEM SUMMARY

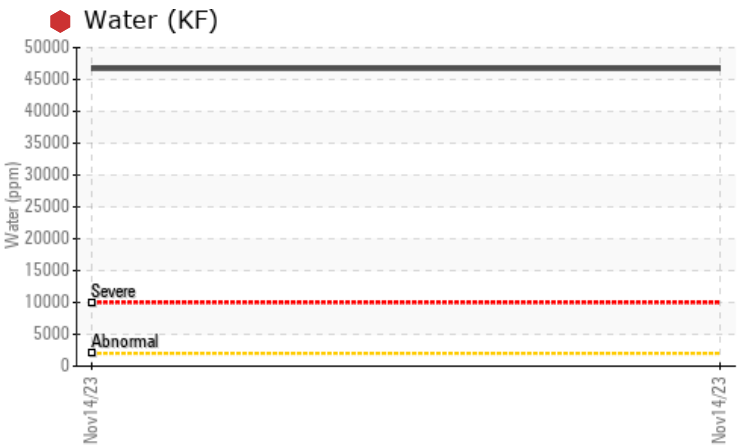
Sample Rating Trend

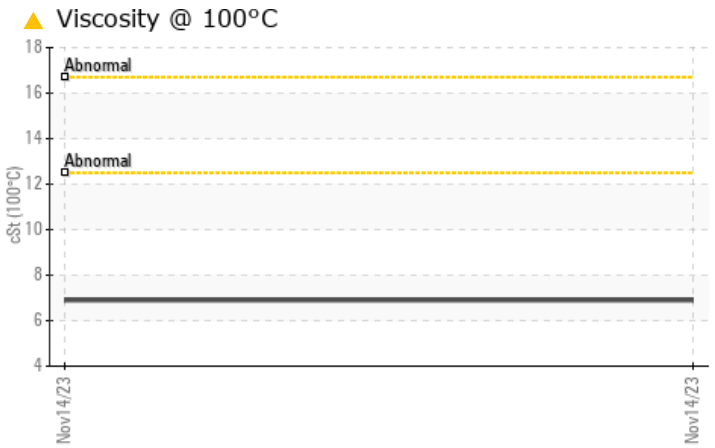


WATER

Machine Id
T0333DK184896
Component
Diesel Engine
Fluid
NOT GIVEN (--- GAL)

COMPONENT CONDITION SUMMARY





RECOMMENDATION

We recommend that you drain the oil and perform a filter service on this component if not already done. We recommend an early resample to monitor this condition. Please note that there was too much water present in the oil to perform an accurate viscosity test.

PROBLEMATIC TEST RESULTS

Sample Status				**SEVERE**	---	---
Water	%	ASTM D6304	>0.2	**4.67**	---	---
ppm Water	ppm	ASTM D6304	>2000	**46700**	---	---
Appearance	scalar	*Visual	NORML	**HAZY**	---	---
Emulsified Water	scalar	*Visual	>0.2	**0.2%**	---	---
Visc @ 100°C	cSt	ASTM D445		**6.9**	---	---

Customer Id: JAMCHA
Sample No.: JR0192519
Lab Number: 06009433
Test Package: CONST

To manage this report scan the QR code

To discuss the diagnosis or test data:
Jonathan Hester +1 919-379-4092 x4092
jhester@wearcheckusa.com

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

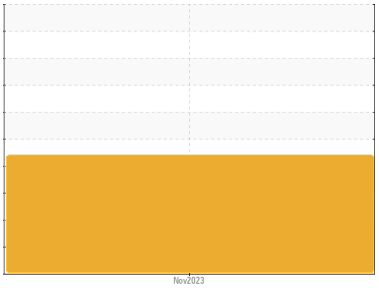
RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Fluid	---	---	?	We recommend that you drain the oil and perform a filter service on this component if not already done.
Change Filter	---	---	?	We recommend that you drain the oil and perform a filter service on this component if not already done.
Resample	---	---	?	We recommend an early resample to monitor this condition.
Alert	---	---	?	Please note that there was too much water present in the oil to perform a viscosity test.

HISTORICAL DIAGNOSIS

OIL ANALYSIS REPORT

Sample Rating Trend



WATER

Machine Id
T0333DK184896
Component
Diesel Engine
Fluid
NOT GIVEN (--- GAL)

DIAGNOSIS

Recommendation
We recommend that you drain the oil and perform a filter service on this component if not already done. We recommend an early resample to monitor this condition. Please note that there was too much water present in the oil to perform an accurate viscosity test.

Wear
All component wear rates are normal.

Contamination
Fuel content negligible. There is a high concentration of water present 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. The oil is no longer serviceable due to the presence of contaminants.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**JR0192519**	---	---
Sample Date		Client Info		**14 Nov 2023**	---	---
Machine Age	hrs	Client Info		**2100**	---	---
Oil Age	hrs	Client Info		**2100**	---	---
Oil Changed		Client Info		**Not Changd**	---	---
Sample Status				**SEVERE**	---	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	**27**	---	---
Chromium	ppm	ASTM D5185m	>20	**0**	---	---
Nickel	ppm	ASTM D5185m	>4	**0**	---	---
Titanium	ppm	ASTM D5185m		**<1**	---	---
Silver	ppm	ASTM D5185m	>3	**0**	---	---
Aluminum	ppm	ASTM D5185m	>20	**2**	---	---
Lead	ppm	ASTM D5185m	>40	**0**	---	---
Copper	ppm	ASTM D5185m	>330	**<1**	---	---
Tin	ppm	ASTM D5185m	>15	**<1**	---	---
Vanadium	ppm	ASTM D5185m		**<1**	---	---
Cadmium	ppm	ASTM D5185m		**<1**	---	---

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**378**	---	---
Barium	ppm	ASTM D5185m		**0**	---	---
Molybdenum	ppm	ASTM D5185m		**74**	---	---
Manganese	ppm	ASTM D5185m		**<1**	---	---
Magnesium	ppm	ASTM D5185m		**407**	---	---
Calcium	ppm	ASTM D5185m		**1264**	---	---
Phosphorus	ppm	ASTM D5185m		**890**	---	---
Zinc	ppm	ASTM D5185m		**1159**	---	---
Sulfur	ppm	ASTM D5185m		**3327**	---	---

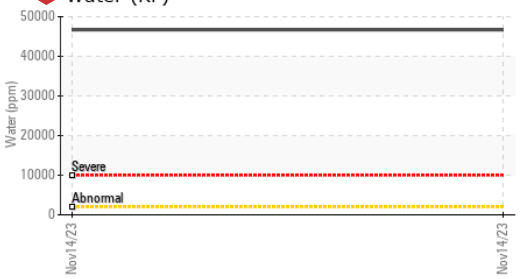
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	**6**	---	---
Sodium	ppm	ASTM D5185m		**2**	---	---
Potassium	ppm	ASTM D5185m	>20	**2**	---	---
Fuel	%	ASTM D3524	>5	**1.1**	---	---
Water	%	ASTM D6304	>0.2	**4.67**	---	---
ppm Water	ppm	ASTM D6304	>2000	**46700**	---	---
Glycol	%	*ASTM D2982		**0.0**	---	---

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	**0.1**	---	---
Nitration	Abs/cm	*ASTM D7624	>20	**8.4**	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	**13.8**	---	---

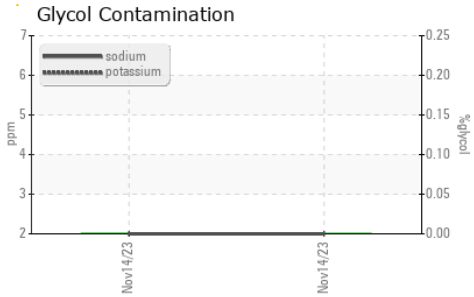
FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	**14.8**	---	---
Base Number (BN)	mg KOH/g	ASTM D2896		**11.8**	---	---

OIL ANALYSIS REPORT

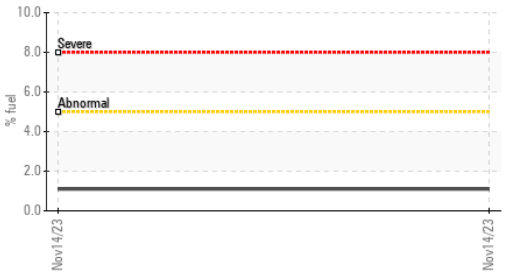
Water (KF)



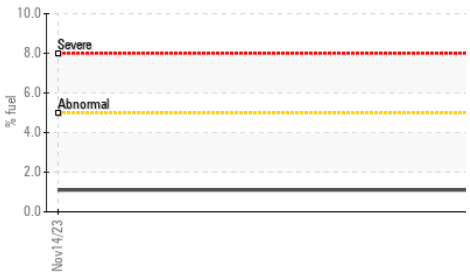
Glycol Contamination



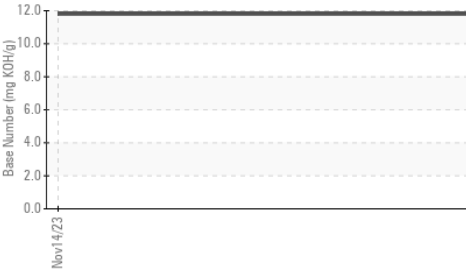
Fuel Dilution



Fuel Dilution



Base Number

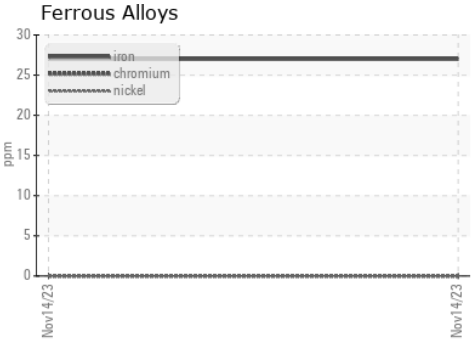


VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	---	---
Yellow Metal	scalar	*Visual	NONE	**NONE**	---	---
Precipitate	scalar	*Visual	NONE	**NONE**	---	---
Silt	scalar	*Visual	NONE	**NONE**	---	---
Debris	scalar	*Visual	NONE	**NONE**	---	---
Sand/Dirt	scalar	*Visual	NONE	**NONE**	---	---
Appearance	scalar	*Visual	NORML	▲ **HAZY**	---	---
Odor	scalar	*Visual	NORML	**NORML**	---	---
Emulsified Water	scalar	*Visual	>0.2	⬢ **0.2%**	---	---
Free Water	scalar	*Visual		**NEG**	---	---

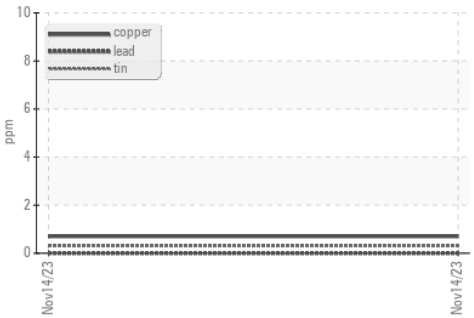
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445		▲ **6.9**	---	---

GRAPHS

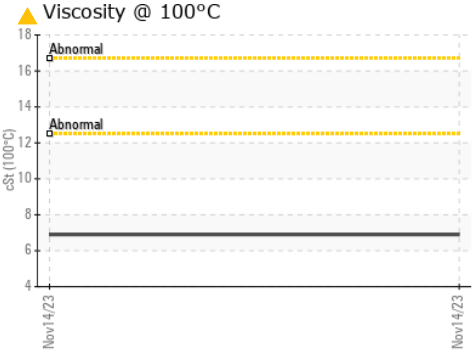
Ferrous Alloys



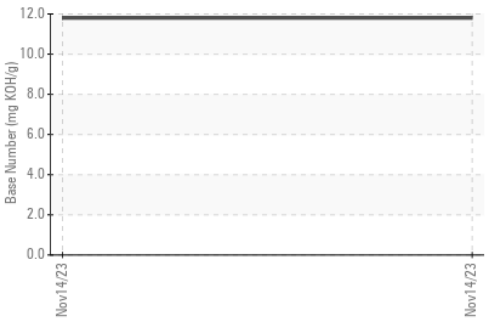
Non-ferrous Metals



▲ Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0192519
Lab Number : 06009433
Unique Number : 10743195
Test Package : CONST (Additional Tests: FuelDilution, Glycol, KF, PercentFuel, TBN)

Received : 16 Nov 2023
Diagnosed : 21 Nov 2023
Diagnostician : Jonathan Hester

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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