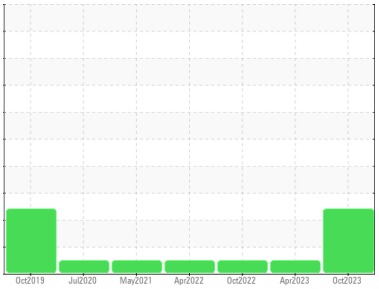
PROBLEM SUMMARY

Sample Rating Trend

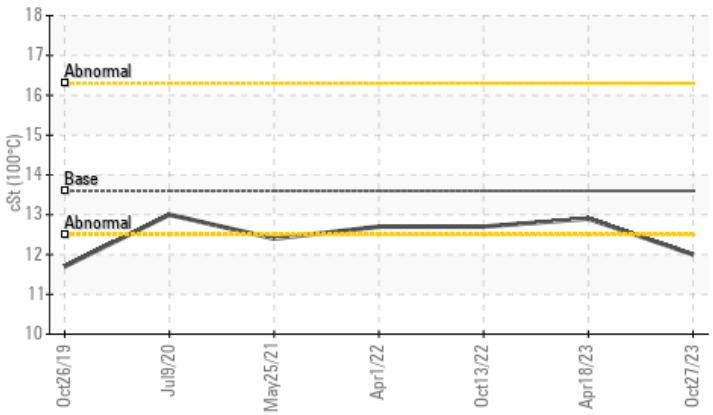


DEGRADATION

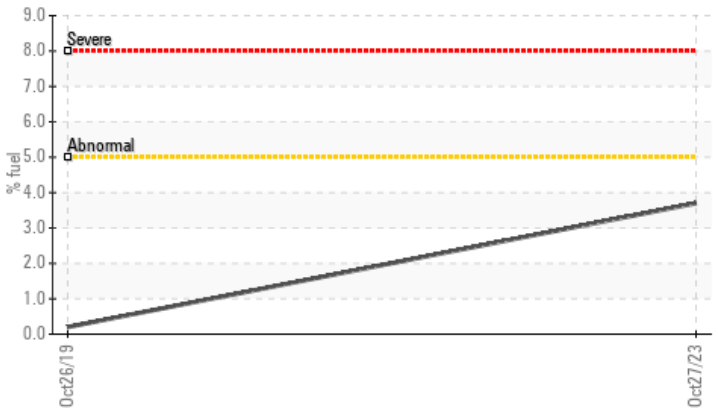
Machine Id
INTERNATIONAL 8026776
Component
Diesel Engine
Fluid
VALVOLINE 15W40 (--- GAL)

COMPONENT CONDITION SUMMARY

▲ Viscosity @ 100°C



▲ Fuel Dilution



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				**ABNORMAL**	NORMAL	NORMAL
Fuel	%	ASTM D3524	>5	▲ **3.7**	<1.0	<1.0
Base Number (BN)	mg KOH/g	ASTM D2896	6.9	▲ **3.8**	5.5	5.0
Visc @ 100°C	cSt	ASTM D445	13.6	▲ **12.0**	12.9	12.7

Customer Id: IDETAMFL
Sample No.: IL0033208
Lab Number: 05996503
Test Package: FLEET

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	---	---	?	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

18 Apr 2023 Diag: Sean Felton

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 acceptable for the time in service.

view report

13 Oct 2022 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

01 Apr 2022 Diag: Don Baldridge

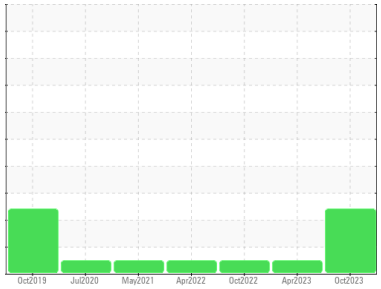
NORMAL

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

OIL ANALYSIS REPORT

Sample Rating Trend



DEGRADATION

Machine Id
INTERNATIONAL 8026776
Component
Diesel Engine
Fluid
VALVOLINE 15W40 (--- 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
Light fuel dilution occurring.

Fluid Condition
The oil viscosity is lower than normal. The BN level is low. Confirm oil type.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**IL0033208**	IL05832366	IL05679771
Sample Date		Client Info		**27 Oct 2023**	18 Apr 2023	13 Oct 2022
Machine Age	mls	Client Info		**276770**	242942	219884
Oil Age	mls	Client Info		**0**	0	36831
Oil Changed		Client Info		**Changed**	N/A	N/A
Sample Status				**ABNORMAL**	NORMAL	NORMAL

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

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	**34**	19	34
Chromium	ppm	ASTM D5185m	>20	**1**	<1	2
Nickel	ppm	ASTM D5185m	>4	**0**	0	0
Titanium	ppm	ASTM D5185m		**0**	0	<1
Silver	ppm	ASTM D5185m	>3	**0**	0	0
Aluminum	ppm	ASTM D5185m	>20	**2**	2	5
Lead	ppm	ASTM D5185m	>40	**4**	0	6
Copper	ppm	ASTM D5185m	>330	**<1**	<1	2
Tin	ppm	ASTM D5185m	>15	**<1**	0	1
Vanadium	ppm	ASTM D5185m		**0**	0	0
Cadmium	ppm	ASTM D5185m		**<1**	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	39	**30**	42	19
Barium	ppm	ASTM D5185m	1	**0**	0	<1
Molybdenum	ppm	ASTM D5185m	49	**76**	68	68
Manganese	ppm	ASTM D5185m	1	**<1**	<1	<1
Magnesium	ppm	ASTM D5185m	616	**574**	732	676
Calcium	ppm	ASTM D5185m	1554	**1246**	1314	1243
Phosphorus	ppm	ASTM D5185m	899	**721**	692	672
Zinc	ppm	ASTM D5185m	1069	**929**	968	890
Sulfur	ppm	ASTM D5185m	2624	**2754**	2733	2501

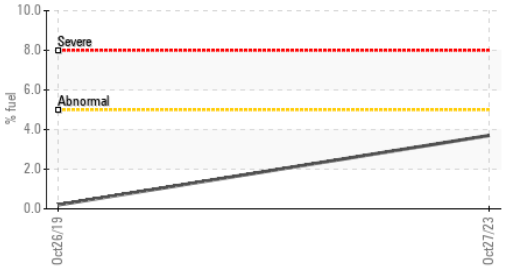
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	**6**	4	6
Sodium	ppm	ASTM D5185m		**0**	2	<1
Potassium	ppm	ASTM D5185m	>20	**5**	3	12
Fuel	%	ASTM D3524	>5	▲ **3.7**	<1.0	<1.0

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	**0.6**	0.3	0.6
Nitration	Abs/cm	*ASTM D7624	>20	**11.0**	10.4	13.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	**26.3**	22.5	28.1

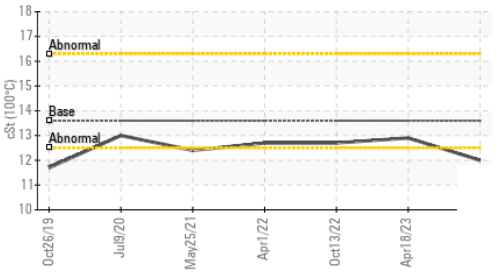
FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	**25.6**	21.5	27.5
Base Number (BN)	mg KOH/g	ASTM D2896	6.9	▲ **3.8**	5.5	5.0

OIL ANALYSIS REPORT

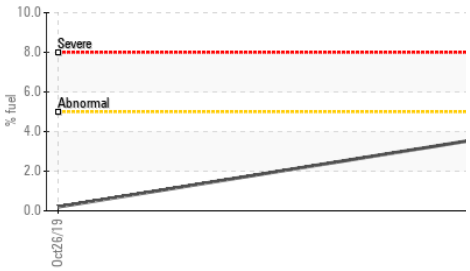
Fuel Dilution



Viscosity @ 100°C



Fuel Dilution

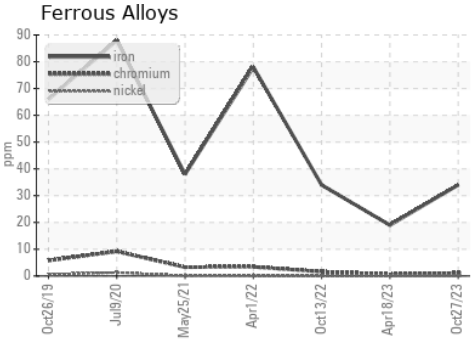


VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	NONE
Sand/Dirt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

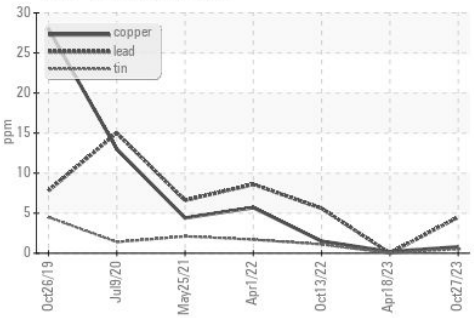
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	13.6	▲ **12.0**	12.9	12.7

GRAPHS

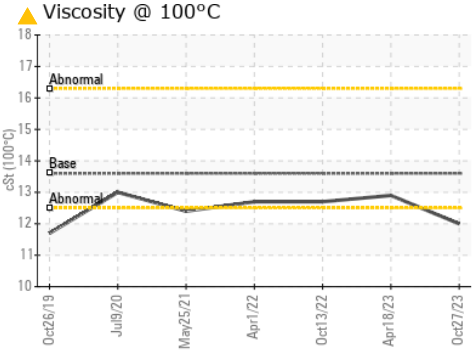
Ferrous Alloys



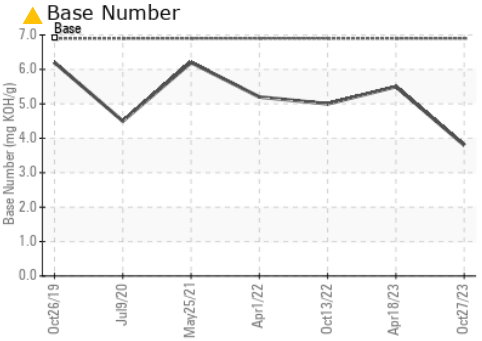
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : IL0033208 **Received** : 02 Nov 2023
Lab Number : 05996503 **Diagnosed** : 06 Nov 2023
Unique Number : 10724863 **Diagnostician** : Jonathan Hester
Test Package : FLEET (Additional Tests: FuelDilution, PercentFuel)

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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