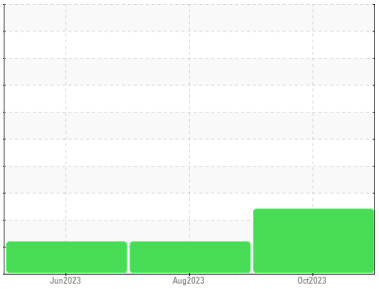
PROBLEM SUMMARY

Area
OKLAHOMA/3
Machine Id
50.26L [OKLAHOMA^3]
Component
Diesel Engine
Fluid
MOBIL DELVAC 1300 SUPER15W40 (--- GAL)

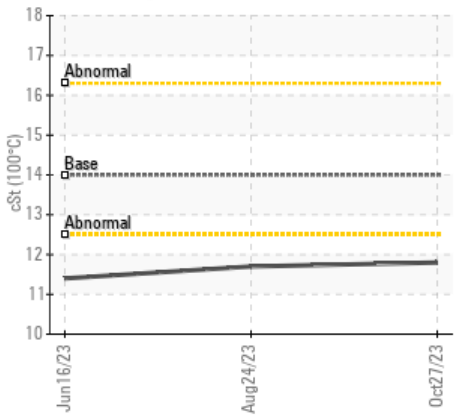
Sample Rating Trend



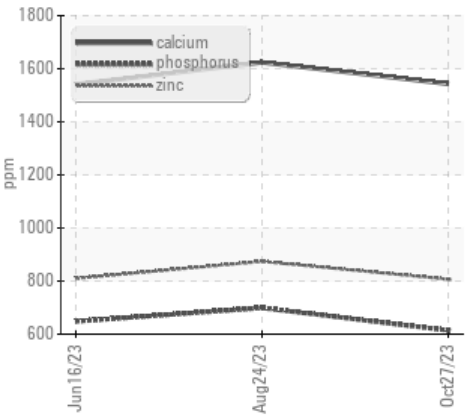
FUEL

COMPONENT CONDITION SUMMARY

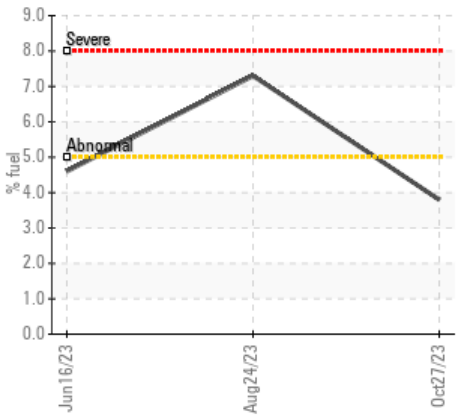
▲ Viscosity @ 100°C



▲ Additives



▲ Fuel Dilution



RECOMMENDATION

The oil change at the time of sampling has been noted. Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor. No other corrective action is recommended at this time.

PROBLEMATIC TEST RESULTS

Sample Status				**ABNORMAL**	ABNORMAL	ABNORMAL
Magnesium	ppm	ASTM D5185m	0	▲ **451**	507	454
Phosphorus	ppm	ASTM D5185m		▲ **614**	699	648
Sulfur	ppm	ASTM D5185m		▲ **2193**	2660	2574
Fuel	%	ASTM D3524	>5	▲ **3.8**	▲ 7.3	▲ 4.6
Visc @ 100°C	cSt	ASTM D445	14	▲ **11.8**	▲ 11.7	▲ 11.4

Customer Id: SHEWIC
Sample No.: WC0857505
Lab Number: 05997757
Test Package: CONST

To manage this report scan the QR code

To discuss the diagnosis or test data:
Wes Davis +1 905-569-8600 x223
wesd@wearcheck.ca

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

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Check Fluid Source	---	---	?	Confirm the source of the lubricant being utilized for top-up/fill.

HISTORICAL DIAGNOSIS

24 Aug 2023 Diag: Wes Davis

FUEL

The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.All component wear rates are normal. There is a moderate amount of fuel present in the oil. Tests confirm the presence of fuel in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

view report

16 Jun 2023 Diag: Wes Davis

FUEL

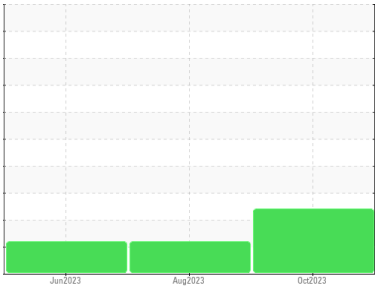
The oil change at the time of sampling has been noted. Resample at the next service interval to monitor.All component wear rates are normal. Light fuel dilution occurring. The BN result indicates that there is suitable alkalinity remaining in the oil. Fuel is present in the oil and is lowering the viscosity. The condition of the oil is suitable for further service.

view report

OIL ANALYSIS REPORT

Area
OKLAHOMA/3
Machine Id
50.26L [OKLAHOMA^3]
Component
Diesel Engine
Fluid
MOBIL DELVAC 1300 SUPER15W40 (--- GAL)

Sample Rating Trend



FUEL

DIAGNOSIS

Recommendation
The oil change at the time of sampling has been noted. Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor. No other corrective action is recommended at this time.

Wear
All component wear rates are normal.

Contamination
Light fuel dilution occurring. No other contaminants were detected in the oil.

Fluid Condition
The BN result indicates that there is suitable alkalinity remaining in the oil. This plus the additive levels indicates that this is not the same brand, or type of oil as reported. The condition of the oil is suitable for further service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**WC0857505**	WC0833963	WC0821706
Sample Date		Client Info		**27 Oct 2023**	24 Aug 2023	16 Jun 2023
Machine Age	hrs	Client Info		**20149**	19846	19383
Oil Age	hrs	Client Info		**19846**	19383	250
Oil Changed		Client Info		**Changed**	Changed	Changed
Sample Status				**ABNORMAL**	ABNORMAL	ABNORMAL

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	**23**	44	21
Chromium	ppm	ASTM D5185m	>20	**<1**	<1	<1
Nickel	ppm	ASTM D5185m	>2	**0**	0	0
Titanium	ppm	ASTM D5185m	>2	**<1**	0	<1
Silver	ppm	ASTM D5185m	>2	**0**	0	0
Aluminum	ppm	ASTM D5185m	>25	**<1**	2	<1
Lead	ppm	ASTM D5185m	>40	**<1**	<1	0
Copper	ppm	ASTM D5185m	>330	**6**	8	8
Tin	ppm	ASTM D5185m	>15	**0**	<1	<1
Vanadium	ppm	ASTM D5185m		**<1**	0	0
Cadmium	ppm	ASTM D5185m		**0**	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	**48**	38	50
Barium	ppm	ASTM D5185m	0	**0**	0	0
Molybdenum	ppm	ASTM D5185m	0	**37**	39	38
Manganese	ppm	ASTM D5185m		**<1**	<1	<1
Magnesium	ppm	ASTM D5185m	0	▲ **451**	507	454
Calcium	ppm	ASTM D5185m		**1543**	1624	1541
Phosphorus	ppm	ASTM D5185m		▲ **614**	699	648
Zinc	ppm	ASTM D5185m		**807**	874	810
Sulfur	ppm	ASTM D5185m		▲ **2193**	2660	2574

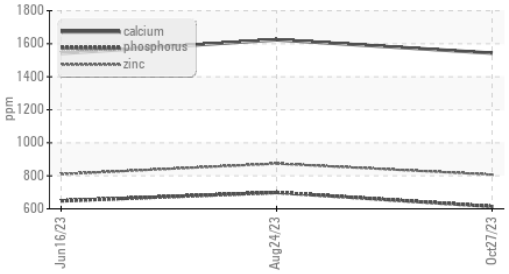
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	**5**	5	4
Sodium	ppm	ASTM D5185m		**3**	4	3
Potassium	ppm	ASTM D5185m	>20	**0**	4	0
Fuel	%	ASTM D3524	>5	▲ **3.8**	▲ 7.3	▲ 4.6

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	**0.7**	1.1	0.6
Nitration	Abs/cm	*ASTM D7624	>20	**6.6**	7.8	6.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	**22.5**	22.1	22.6

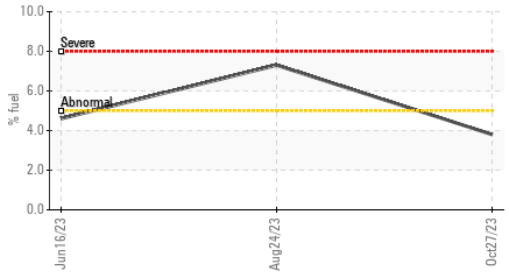
FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	**19.3**	17.8	20.1
Base Number (BN)	mg KOH/g	ASTM D2896	9.4	**9.5**	8.2	9.0

OIL ANALYSIS REPORT

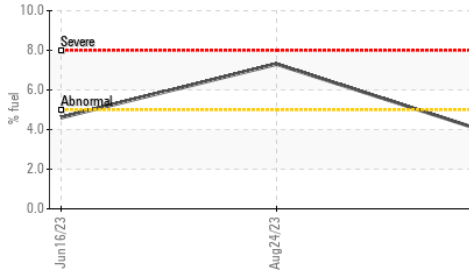
Additives



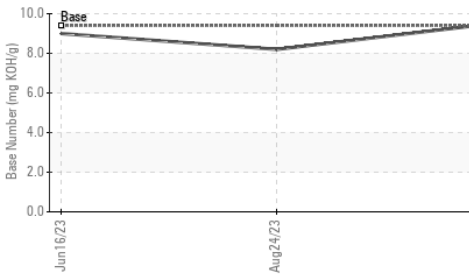
Fuel Dilution



Fuel Dilution



Base Number

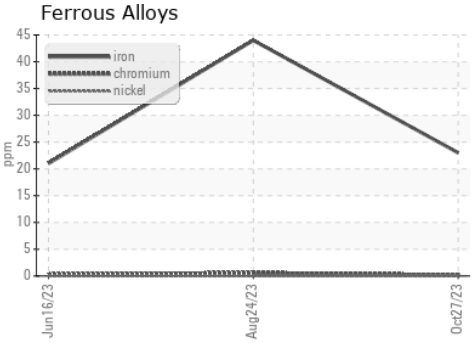


VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	NONE
Sand/Dirt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

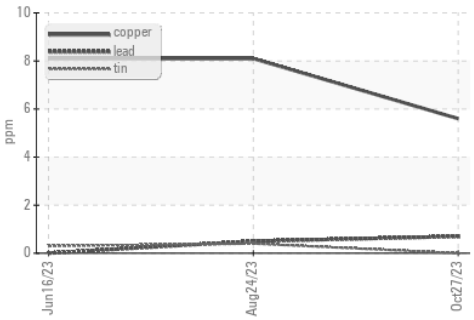
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	14	▲ **11.8**	▲ 11.7	▲ 11.4

GRAPHS

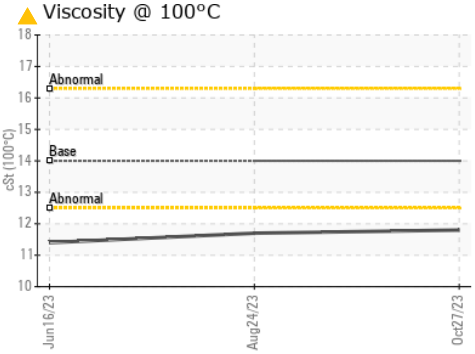
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



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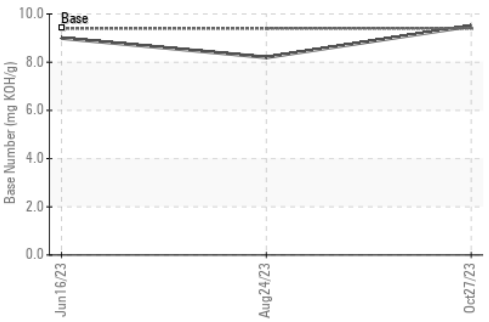

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0857505 **Received** : 03 Nov 2023
Lab Number : 05997757 **Diagnosed** : 06 Nov 2023
Unique Number : 10726117 **Diagnostician** : Wes Davis
Test Package : CONST (Additional Tests: 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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WICHITA, KS
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Report Id: SHEWIC [WUSCAR] 05997757 (Generated: 11/06/2023 17:52:11) Rev: 1

Submitted By: GARRETT ADAMS