



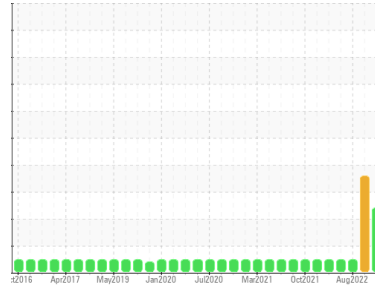
PROBLEM SUMMARY

Sample Rating Trend

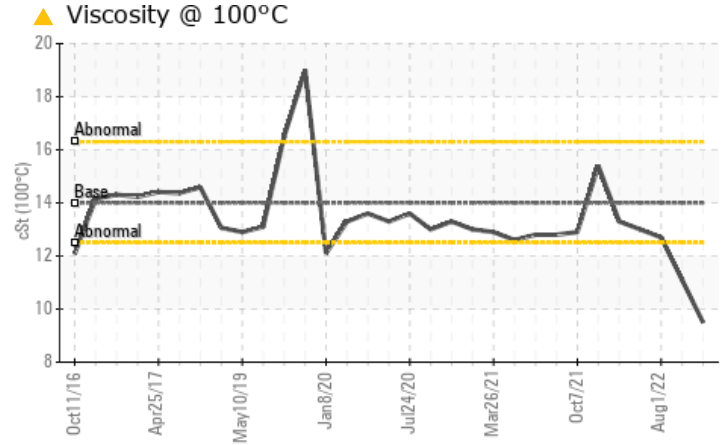
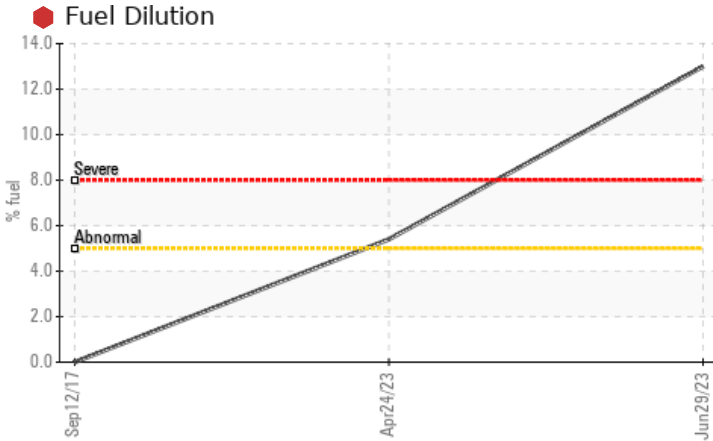
FUEL



Area
OKLAHOMA/102/EG - TRUCK-ON-HWY-HEAVY DUTY
 Machine Id
05.53 [OKLAHOMA^102^EG - TRUCK-ON-HWY-HEAVY DUTY]
 Component
Diesel Engine
 Fluid
MOBIL DELVAC 1300 SUPER15W40 (--- GAL)



COMPONENT CONDITION SUMMARY



RECOMMENDATION

We advise that you check the fuel injection system. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS

Sample Status				SEVERE	ABNORMAL	NORMAL
Fuel	%	ASTM D3524	>5	13.0	5.4	<1.0
Visc @ 100°C	cSt	ASTM D445	14	9.5	11.1	12.7

Customer Id: SHEWIC
 Sample No.: WC0821803
 Lab Number: 05899180
 Test Package: CONST



To manage this report scan the QR code

To discuss the diagnosis or test data:
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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.
Resample	---	---	?	We recommend an early resample to monitor this condition.
Check Fuel/injector System	---	---	?	We advise that you check the fuel injection system.

HISTORICAL DIAGNOSIS

24 Apr 2023 Diag: Don Baldrige

DIRT



We advise that you check the fuel injection system. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. An increase in the copper level is noted. All other component wear rates are normal. Elemental level of silicon (Si) above normal. There is a moderate amount of fuel present in the oil. Fuel is present in the oil and is lowering the viscosity. The BN result indicates that there is suitable alkalinity remaining in the oil.

view report



01 Aug 2022 Diag: Don Baldrige

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



22 Jun 2022 Diag: Don Baldrige

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



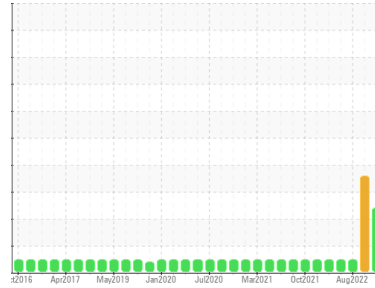


OIL ANALYSIS REPORT

Sample Rating Trend

FUEL

Area
OKLAHOMA/102/EG - TRUCK-ON-HWY-HEAVY DUTY
 Machine Id
05.53 [OKLAHOMA^102^EG - TRUCK-ON-HWY-HEAVY DUTY]
 Component
Diesel Engine
 Fluid
MOBIL DELVAC 1300 SUPER15W40 (--- GAL)



DIAGNOSIS

Recommendation

We advise that you check the fuel injection system. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Wear

All component wear rates are normal.

Contamination

There is a high amount of fuel present in the oil.

Fluid Condition

Fuel is present in the oil and is lowering the viscosity. The BN result indicates that there is suitable alkalinity remaining in the oil.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0821803	WC0807995	WC0713295
Sample Date	Client Info		29 Jun 2023	24 Apr 2023	01 Aug 2022
Machine Age	hrs	Client Info	440	273	8786
Oil Age	hrs	Client Info	167	273	184
Oil Changed	Client Info		Changed	Changed	Changed
Sample Status			SEVERE	ABNORMAL	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	17	25	11
Chromium	ppm	ASTM D5185m >20	<1	1	<1
Nickel	ppm	ASTM D5185m >4	0	<1	<1
Titanium	ppm	ASTM D5185m	0	<1	<1
Silver	ppm	ASTM D5185m >3	<1	1	<1
Aluminum	ppm	ASTM D5185m >20	5	7	2
Lead	ppm	ASTM D5185m >40	3	5	1
Copper	ppm	ASTM D5185m >330	96	▲ 110	<1
Tin	ppm	ASTM D5185m >15	2	3	<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 0	36	143	45
Barium	ppm	ASTM D5185m 0	<1	17	0
Molybdenum	ppm	ASTM D5185m 0	30	13	38
Manganese	ppm	ASTM D5185m	2	6	<1
Magnesium	ppm	ASTM D5185m 0	411	266	460
Calcium	ppm	ASTM D5185m	1529	2301	1649
Phosphorus	ppm	ASTM D5185m	693	1160	727
Zinc	ppm	ASTM D5185m	859	1360	902
Sulfur	ppm	ASTM D5185m	2748	4122	2518

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	9	▲ 28	8
Sodium	ppm	ASTM D5185m	3	4	4
Potassium	ppm	ASTM D5185m >20	4	10	4
Fuel	%	ASTM D3524 >5	● 13.0	▲ 5.4	<1.0

INFRA-RED

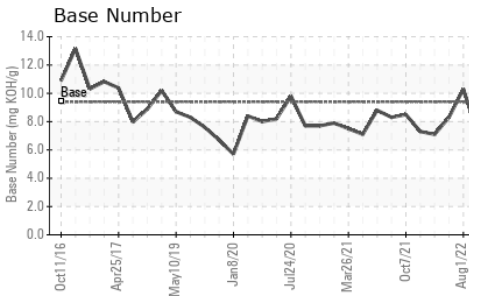
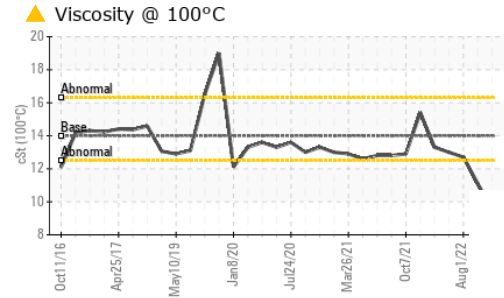
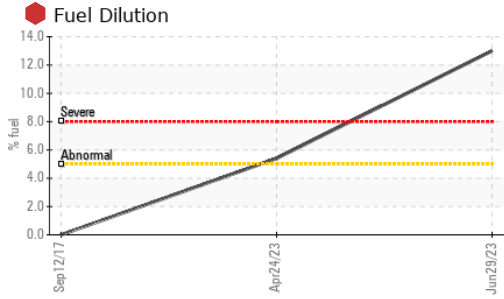
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	0.4	0.2	0.3
Nitration	Abs/cm	*ASTM D7624 >20	10.3	9.1	10.2
Sulfation	Abs/.1mm	*ASTM D7415 >30	23.9	21.7	25.4

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	25.1	18.9	25.9
Base Number (BN)	mg KOH/g	ASTM D2896 9.4	7.7	7.2	10.3



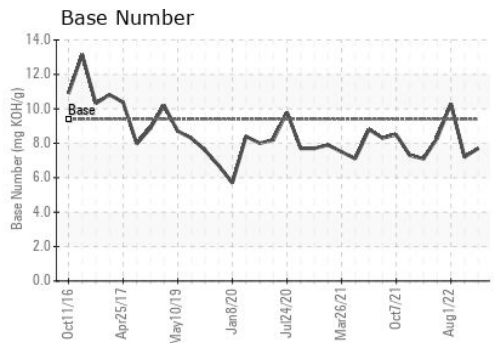
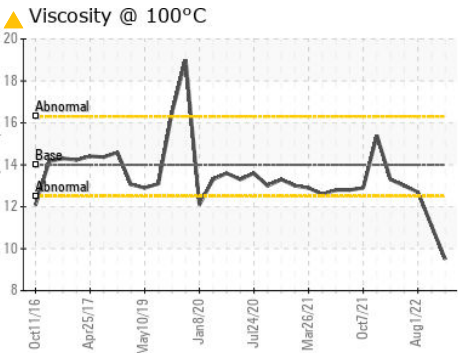
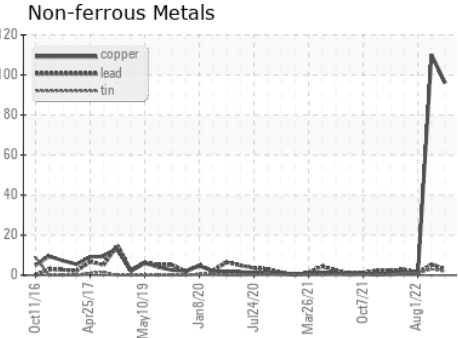
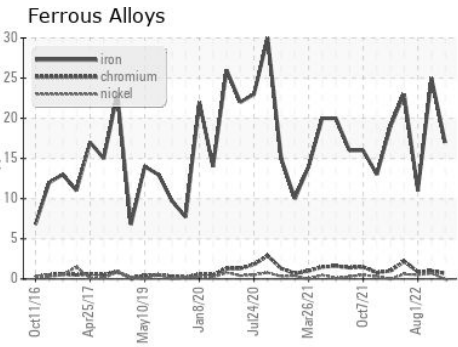
OIL ANALYSIS REPORT



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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445 14	▲ 9.5	▲ 11.1	12.7

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0821803 **Received** : 14 Jul 2023
Lab Number : 05899180 **Diagnosed** : 18 Jul 2023
Unique Number : 10560536 **Diagnostician** : Jonathan Hester
Test Package : CONST (Additional Tests: PercentFuel, TBN)

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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)