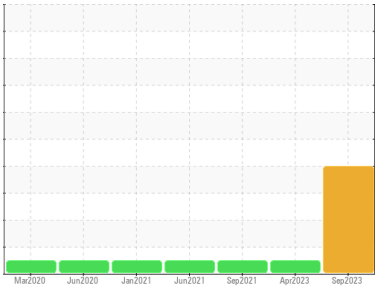
PROBLEM SUMMARY

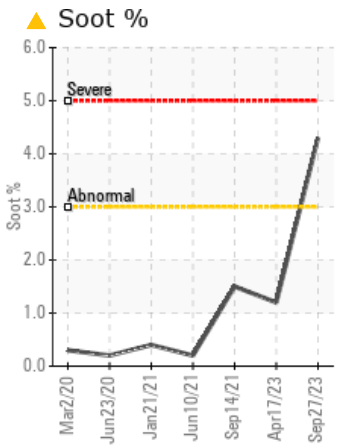
Sample Rating Trend

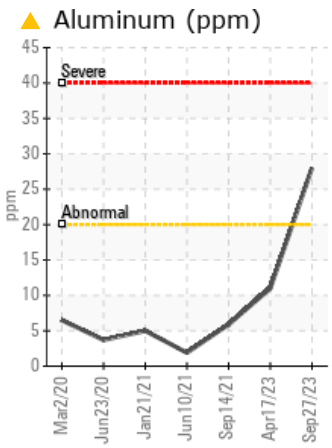


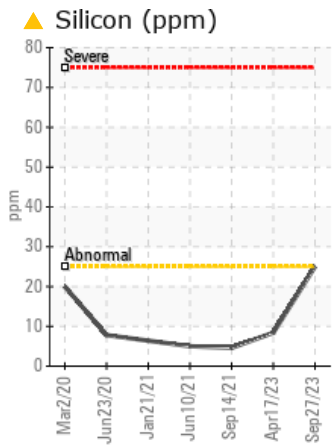
DIRT

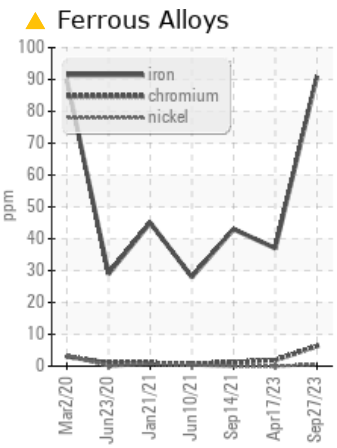
Area
OKLAHOMA/3/EG - OTHER SERVICE
Machine Id
96.104L [OKLAHOMA^3^EG - OTHER SERVICE]
Component
Diesel Engine
Fluid
MOBIL DELVAC 1300 SUPER15W40 (--- GAL)

COMPONENT CONDITION SUMMARY









RECOMMENDATION

We advise that you check for faulty combustion, plugged air filters, or aftercoolers. 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
Iron	ppm	ASTM D5185m	>100	▲ **91**	37	43
Aluminum	ppm	ASTM D5185m	>20	▲ **28**	11	6
Silicon	ppm	ASTM D5185m	>25	▲ **25**	8	5
Soot %	%	*ASTM D7844	>3	▲ **4.3**	1.2	1.5

Customer Id: SHEWIC
Sample No.: WC0857228
Lab Number: 05966090
Test Package: CONST

To manage this report scan the QR code

To discuss the diagnosis or test data:
Don Baldridge +1
don.b505@comcast.net

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.
Check Combustion	---	---	?	We advise that you check for faulty combustion, plugged air filters, or aftercoolers.

HISTORICAL DIAGNOSIS

17 Apr 2023 Diag: Wes Davis

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

14 Sep 2021 Diag: Wes Davis

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

10 Jun 2021 Diag: Wes Davis

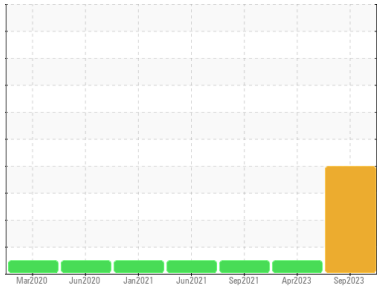
NORMAL

Resample at the next service interval to monitor.Metal levels are typical for a new component breaking in. 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



DIRT

Area
OKLAHOMA/3/EG - OTHER SERVICE
Machine Id
96.104L [OKLAHOMA^3^EG - OTHER SERVICE]
Component
Diesel Engine
Fluid
MOBIL DELVAC 1300 SUPER15W40 (--- GAL)

DIAGNOSIS

Recommendation
We advise that you check for faulty combustion, plugged air filters, or aftercoolers. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Wear
Piston, ring and cylinder wear is indicated.

Contamination
Elemental level of silicon (Si) above normal. There is an abnormal amount of solids and carbon present in the oil.

Fluid Condition
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.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**WC0857228**	WC0738508	WC0616638
Sample Date		Client Info		**27 Sep 2023**	17 Apr 2023	14 Sep 2021
Machine Age	hrs	Client Info		**1700**	1571	1197
Oil Age	hrs	Client Info		**1571**	1197	127
Oil Changed		Client Info		**Changed**	Changed	Changed
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	▲ **91**	37	43
Chromium	ppm	ASTM D5185m	>20	**6**	2	1
Nickel	ppm	ASTM D5185m	>4	**<1**	0	0
Titanium	ppm	ASTM D5185m		**<1**	0	<1
Silver	ppm	ASTM D5185m	>3	**0**	0	0
Aluminum	ppm	ASTM D5185m	>20	▲ **28**	11	6
Lead	ppm	ASTM D5185m	>40	**1**	0	<1
Copper	ppm	ASTM D5185m	>330	**7**	2	2
Tin	ppm	ASTM D5185m	>15	**<1**	0	<1
Antimony	ppm	ASTM D5185m		**---**	---	0
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	**55**	53	65
Barium	ppm	ASTM D5185m	0	**0**	0	0
Molybdenum	ppm	ASTM D5185m	0	**44**	35	27
Manganese	ppm	ASTM D5185m		**2**	1	<1
Magnesium	ppm	ASTM D5185m	0	**535**	439	578
Calcium	ppm	ASTM D5185m		**1741**	1474	1489
Phosphorus	ppm	ASTM D5185m		**778**	662	748
Zinc	ppm	ASTM D5185m		**950**	796	882
Sulfur	ppm	ASTM D5185m		**2581**	2364	2339

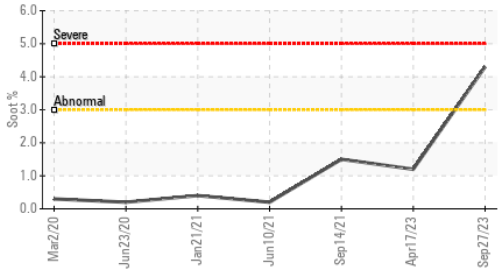
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	▲ **25**	8	5
Sodium	ppm	ASTM D5185m		**8**	2	3
Potassium	ppm	ASTM D5185m	>20	**4**	0	0
Fuel	%	ASTM D3524	>5	**<1.0**	<1.0	<1.0

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	▲ **4.3**	1.2	1.5
Nitration	Abs/cm	*ASTM D7624	>20	**12.7**	6.9	8.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	**29.6**	23.1	22.6

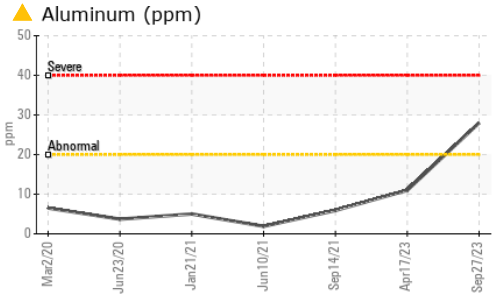
FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	**21.5**	19.4	16.8
Base Number (BN)	mg KOH/g	ASTM D2896	9.4	**10.5**	11.7	11

OIL ANALYSIS REPORT

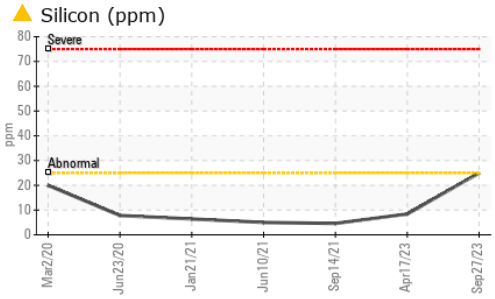
Soot %



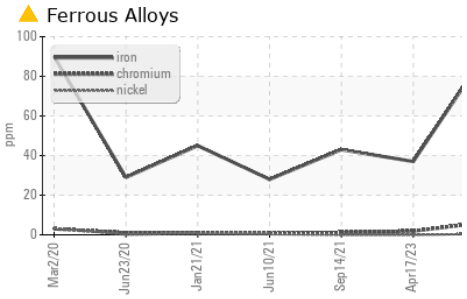
Aluminum (ppm)



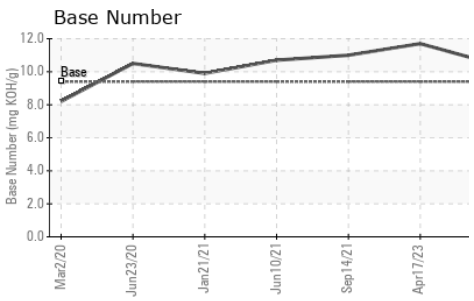
Silicon (ppm)



Ferrous Alloys



Base Number

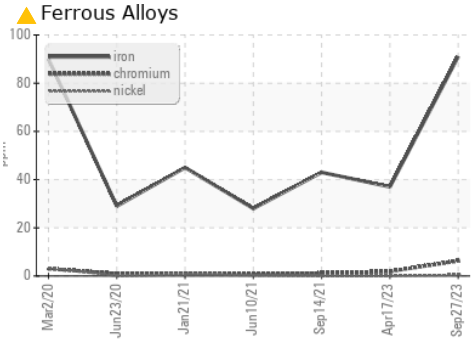


VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	NONE
Sand/Dirt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

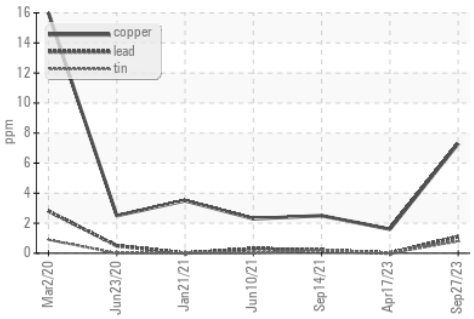
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	14	**15.8**	13.5	14.4

GRAPHS

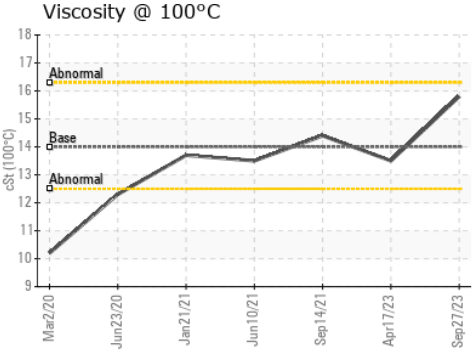
Ferrous Alloys



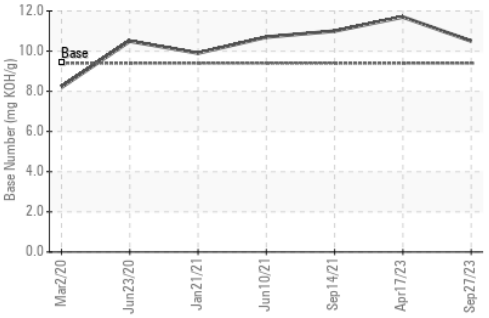
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0857228 **Received** : 02 Oct 2023
Lab Number : 05966090 **Diagnosed** : 03 Oct 2023
Unique Number : 10672641 **Diagnostician** : Don Baldridge
Test Package : CONST (Additional Tests: FuelDilution, 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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Report Id: SHEWIC [WUSCAR] 05966090 (Generated: 10/05/2023 03:27:21) Rev: 1

Submitted By: GARRETT ADAMS