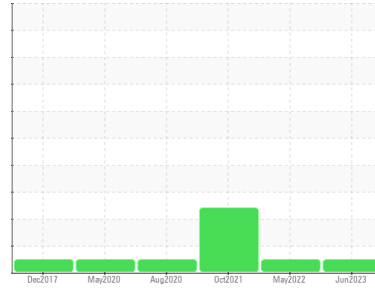




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
MACK TD-401
Component
Front Diesel Engine
Fluid
MOBIL DELVAC 1300 SUPER15W40 (10 GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0705229	WC0588235	WC0355587
Sample Date	Client Info		22 Jun 2023	20 May 2022	13 Oct 2021
Machine Age	mls	Client Info	136256	118128	107217
Oil Age	mls	Client Info	10000	20000	0
Oil Changed	Client Info		Changed	Changed	N/A
Sample Status			NORMAL	NORMAL	ABNORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>3.0	<1.0	<1.0	<1.0
Glycol	WC Method		NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >120	20	20	3
Chromium	ppm	ASTM D5185m >20	<1	<1	<1
Nickel	ppm	ASTM D5185m >5	1	<1	0
Titanium	ppm	ASTM D5185m >2	<1	0	0
Silver	ppm	ASTM D5185m >2	0	0	<1
Aluminum	ppm	ASTM D5185m >20	4	2	0
Lead	ppm	ASTM D5185m >40	3	4	<1
Copper	ppm	ASTM D5185m >330	2	2	<1
Tin	ppm	ASTM D5185m >15	1	2	<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	14	6	8
Barium	ppm	ASTM D5185m 0	0	0	0
Molybdenum	ppm	ASTM D5185m 0	63	54	51
Manganese	ppm	ASTM D5185m	<1	<1	<1
Magnesium	ppm	ASTM D5185m 0	876	967	862
Calcium	ppm	ASTM D5185m	1314	1314	1128
Phosphorus	ppm	ASTM D5185m	1044	1094	986
Zinc	ppm	ASTM D5185m	1278	1230	1119
Sulfur	ppm	ASTM D5185m	3776	3264	2658

CONTAMINANTS

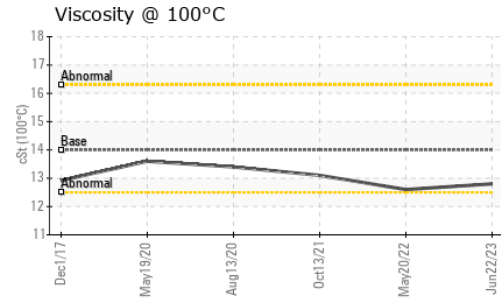
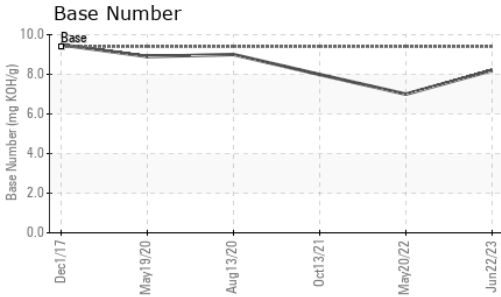
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	5	4	2
Sodium	ppm	ASTM D5185m	5	6	3
Potassium	ppm	ASTM D5185m >20	4	1	<1

INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >4	0.5	0.6	0.4
Nitration	Abs/cm	*ASTM D7624 >20	9.6	9.5	6.9
Sulfation	Abs./1mm	*ASTM D7415 >30	20.7	21.0	18.8



OIL ANALYSIS REPORT



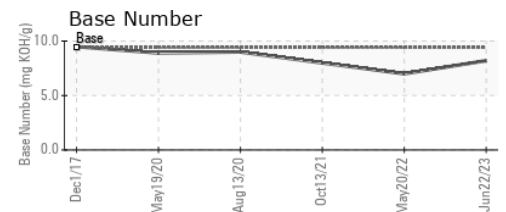
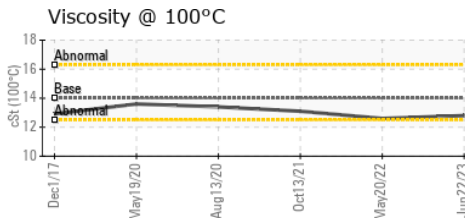
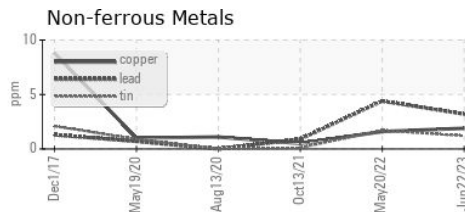
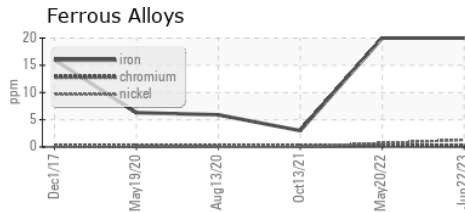
FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>20000	---	---	▲ 33442
Particles >6µm	ASTM D7647	>5000	---	---	▲ 18218
Particles >14µm	ASTM D7647	>640	---	---	▲ 3100
Particles >21µm	ASTM D7647	>160	---	---	▲ 1044
Particles >38µm	ASTM D7647	>40	---	---	▲ 161
Particles >71µm	ASTM D7647	>10	---	---	▲ 16
Oil Cleanliness	ISO 4406 (c)	>21/19/16	---	---	▲ 22/21/19

FLUID DEGRADATION	method	limit/base	current	history1	history2	
Oxidation	Abs./1mm	*ASTM D7414	>25	16.8	16.2	13.5
Base Number (BN)	mg KOH/g	ASTM D2896	9.4	8.2	7	7.99

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	12.8	12.6	13.1

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0705229 **Received** : 18 Jul 2023
Lab Number : 05900986 **Diagnosed** : 19 Jul 2023
Unique Number : 10562342 **Diagnostician** : Don Baldrige
Test Package : FLEET (Additional Tests: PrtCount)

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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