



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
MACK GR64F T-35 (S/N 1M2GR4GC9KM001361)
Component
Diesel Engine
Fluid
PHILLIPS 66 15W40 (10 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0849493	WC0833539	WC0709483
Sample Date		Client Info		17 Jan 2024	31 Jul 2023	05 Dec 2022
Machine Age	mls	Client Info		140525	126633	109172
Oil Age	mls	Client Info		13892	17461	15763
Filter Age	mls	Client Info		13892	17461	15763
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>120	14	5	15
Chromium	ppm	ASTM D5185m	>20	0	0	<1
Nickel	ppm	ASTM D5185m	>5	<1	0	<1
Titanium	ppm	ASTM D5185m	>2	26	9	80
Silver	ppm	ASTM D5185m	>2	<1	0	<1
Aluminum	ppm	ASTM D5185m	>20	3	3	2
Lead	ppm	ASTM D5185m	>40	2	0	3
Copper	ppm	ASTM D5185m	>330	3	<1	4
Tin	ppm	ASTM D5185m	>15	1	0	<1
Vanadium	ppm	ASTM D5185m		<1	<1	1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

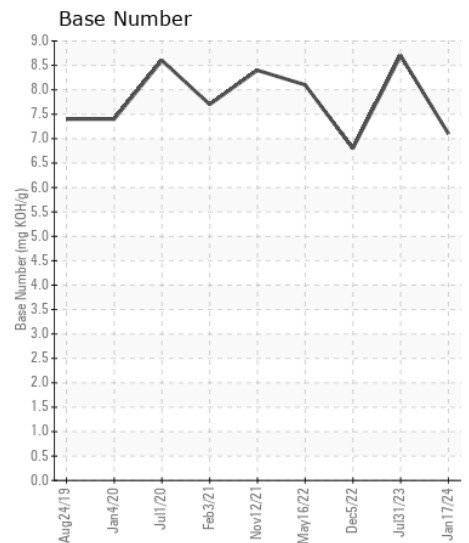
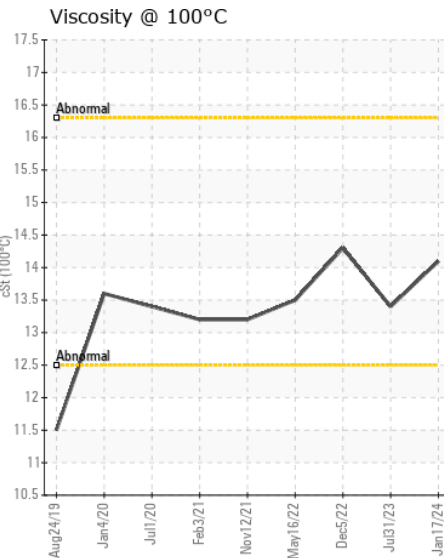
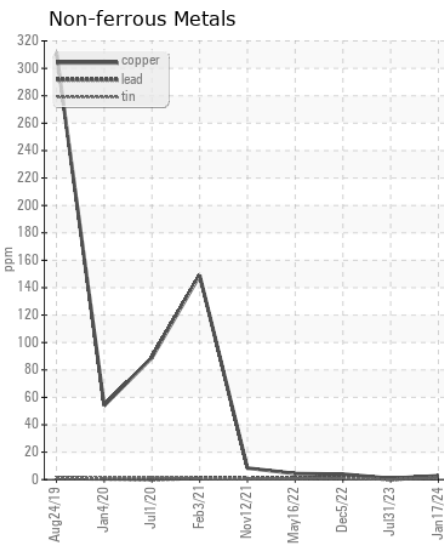
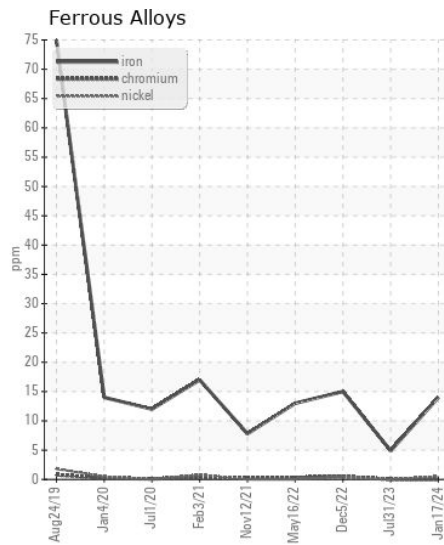
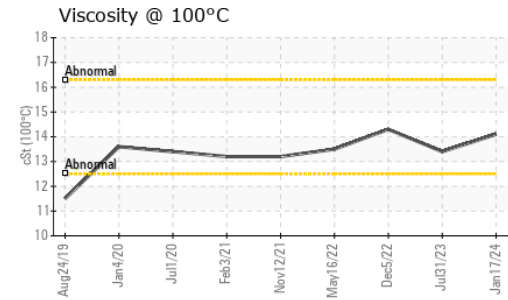
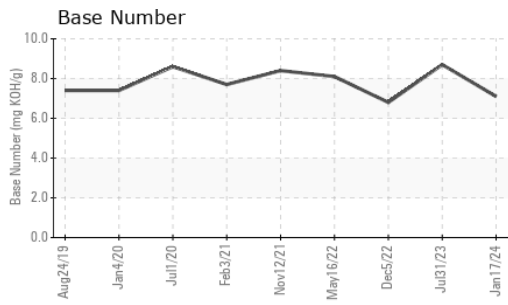
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	4	4	5
Potassium	ppm	ASTM D5185m	>20	5	2	2
Fuel		WC Method	>3.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>4	0.3	0.1	0.4
Nitration	Abs/cm	*ASTM D7624	>20	8.8	7.1	10.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.0	18.7	25.8
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

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.

Sodium	ppm	ASTM D5185m		4	2	5
Boron	ppm	ASTM D5185m		17	57	45
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		43	50	11
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		785	493	390
Calcium	ppm	ASTM D5185m		1247	1600	1687
Phosphorus	ppm	ASTM D5185m		1037	939	895
Zinc	ppm	ASTM D5185m		1258	1157	1151
Sulfur	ppm	ASTM D5185m		3129	3546	3667
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.2	14.5	20.2
Base Number (BN)	mg KOH/g	ASTM D2896		7.1	8.7	6.8
Visc @ 100°C	cSt	ASTM D445		14.1	13.4	14.3



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0849493 **Received** : 31 Jan 2024
Lab Number : 06075511 **Diagnosed** : 01 Feb 2024
Unique Number : 10857602 **Diagnostician** : Wes Davis
Test Package : CONST (Additional Tests: 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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