



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
MACK V111
Component
Rear Differential
Fluid
GEAR OIL SAE 80W140 (--- QTS)

RECOMMENDATION

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0219553	JR0178537	JR0178289
Sample Date		Client Info		12 Jun 2024	28 Dec 2023	20 Sep 2023
Machine Age	mls	Client Info		120166	113606	0
Oil Age	mls	Client Info		17340	5780	29578
Filter Age	mls	Client Info		0	0	0
Oil Changed		Client Info		Not Changed	Not Changed	Not Changed
Filter Changed		Client Info		Changed	Changed	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

PQ		ASTM D8184	>1100	49	38	40
Iron	ppm	ASTM D5185m	>1200	135	127	120
Chromium	ppm	ASTM D5185m	>8	<1	0	<1
Nickel	ppm	ASTM D5185m	>20	0	0	0
Titanium	ppm	ASTM D5185m	>4	0	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>30	3	0	<1
Lead	ppm	ASTM D5185m	>25	0	0	0
Copper	ppm	ASTM D5185m	>50	<1	0	<1
Tin	ppm	ASTM D5185m	>5	0	0	0
Vanadium	ppm	ASTM D5185m		0	0	0
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.

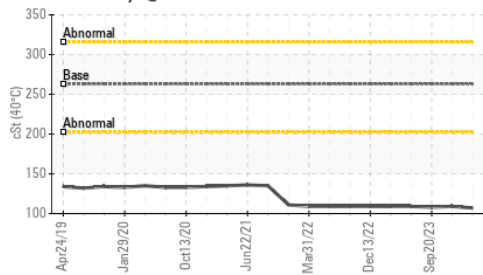
Silicon	ppm	ASTM D5185m	>230	9	8	9
Potassium	ppm	ASTM D5185m	>20	1	<1	2
Water		WC Method	>.2	NEG	NEG	NEG
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>.2	NEG	NEG	NEG

FLUID CONDITION

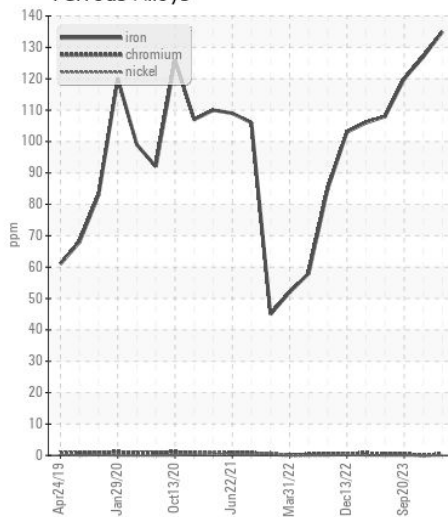
The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		1	2	2
Boron	ppm	ASTM D5185m	400	285	293	361
Barium	ppm	ASTM D5185m	200	0	0	0
Molybdenum	ppm	ASTM D5185m	12	0	0	0
Manganese	ppm	ASTM D5185m		3	2	3
Magnesium	ppm	ASTM D5185m	12	0	0	<1
Calcium	ppm	ASTM D5185m	150	0	0	<1
Phosphorus	ppm	ASTM D5185m	1650	1349	1367	1337
Zinc	ppm	ASTM D5185m	125	3	0	6
Sulfur	ppm	ASTM D5185m	22500	21206	24101	27724
Visc @ 40°C	cSt	ASTM D445	263	107	109	108

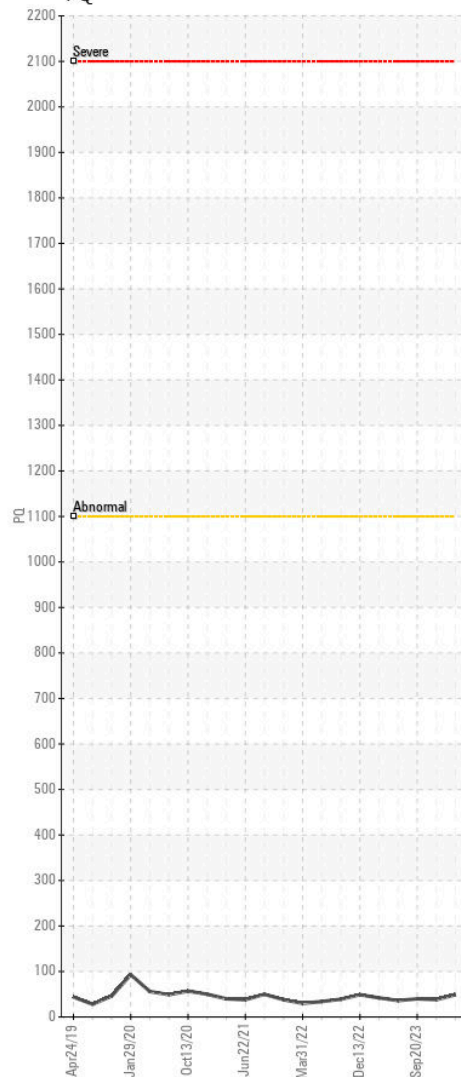
Viscosity @ 40°C



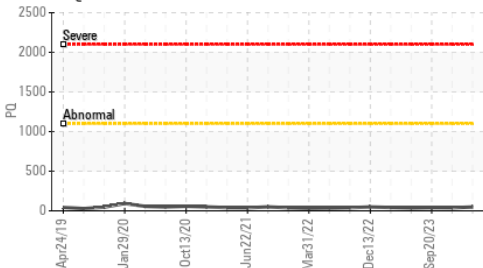
Ferrous Alloys



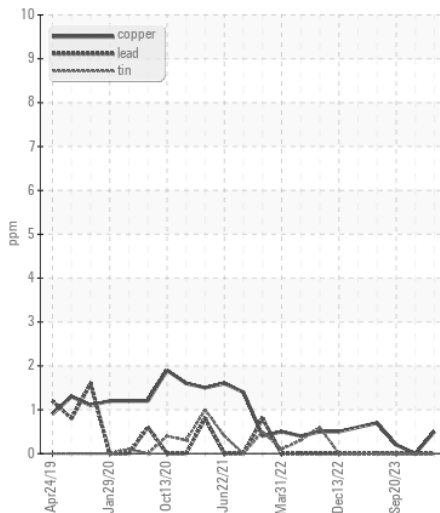
PQ



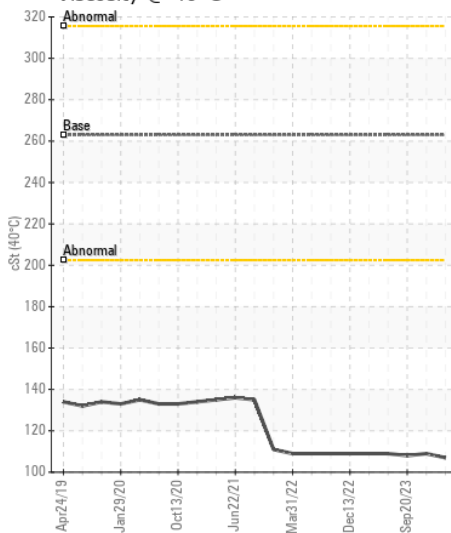
PQ



Non-ferrous Metals



Viscosity @ 40°C



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : JR0219553

Lab Number : 06226558

Unique Number : 11110051

Test Package : CONST (Additional Tests: PQ)

Received : 02 Jul 2024

Tested : 03 Jul 2024

Diagnosed : 03 Jul 2024 - Wes Davis

MATTHEWS CONSTRUCTION

127 GRAYSON RD

ROCK HILL, SC

US 29732

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F:

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)