



WEAR CHECK

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
1448
 Component
Diesel Engine
 Fluid
MOBIL 1 5W30 (--- QTS)

RECOMMENDATION

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0827798	WC0827779	WC0827693
Sample Date		Client Info		06 May 2024	03 Feb 2024	05 Oct 2023
Machine Age	mls	Client Info		92164	85266	79383
Oil Age	mls	Client Info		6832	0	0
Filter Age	mls	Client Info		6832	0	0
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	>100	39	24	21
Chromium	ppm	ASTM D5185m	>20	2	1	<1
Nickel	ppm	ASTM D5185m	>4	<1	0	1
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	7	5	5
Lead	ppm	ASTM D5185m	>40	0	0	2
Copper	ppm	ASTM D5185m	>330	20	21	19
Tin	ppm	ASTM D5185m	>15	<1	<1	<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.

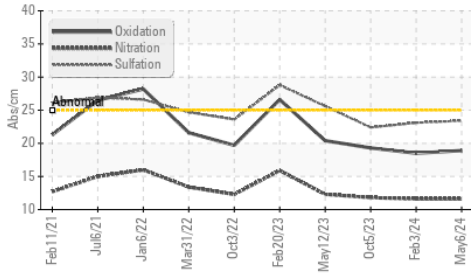
Silicon	ppm	ASTM D5185m	>25	10	8	9
Potassium	ppm	ASTM D5185m	>20	31	3	3
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.1	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	11.6	11.6	11.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.4	23.1	22.4
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

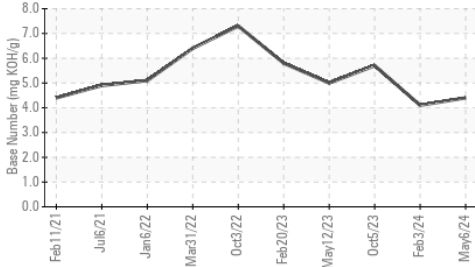
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		12	4	4
Boron	ppm	ASTM D5185m	94	34	39	34
Barium	ppm	ASTM D5185m	0.0	0	0	0
Molybdenum	ppm	ASTM D5185m	0.0	74	76	92
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m	1388	509	575	686
Calcium	ppm	ASTM D5185m	820	1115	1035	725
Phosphorus	ppm	ASTM D5185m	720	660	665	660
Zinc	ppm	ASTM D5185m	780	795	818	834
Sulfur	ppm	ASTM D5185m	2240	2581	2426	1988
Oxidation	Abs/.1mm	*ASTM D7414	>25	18.9	18.5	19.3
Base Number (BN)	mg KOH/g	ASTM D2896		4.4	4.1	5.7
Visc @ 100°C	cSt	ASTM D445	11.3	10.0	10.3	10.6

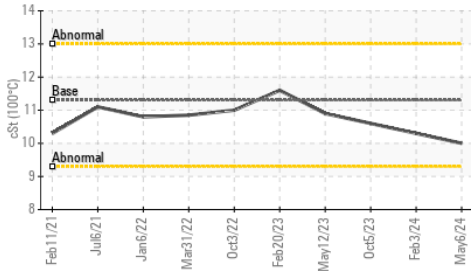
FT-IR (Direct Trend)



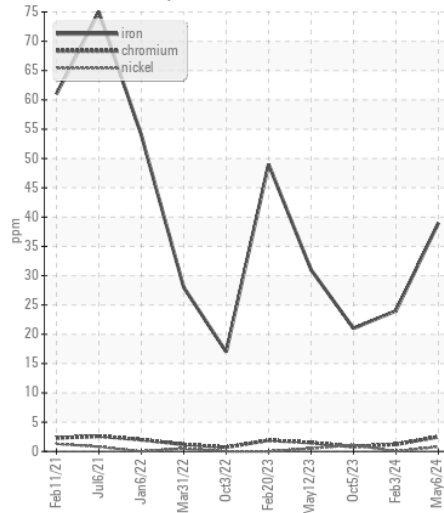
Base Number



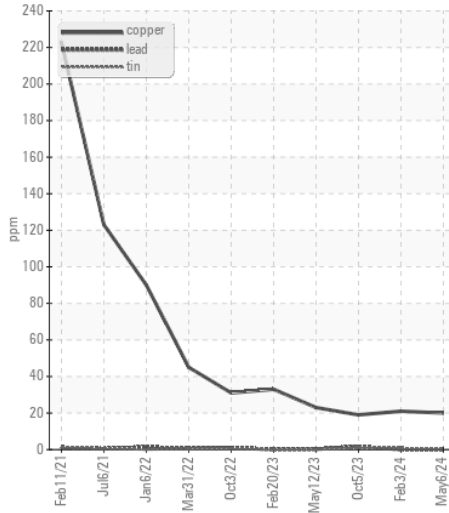
Viscosity @ 100°C



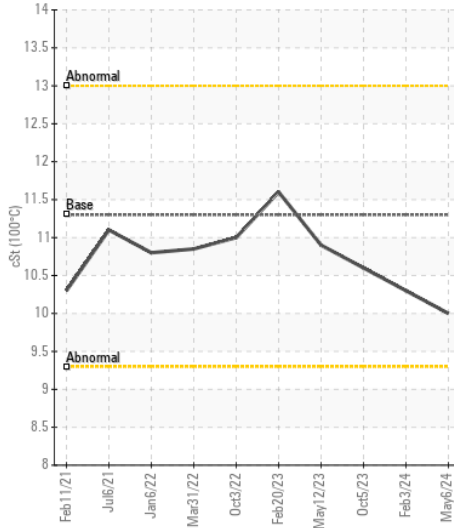
Ferrous Alloys



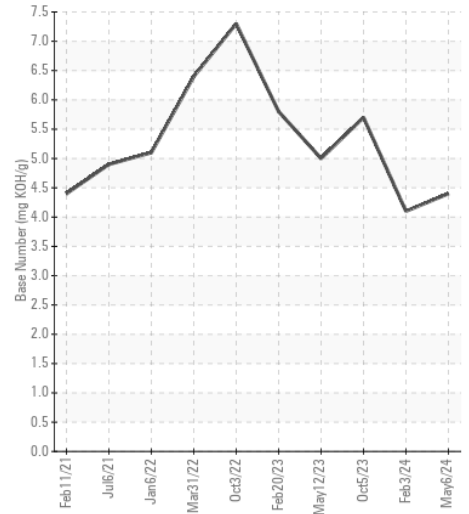
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0827798
Lab Number : 06178559
Unique Number : 11029885
Test Package : FLEET

Received : 14 May 2024
Tested : 15 May 2024
Diagnosed : 15 May 2024 - Wes Davis

CARCO TRANSPORTATION
 415 S WESTERN AVENUE
 OKLAHOMA CITY, OK
 US 73109
 Contact: VICTOR STACHONIAK
 victors@carcotrans.com

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)

T: (405)239-2555

F: