



WEAR CHECK

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
2042
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		WC0827804	WC0827769	WC0691376
Sample Date		Client Info		11 Jan 2024	08 Sep 2023	06 Feb 2023
Machine Age	mls	Client Info		154541	150652	144904
Oil Age	mls	Client Info		4500	5560	6300
Filter Age	mls	Client Info		4500	5560	6300
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	ATTENTION

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	42	31	52
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>4	<1	<1	0
Titanium	ppm	ASTM D5185m		0	<1	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	3	2	2
Lead	ppm	ASTM D5185m	>40	<1	<1	0
Copper	ppm	ASTM D5185m	>330	16	27	15
Tin	ppm	ASTM D5185m	>15	<1	1	0
Vanadium	ppm	ASTM D5185m		0	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

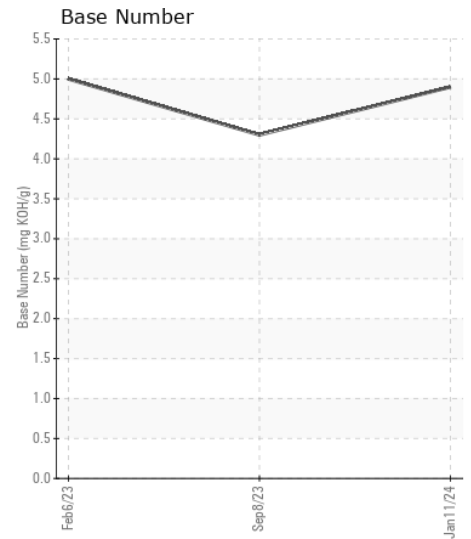
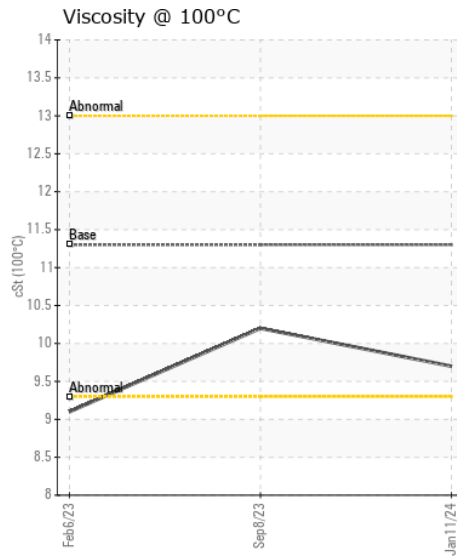
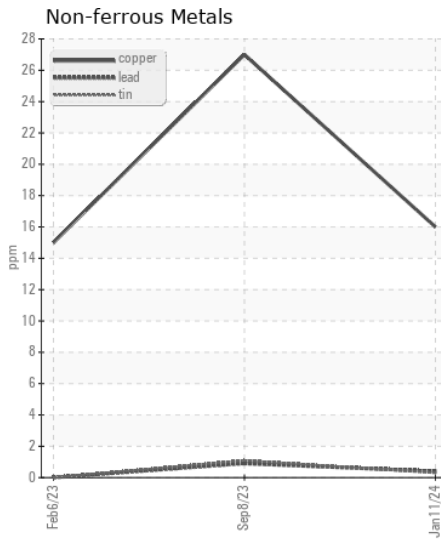
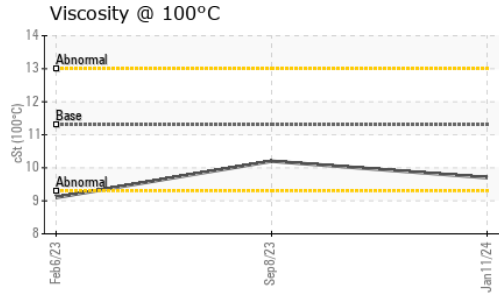
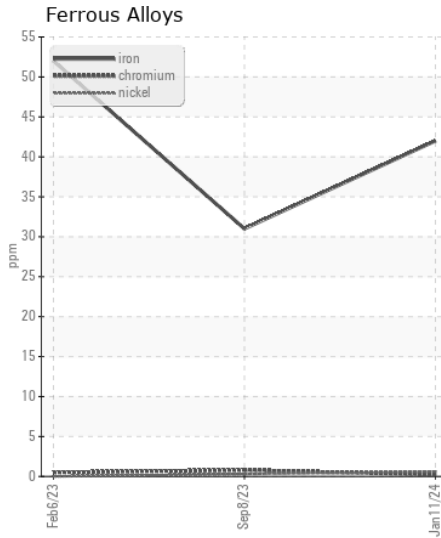
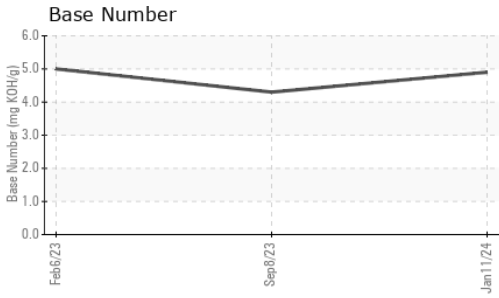
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	11	8	6
Potassium	ppm	ASTM D5185m	>20	1	4	2
Fuel		WC Method	>5	<1.0	<1.0	1.2
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	10.1	10.4	8.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.2	21.0	16.4
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		2	4	3
Boron	ppm	ASTM D5185m	94	35	31	17
Barium	ppm	ASTM D5185m	0.0	0	0	0
Molybdenum	ppm	ASTM D5185m	0.0	74	86	59
Manganese	ppm	ASTM D5185m		<1	1	<1
Magnesium	ppm	ASTM D5185m	1388	533	643	379
Calcium	ppm	ASTM D5185m	820	839	854	941
Phosphorus	ppm	ASTM D5185m	720	649	641	533
Zinc	ppm	ASTM D5185m	780	747	802	625
Sulfur	ppm	ASTM D5185m	2240	2224	2303	1658
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.0	17.9	10.0
Base Number (BN)	mg KOH/g	ASTM D2896		4.9	4.3	5.0
Visc @ 100°C	cSt	ASTM D445	11.3	9.7	10.2	▲ 9.1



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0827804 **Recieved** : 17 Jan 2024
Lab Number : 06063368 **Diagnosed** : 18 Jan 2024
Unique Number : 10834750 **Diagnostician** : Wes Davis
Test Package : FLEET

CARCO TRANSPORTATION
 415 S WESTERN AVENUE
 OKLAHOMA CITY, OK
 US 73109
 Contact: VICTOR STACHONIAK
 victors@carcotrans.com
 T: (405)239-2555
 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)