



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
4470
Machine Id
441350
Component
Front Center Diesel Engine
Fluid
MOBIL 15W40 (21 QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		IL0033875	IL0033716	IL0030505
Sample Date		Client Info		25 Jun 2024	29 Mar 2024	01 Nov 2023
Machine Age	mls	Client Info		177352	168569	152777
Oil Age	mls	Client Info		151087	158096	10473
Filter Age	mls	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	ABNORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>90	12	26	12
Chromium	ppm	ASTM D5185m	>20	1	<1	<1
Nickel	ppm	ASTM D5185m	>2	0	0	0
Titanium	ppm	ASTM D5185m	>2	0	0	0
Silver	ppm	ASTM D5185m	>2	0	0	<1
Aluminum	ppm	ASTM D5185m	>20	2	7	4
Lead	ppm	ASTM D5185m	>40	0	0	0
Copper	ppm	ASTM D5185m	>330	0	<1	<1
Tin	ppm	ASTM D5185m	>15	0	<1	<1
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.

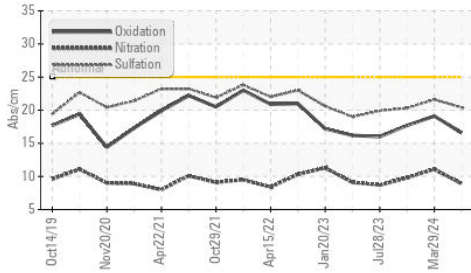
Silicon	ppm	ASTM D5185m	>25	2	5	4
Potassium	ppm	ASTM D5185m	>20	3	3	0
Fuel		WC Method	>3.0	<1.0	▲ 2.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>6	0.5	0.7	0.5
Nitration	Abs/cm	*ASTM D7624	>20	8.9	11.1	9.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.4	21.6	20.3
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

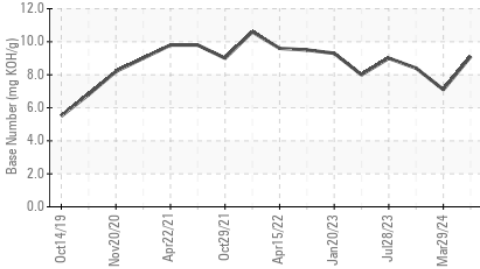
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>118	<1	2	0
Boron	ppm	ASTM D5185m		2	3	3
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		59	69	66
Manganese	ppm	ASTM D5185m		0	<1	<1
Magnesium	ppm	ASTM D5185m		956	▲ 1013	1016
Calcium	ppm	ASTM D5185m		1073	▲ 1183	1096
Phosphorus	ppm	ASTM D5185m		1053	1091	1128
Zinc	ppm	ASTM D5185m		1293	1317	1352
Sulfur	ppm	ASTM D5185m		3613	3725	3318
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.6	19.1	17.7
Base Number (BN)	mg KOH/g	ASTM D2896		9.1	7.1	8.4
Visc @ 100°C	cSt	ASTM D445		12.9	12.4	12.9

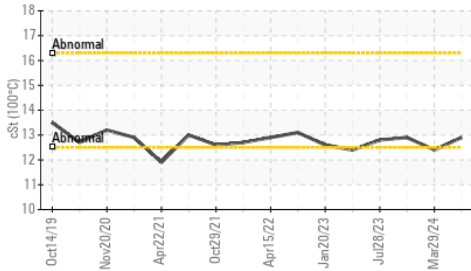
FT-IR (Direct Trend)



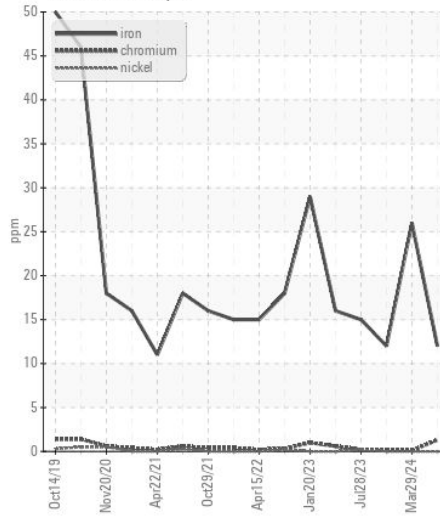
Base Number



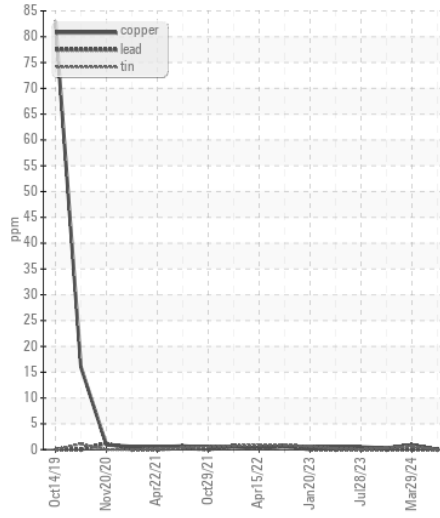
Viscosity @ 100°C



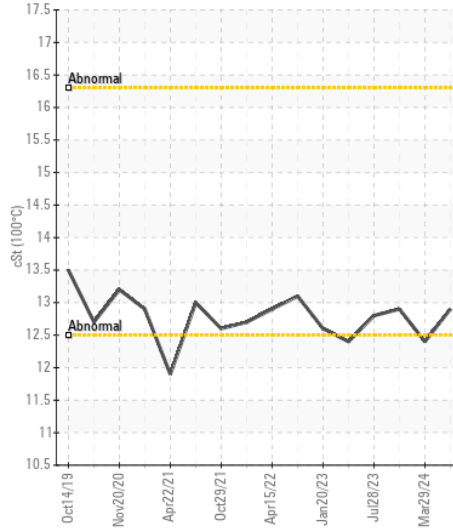
Ferrous Alloys



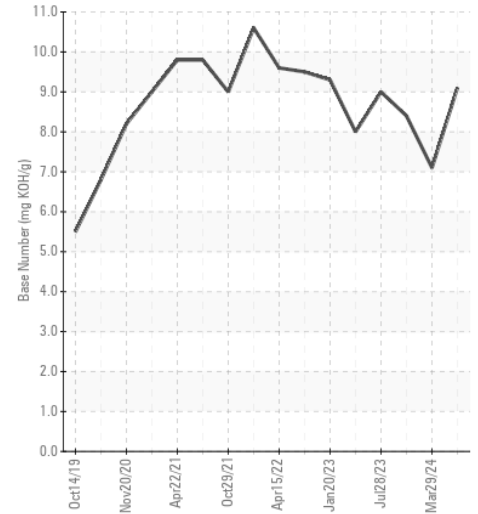
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

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

Sample No. : IL0033875

Lab Number : 06235397

Unique Number : 11124231

Test Package : FLEET

Received : 15 Jul 2024

Tested : 15 Jul 2024

Diagnosed : 15 Jul 2024 - Don Baldrige

RUSH TRUCK LEASING - CHARLOTTE IDEALEASE

1333 AMERON DR

CHARLOTTE, NC

US 28206

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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)