OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION

Machine Id
124
Component
Diesel Engine
Fluid
CITGO CITGO 10W30 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

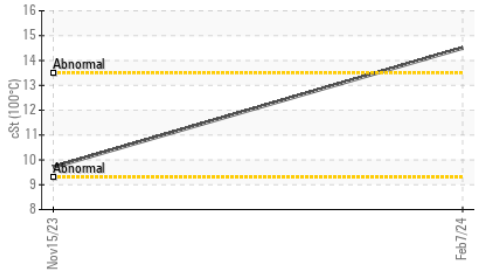
There is no indication of any contamination in the oil.

FLUID CONDITION

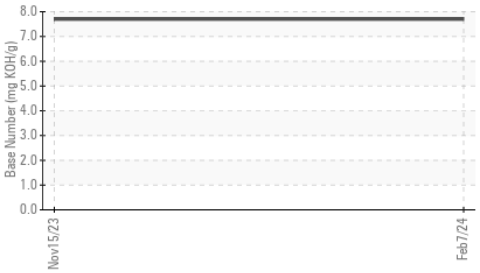
The oil viscosity is higher than normal. The BN result indicates that there is suitable alkalinity remaining in the oil.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC06083232	WC06013212	---
Sample Date		Client Info		07 Feb 2024	15 Nov 2023	---
Machine Age	mls	Client Info		466476	33888	---
Oil Age	mls	Client Info		0	33888	---
Filter Age	mls	Client Info		0	33888	---
Oil Changed		Client Info		N/A	Not Changd	---
Filter Changed		Client Info		N/A	Not Changd	---
Sample Status				ATTENTION	NORMAL	---
Iron	ppm	ASTM D5185m	>100	24	68	---
Chromium	ppm	ASTM D5185m	>20	2	8	---
Nickel	ppm	ASTM D5185m	>4	0	1	---
Titanium	ppm	ASTM D5185m		82	<1	---
Silver	ppm	ASTM D5185m	>3	0	0	---
Aluminum	ppm	ASTM D5185m	>20	2	159	---
Lead	ppm	ASTM D5185m	>40	2	<1	---
Copper	ppm	ASTM D5185m	>330	1	197	---
Tin	ppm	ASTM D5185m	>15	<1	4	---
Vanadium	ppm	ASTM D5185m		1	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---
Silicon	ppm	ASTM D5185m	>25	4	11	---
Potassium	ppm	ASTM D5185m	>20	1	340	---
Fuel		WC Method	>5	<1.0	<1.0	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	1.3	0.6	---
Nitration	Abs/cm	*ASTM D7624	>20	9.9	9.4	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.4	23.5	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	---
Sodium	ppm	ASTM D5185m		4	5	---
Boron	ppm	ASTM D5185m		94	42	---
Barium	ppm	ASTM D5185m		0	10	---
Molybdenum	ppm	ASTM D5185m		9	44	---
Manganese	ppm	ASTM D5185m		<1	4	---
Magnesium	ppm	ASTM D5185m		428	504	---
Calcium	ppm	ASTM D5185m		1662	1715	---
Phosphorus	ppm	ASTM D5185m		999	738	---
Zinc	ppm	ASTM D5185m		1186	890	---
Sulfur	ppm	ASTM D5185m		3554	2296	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.3	24.2	---
Base Number (BN)	mg KOH/g	ASTM D2896		7.7	7.7	---
Visc @ 100°C	cSt	ASTM D445		▲ 14.5	9.7	---

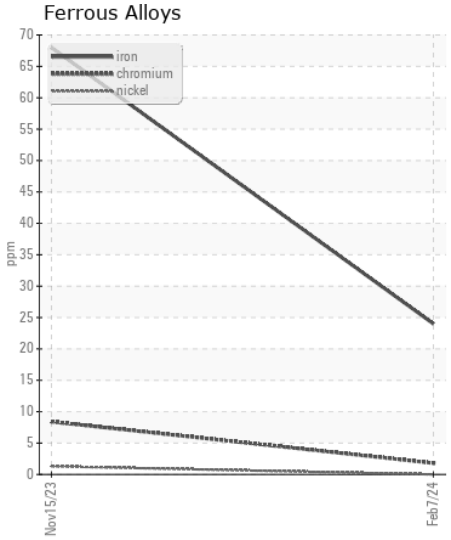
Viscosity @ 100°C



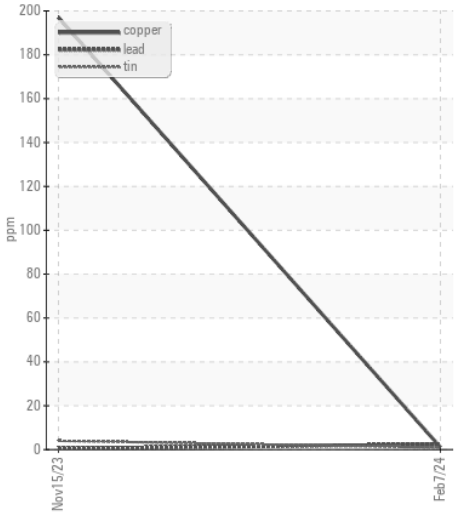
Base Number



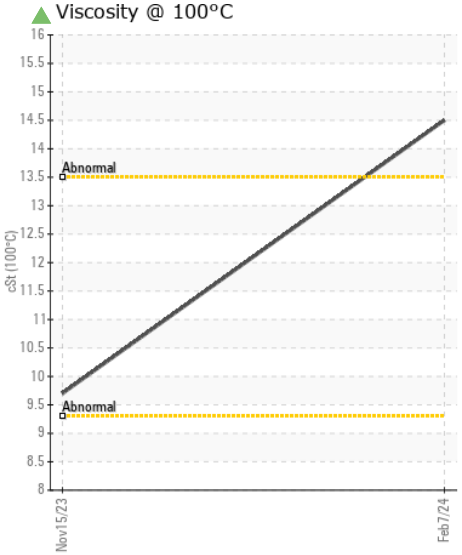
Ferrous Alloys



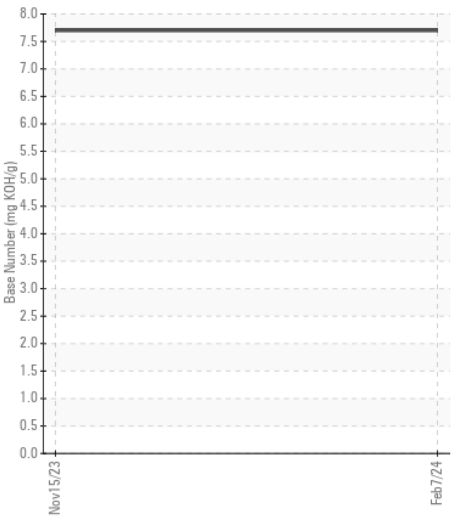
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC06083232
Lab Number : 06083232
Unique Number : 10870677
Test Package : FLEET

Received : 08 Feb 2024
Tested : 08 Feb 2024
Diagnosed : 09 Feb 2024 - Don Baldridge

LONNIE SONGER
1820 SHELTON MISSION RD
GREENEVILLE, TN
US 37743
Contact: LONNIE SONGER

Certificate L2367

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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F: