



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	ABNORMAL



Machine Id
93065
Component
Diesel Engine
Fluid
MOBIL DELVAC 1300 SUPER15W40 (10 GAL)

RECOMMENDATION

We advise that you check for the source of the coolant leak. Check for low coolant level. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		SBP0005444	SBP0005483	---
Sample Date		Client Info		27 May 2024	13 Sep 2023	---
Machine Age	mls	Client Info		0	0	---
Oil Age	mls	Client Info		0	0	---
Filter Age	mls	Client Info		0	0	---
Oil Changed		Client Info		N/A	N/A	---
Filter Changed		Client Info		N/A	N/A	---
Sample Status				ABNORMAL	SEVERE	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>80	51	78	---
Chromium	ppm	ASTM D5185m	>5	3	8	---
Nickel	ppm	ASTM D5185m	>2	1	2	---
Titanium	ppm	ASTM D5185m		<1	<1	---
Silver	ppm	ASTM D5185m	>3	1	0	---
Aluminum	ppm	ASTM D5185m	>30	5	16	---
Lead	ppm	ASTM D5185m	>30	1	2	---
Copper	ppm	ASTM D5185m	>150	75	8	---
Tin	ppm	ASTM D5185m	>5	1	<1	---
Vanadium	ppm	ASTM D5185m		<1	<1	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

Sodium and/or potassium levels are high.

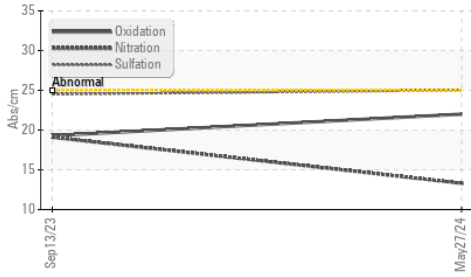
Silicon	ppm	ASTM D5185m	>20	10	33	---
Potassium	ppm	ASTM D5185m	>20	131	2755	---
Fuel		WC Method	>5	<1.0	<1.0	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol	%	*ASTM D2982		NEG	0.20	---
Soot %	%	*ASTM D7844	>3	1	0.8	---
Nitration	Abs/cm	*ASTM D7624	>20	13.3	19.1	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	25.0	24.5	---
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	---

FLUID CONDITION

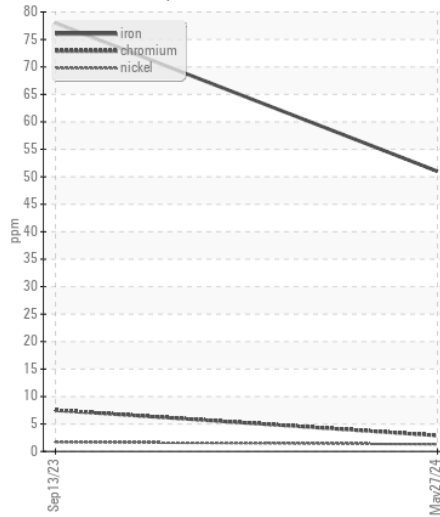
The BN result indicates that there is suitable alkalinity remaining in the oil.

Sodium	ppm	ASTM D5185m		93	1487	---
Boron	ppm	ASTM D5185m	0	4	4	---
Barium	ppm	ASTM D5185m	0	1	0	---
Molybdenum	ppm	ASTM D5185m	0	78	311	---
Manganese	ppm	ASTM D5185m		1	1	---
Magnesium	ppm	ASTM D5185m	0	993	947	---
Calcium	ppm	ASTM D5185m		1174	1113	---
Phosphorus	ppm	ASTM D5185m		1059	1102	---
Zinc	ppm	ASTM D5185m		1299	1309	---
Sulfur	ppm	ASTM D5185m		3117	3314	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	22.0	19.3	---
Base Number (BN)	mg KOH/g	ASTM D2896	9.4	8.0	17.0	---
Visc @ 100°C	cSt	ASTM D445	14	13.9	14.4	---

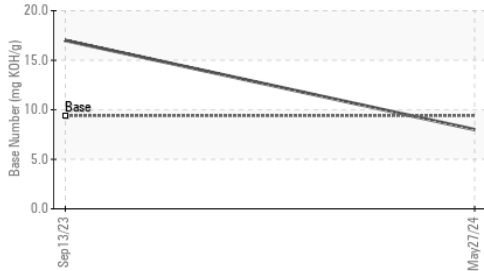
FT-IR (Direct Trend)



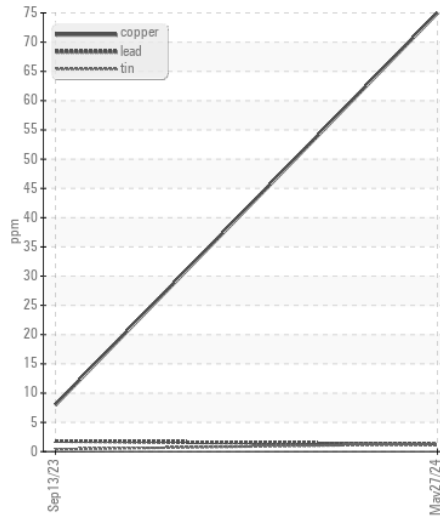
Ferrous Alloys



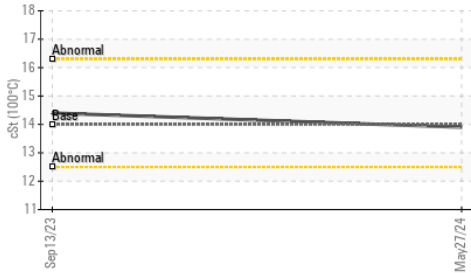
Base Number



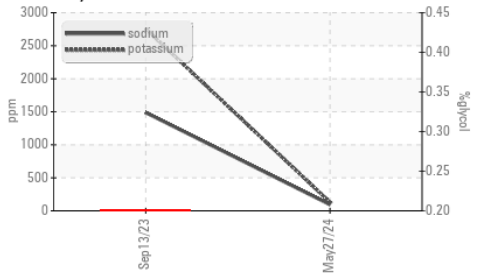
Non-ferrous Metals



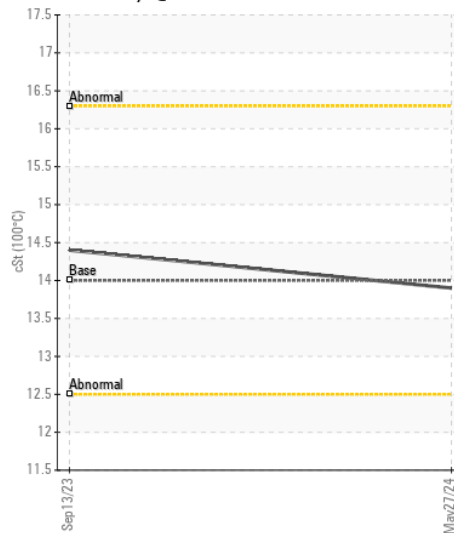
Viscosity @ 100°C



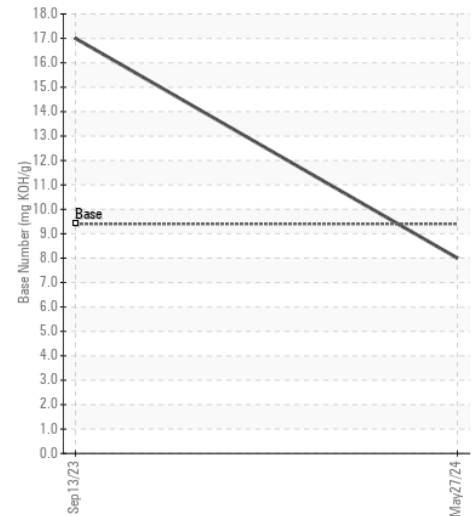
Glycol Contamination



Viscosity @ 100°C



Base Number



Certificate L2367

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

Sample No. : SBP0005444

Lab Number : 06192013

Unique Number : 11048765

Test Package : FLEET

Received : 28 May 2024

Tested : 30 May 2024

Diagnosed : 30 May 2024 - Jonathan Hester

Sapp Bros. Fleet - Columbus Location

US

Contact: Service Manager

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:

F: