



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
98226
Component
Gasoline Engine
Fluid
NOT GIVEN (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		SBP0007539	SBP0005571	---
Sample Date		Client Info		28 Jun 2024	09 Jan 2024	---
Machine Age	mls	Client Info		120581	106324	---
Oil Age	mls	Client Info		7500	7500	---
Filter Age	mls	Client Info		7500	7500	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				NORMAL	ABNORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>150	51	63	---
Chromium	ppm	ASTM D5185m	>20	2	3	---
Nickel	ppm	ASTM D5185m	>5	<1	0	---
Titanium	ppm	ASTM D5185m		0	<1	---
Silver	ppm	ASTM D5185m	>2	0	0	---
Aluminum	ppm	ASTM D5185m	>40	13	13	---
Lead	ppm	ASTM D5185m	>50	<1	0	---
Copper	ppm	ASTM D5185m	>155	4	3	---
Tin	ppm	ASTM D5185m	>10	<1	<1	---
Vanadium	ppm	ASTM D5185m		0	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

There is no indication of any contamination in the oil.

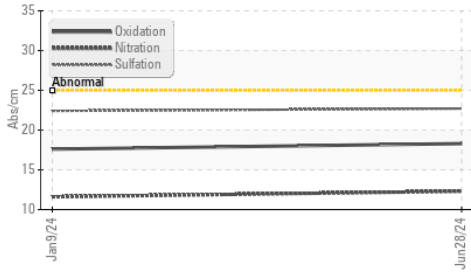
Silicon	ppm	ASTM D5185m	>30	24	32	---
Potassium	ppm	ASTM D5185m	>20	6	3	---
Fuel	%	ASTM D3524	>4.0	<1.0	<1.0	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844		0.1	0	---
Nitration	Abs/cm	*ASTM D7624	>20	12.3	11.6	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.7	22.4	---
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

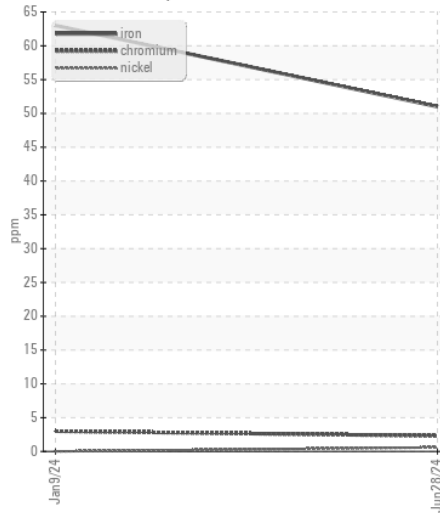
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>400	4	4	---
Boron	ppm	ASTM D5185m		21	23	---
Barium	ppm	ASTM D5185m		0	0	---
Molybdenum	ppm	ASTM D5185m		87	106	---
Manganese	ppm	ASTM D5185m		<1	1	---
Magnesium	ppm	ASTM D5185m		453	498	---
Calcium	ppm	ASTM D5185m		1138	983	---
Phosphorus	ppm	ASTM D5185m		689	600	---
Zinc	ppm	ASTM D5185m		792	667	---
Sulfur	ppm	ASTM D5185m		2566	2413	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	18.3	17.6	---
Base Number (BN)	mg KOH/g	ASTM D2896		3.6	2.1	---
Visc @ 100°C	cSt	ASTM D445		7.7	7.8	---

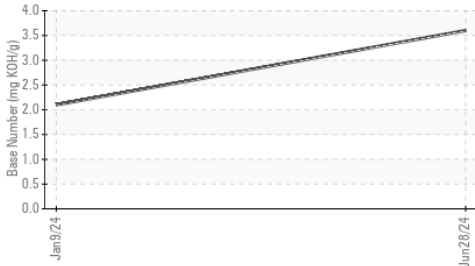
FT-IR (Direct Trend)



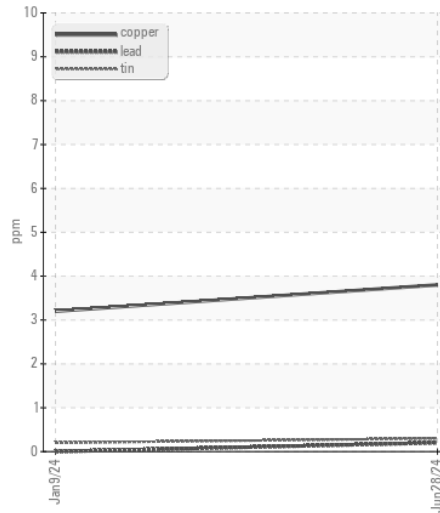
Ferrous Alloys



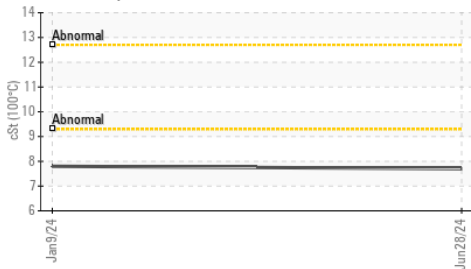
Base Number



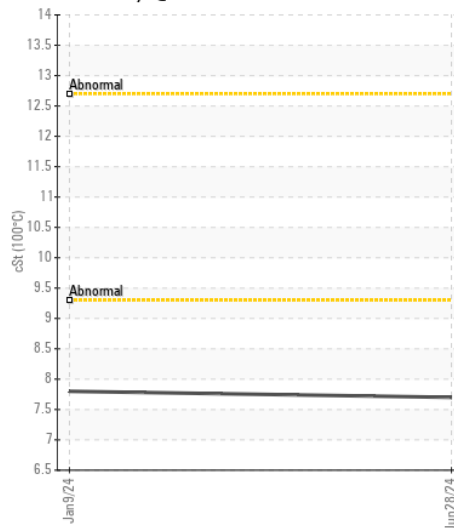
Non-ferrous Metals



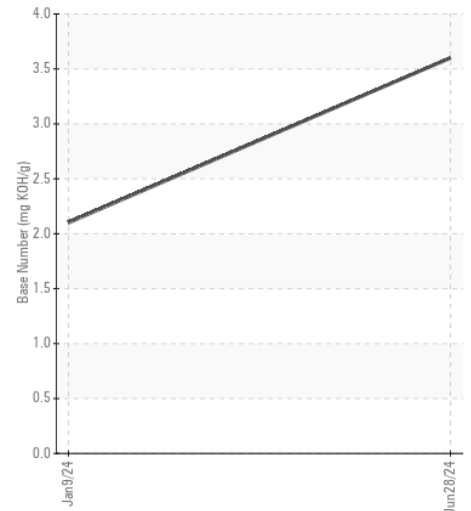
Viscosity @ 100°C



Viscosity @ 100°C



Base Number



Certificate L2367

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

Sample No. : SBP0007539

Lab Number : 06229766

Unique Number : 11113259

Test Package : FLEET (Additional Tests: FuelDilution, PercentFuel)

Received : 08 Jul 2024

Tested : 09 Jul 2024

Diagnosed : 09 Jul 2024 - Jonathan Hester

Sapp Bros. Fleet - Lincoln 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)

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F: