



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
RA512
Component
Diesel Engine
Fluid
DURALENE Dura-Syn 10W30 (--- GAL)

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		WC0675004	WC0615584	---
Sample Date		Client Info		27 Dec 2023	02 Oct 2021	---
Machine Age	hrs	Client Info		2110	398	---
Oil Age	hrs	Client Info		190	398	---
Filter Age	hrs	Client Info		190	398	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				NORMAL	NORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	15	42	---
Chromium	ppm	ASTM D5185m	>20	<1	6	---
Nickel	ppm	ASTM D5185m	>4	0	<1	---
Titanium	ppm	ASTM D5185m		0	<1	---
Silver	ppm	ASTM D5185m	>3	0	<1	---
Aluminum	ppm	ASTM D5185m	>20	3	7	---
Lead	ppm	ASTM D5185m	>40	0	<1	---
Copper	ppm	ASTM D5185m	>330	<1	6	---
Tin	ppm	ASTM D5185m	>15	0	<1	---
Vanadium	ppm	ASTM D5185m		<1	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

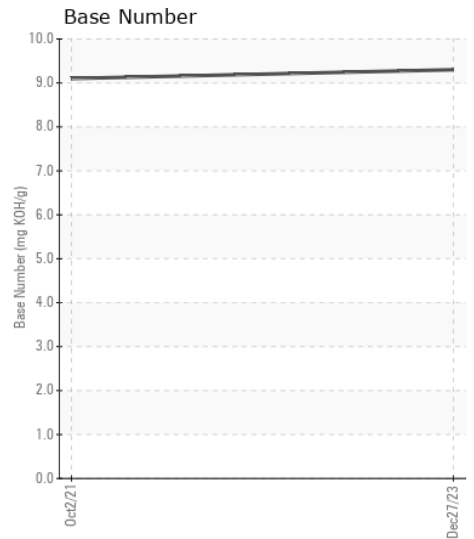
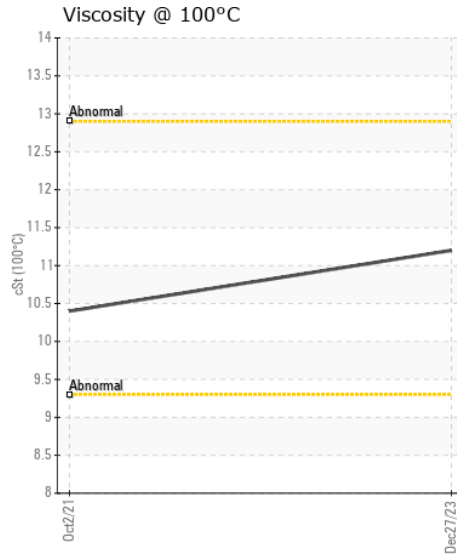
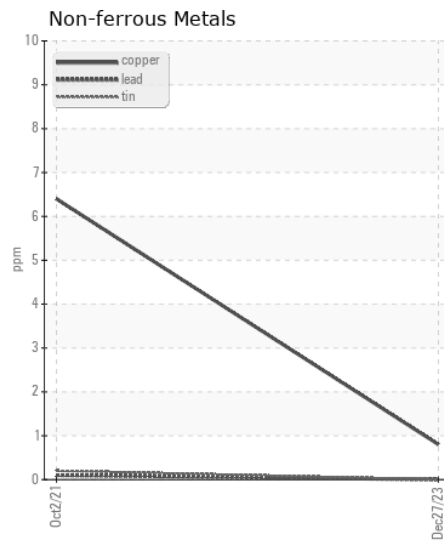
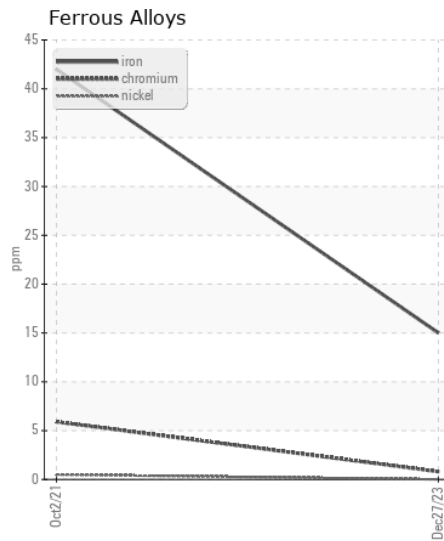
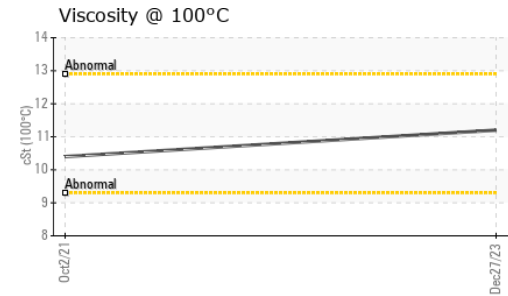
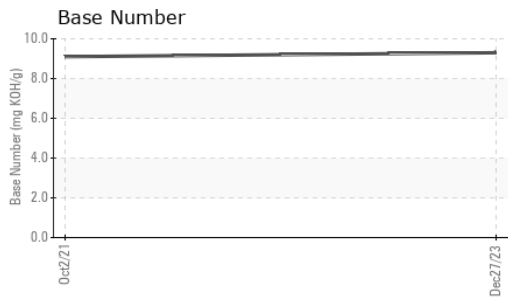
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	5	17	---
Potassium	ppm	ASTM D5185m	>20	2	5	---
Fuel		WC Method	>5	<1.0	<1.0	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0.2	0.2	---
Nitration	Abs/cm	*ASTM D7624	>20	6.5	6.4	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.1	21.5	---
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. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		1	3	---
Boron	ppm	ASTM D5185m		15	41	---
Barium	ppm	ASTM D5185m		0	<1	---
Molybdenum	ppm	ASTM D5185m		49	39	---
Manganese	ppm	ASTM D5185m		<1	9	---
Magnesium	ppm	ASTM D5185m		727	435	---
Calcium	ppm	ASTM D5185m		1391	1562	---
Phosphorus	ppm	ASTM D5185m		961	850	---
Zinc	ppm	ASTM D5185m		1204	1001	---
Sulfur	ppm	ASTM D5185m		3134	2332	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.1	19	---
Base Number (BN)	mg KOH/g	ASTM D2896		9.3	9.1	---
Visc @ 100°C	cSt	ASTM D445		11.2	10.4	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0675004 **Received** : 17 Jan 2024
Lab Number : 06062438 **Diagnosed** : 18 Jan 2024
Unique Number : 10833820 **Diagnostician** : Wes Davis
Test Package : CONST (Additional Tests: TBN)

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)

GRAY & SON INC
 430 W PADONIA RD
 TIMONIUM, MD
 US 21093-2274
 Contact: DON WIMER
 dwimer@graynson.com
 T: (410)771-4311
 F: (410)560-0394