

Area
MATERIAL HANDLER
Machine Id
240-90101

Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 15W40 (--- GAL)



DIAGNOSIS

Recommendation

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

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

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.

SAMPLE INFORMATION method limit/base current history1 history2

Sample Number	Client Info	RLB0000032	---	---
Sample Date	Client Info	10 Jan 2024	---	---
Machine Age	hrs Client Info	6485	---	---
Oil Age	hrs Client Info	250	---	---
Oil Changed	Client Info	Changed	---	---
Sample Status		NORMAL	---	---

CONTAMINATION method limit/base current history1 history2

Fuel	WC Method	>5	<1.0	---	---
Water	WC Method	>0.2	NEG	---	---
Glycol	WC Method		NEG	---	---

WEAR METALS method limit/base current history1 history2

Iron	ppm	ASTM D5185m	>100	11	---	---
Chromium	ppm	ASTM D5185m	>20	<1	---	---
Nickel	ppm	ASTM D5185m	>4	<1	---	---
Titanium	ppm	ASTM D5185m		0	---	---
Silver	ppm	ASTM D5185m	>3	0	---	---
Aluminum	ppm	ASTM D5185m	>20	2	---	---
Lead	ppm	ASTM D5185m	>40	0	---	---
Copper	ppm	ASTM D5185m	>330	0	---	---
Tin	ppm	ASTM D5185m	>15	0	---	---
Vanadium	ppm	ASTM D5185m		0	---	---
Cadmium	ppm	ASTM D5185m		0	---	---

ADDITIVES method limit/base current history1 history2

Boron	ppm	ASTM D5185m	250	6	---	---
Barium	ppm	ASTM D5185m	10	0	---	---
Molybdenum	ppm	ASTM D5185m	100	61	---	---
Manganese	ppm	ASTM D5185m		<1	---	---
Magnesium	ppm	ASTM D5185m	450	953	---	---
Calcium	ppm	ASTM D5185m	3000	1075	---	---
Phosphorus	ppm	ASTM D5185m	1150	1047	---	---
Zinc	ppm	ASTM D5185m	1350	1287	---	---
Sulfur	ppm	ASTM D5185m	4250	3145	---	---

CONTAMINANTS method limit/base current history1 history2

Silicon	ppm	ASTM D5185m	>25	3	---	---
Sodium	ppm	ASTM D5185m	>158	<1	---	---
Potassium	ppm	ASTM D5185m	>20	<1	---	---

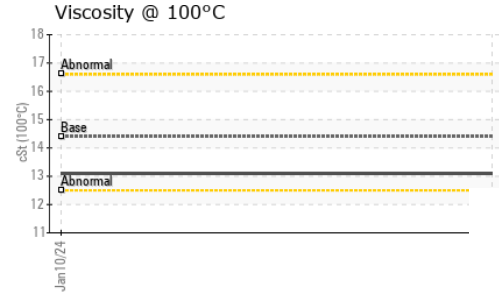
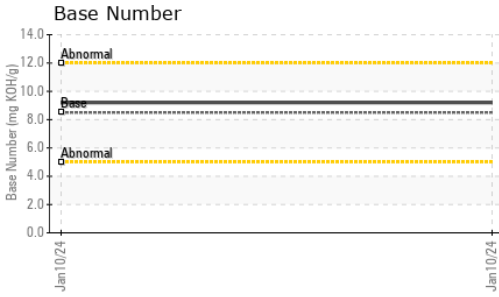
INFRA-RED method limit/base current history1 history2

Soot %	%	*ASTM D7844	>3	0.2	---	---
Nitration	Abs/cm	*ASTM D7624	>20	6.9	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.5	---	---

FLUID DEGRADATION method limit/base current history1 history2

Oxidation	Abs/.1mm	*ASTM D7414	>25	15.3	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	9.2	---	---

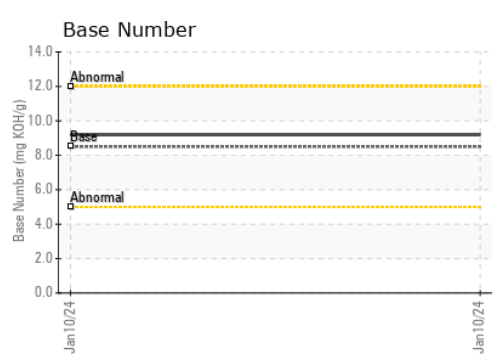
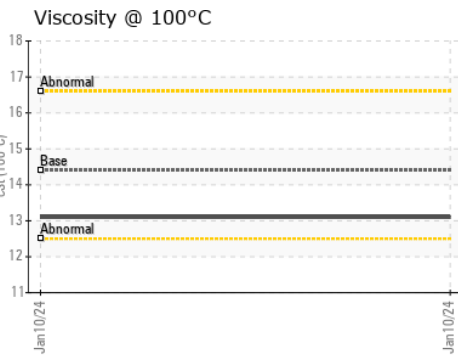
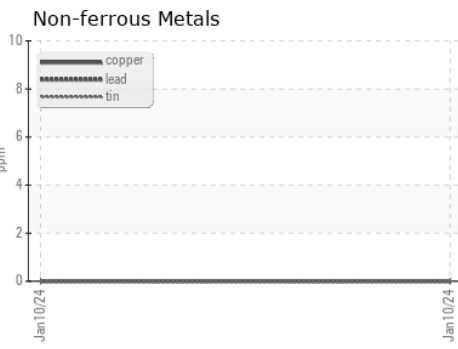
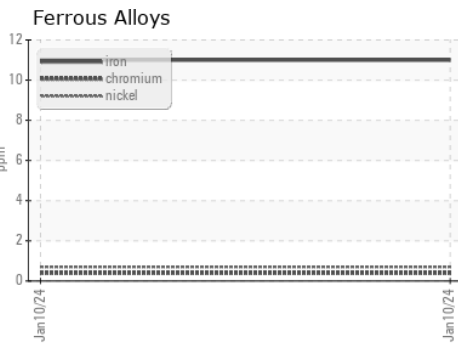
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---
Precipitate	scalar	*Visual	NONE	NONE	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	NORML	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual	>0.2	NEG	---	---
Free Water	scalar	*Visual		NEG	---	---

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D445	14.4	13.1	---	---

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : RLB0000032 **Recieved** : 30 Jan 2024
Lab Number : **06074379** **Diagnosed** : 31 Jan 2024
Unique Number : 10856470 **Diagnostician** : Wes Davis
Test Package : FLEET

CHAMLEY PIPE & SALVAGE
 5228 134TH AVE NW
 WILLISTON, ND
 US 58801
 Contact: CHRIS SCHROEDER
 shop@chamleypipe.com
 T: (701)425-7136
 F:

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)