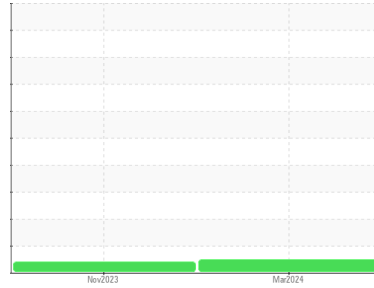




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id
MCI 1904
 Component
Diesel Engine
 Fluid
PURUS 10W30 BLEND (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

No evidence of coolant present in the oil. 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			WC0859064	WC0859055	---
Sample Date	Client Info			18 Mar 2024	28 Nov 2023	---
Machine Age	mls	Client Info		704000	676667	---
Oil Age	mls	Client Info		15000	0	---
Oil Changed	Client Info			Changed	Changed	---
Sample Status				NORMAL	ATTENTION	---

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>3.0		<1.0	0.2	---
Water	WC Method	>0.2		NEG	NEG	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>165	26	42	---
Chromium	ppm	ASTM D5185m	>5	1	2	---
Nickel	ppm	ASTM D5185m	>4	<1	0	---
Titanium	ppm	ASTM D5185m	>2	<1	<1	---
Silver	ppm	ASTM D5185m	>2	0	0	---
Aluminum	ppm	ASTM D5185m	>20	3	3	---
Lead	ppm	ASTM D5185m	>150	3	2	---
Copper	ppm	ASTM D5185m	>90	1	2	---
Tin	ppm	ASTM D5185m	>5	1	<1	---
Vanadium	ppm	ASTM D5185m		<1	0	---
Cadmium	ppm	ASTM D5185m		0	0	---

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		17	19	---
Barium	ppm	ASTM D5185m		0	0	---
Molybdenum	ppm	ASTM D5185m		71	80	---
Manganese	ppm	ASTM D5185m		<1	0	---
Magnesium	ppm	ASTM D5185m		939	1083	---
Calcium	ppm	ASTM D5185m		1144	1278	---
Phosphorus	ppm	ASTM D5185m		1044	1249	---
Zinc	ppm	ASTM D5185m		1255	1419	---
Sulfur	ppm	ASTM D5185m		3743	3698	---

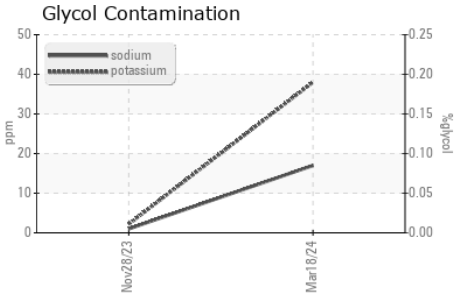
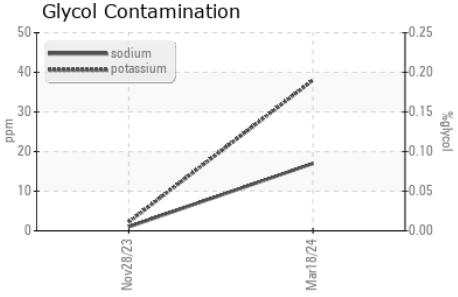
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>35	13	18	---
Sodium	ppm	ASTM D5185m		17	1	---
Potassium	ppm	ASTM D5185m	>20	38	2	---
Glycol	%	*ASTM D2982		NEG	NEG	---

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>7.5	0.5	0.6	---
Nitration	Abs/cm	*ASTM D7624	>20	11.1	10.9	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.7	22.1	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	19.0	18.8	---
Base Number (BN)	mg KOH/g	ASTM D2896		7.5	9.3	---



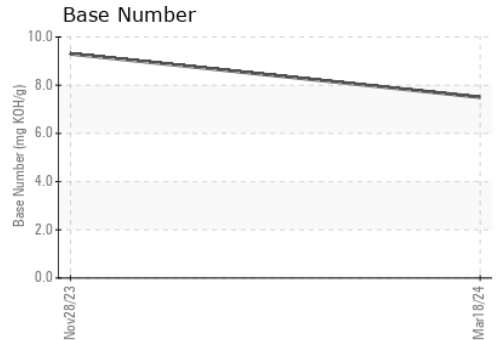
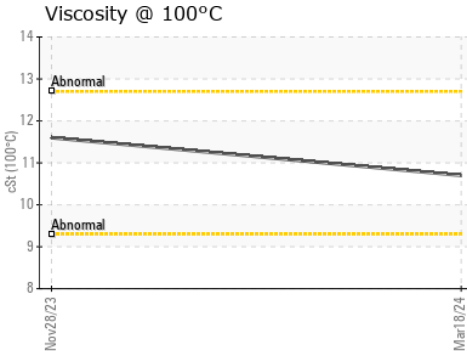
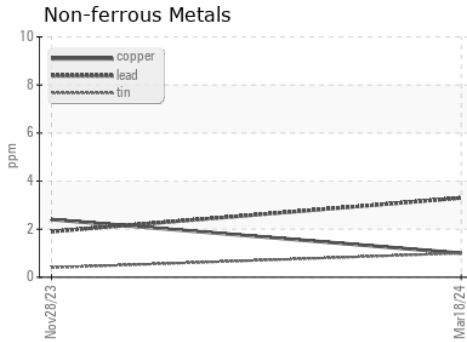
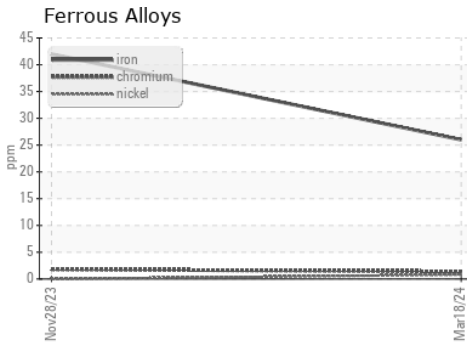
OIL ANALYSIS REPORT



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	10.7	11.6	---

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0859064 **Received** : 28 Mar 2024
Lab Number : 06131644 **Tested** : 02 Apr 2024
Unique Number : 10951109 **Diagnosed** : 02 Apr 2024 - Jonathan Hester
Test Package : FLEET (Additional Tests: GLYCOL)

JEFFERSON LINES
 1830 4TH AVE N
 BILLINGS, MT
 US 59101
 Contact: BILLINGS SHOP
 billingsshop@jeffersonlines.com

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: