



WEAR	NORMAL
CONTAMINATION	MARGINAL
FLUID CONDITION	NORMAL

Machine Id
242106

Component
Diesel Engine

Fluid
DIESEL ENGINE OIL SAE 40 (--- QTS)

RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor. Please specify the component make and model with your next sample. Please specify the brand, type, and viscosity of the oil on your next sample.

WEAR

All component wear rates are normal.

CONTAMINATION

Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. Light fuel dilution occurring. No other contaminants were detected in the oil.

FLUID CONDITION

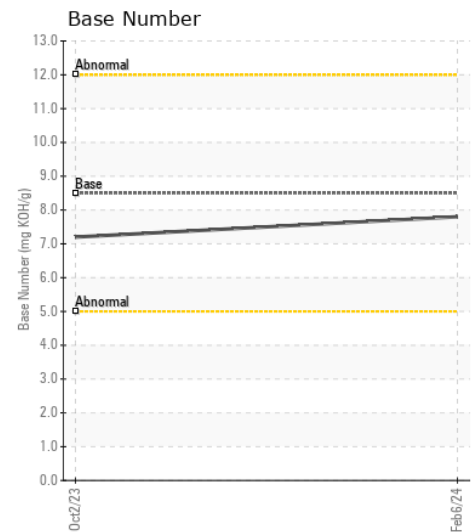
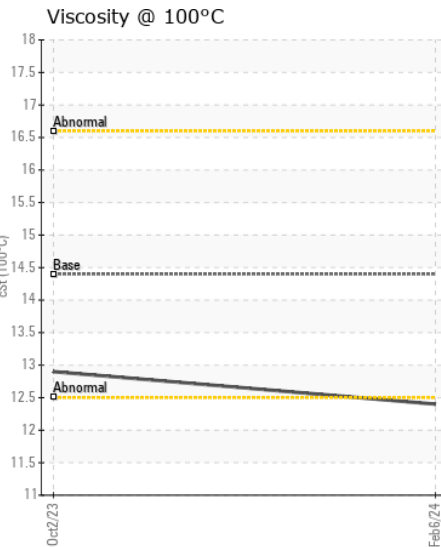
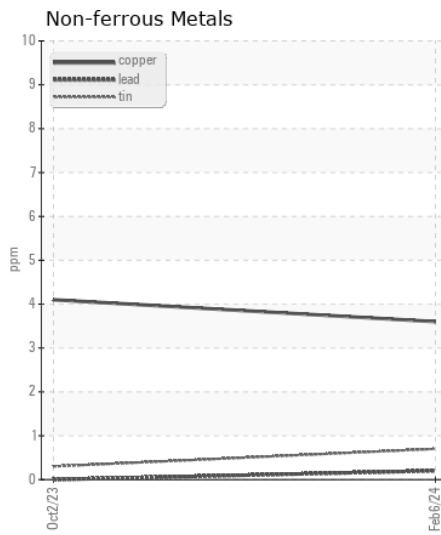
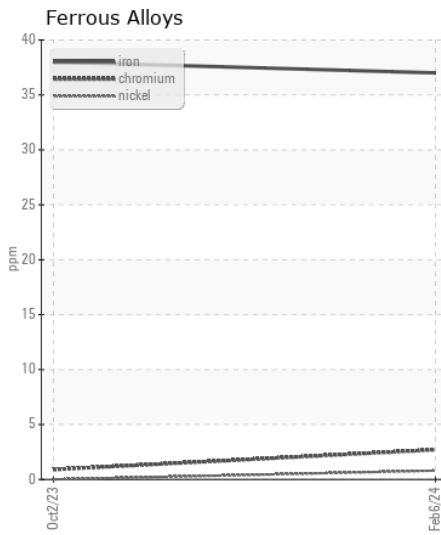
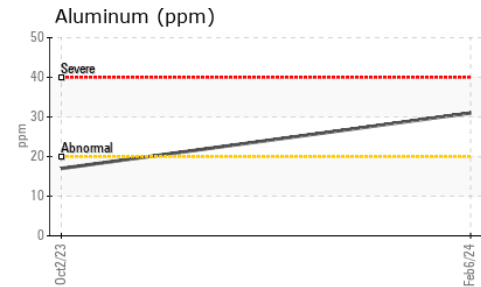
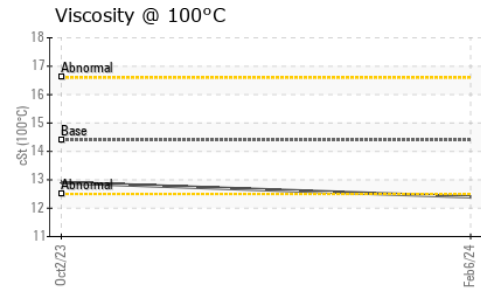
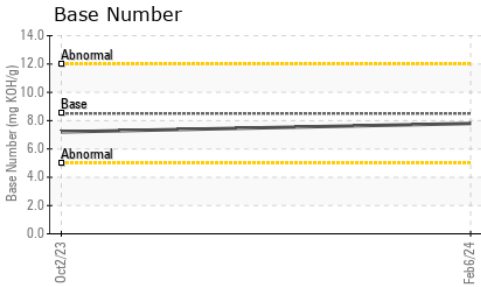
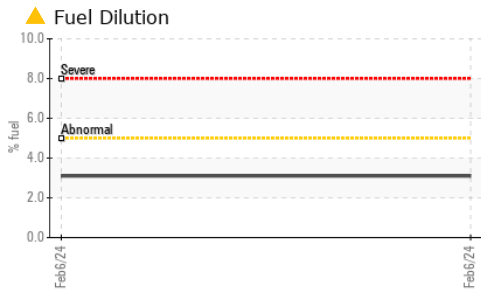
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		IL06101398	IL05991467	---
Sample Date		Client Info		06 Feb 2024	02 Oct 2023	---
Machine Age	hrs	Client Info		4309	3604	---
Oil Age	hrs	Client Info		0	0	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		N/A	N/A	---
Filter Changed		Client Info		N/A	N/A	---
Sample Status				MARGINAL	NORMAL	---

Iron	ppm	ASTM D5185m	>100	37	38	---
Chromium	ppm	ASTM D5185m	>20	3	<1	---
Nickel	ppm	ASTM D5185m	>4	<1	0	---
Titanium	ppm	ASTM D5185m		<1	0	---
Silver	ppm	ASTM D5185m	>3	0	0	---
Aluminum	ppm	ASTM D5185m	>20	31	17	---
Lead	ppm	ASTM D5185m	>40	<1	0	---
Copper	ppm	ASTM D5185m	>330	4	4	---
Tin	ppm	ASTM D5185m	>15	<1	<1	---
Vanadium	ppm	ASTM D5185m		<1	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

Silicon	ppm	ASTM D5185m	>25	7	6	---
Potassium	ppm	ASTM D5185m	>20	57	32	---
Fuel	%	ASTM D3524	>5	3.1	<1.0	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0.8	1.1	---
Nitration	Abs/cm	*ASTM D7624	>20	11.9	12.3	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.3	22.5	---
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	---

Sodium	ppm	ASTM D5185m	>216	1	2	---
Boron	ppm	ASTM D5185m	250	3	6	---
Barium	ppm	ASTM D5185m	10	1	0	---
Molybdenum	ppm	ASTM D5185m	100	59	51	---
Manganese	ppm	ASTM D5185m		1	<1	---
Magnesium	ppm	ASTM D5185m	450	817	799	---
Calcium	ppm	ASTM D5185m	3000	978	1031	---
Phosphorus	ppm	ASTM D5185m	1150	946	876	---
Zinc	ppm	ASTM D5185m	1350	1130	1086	---
Sulfur	ppm	ASTM D5185m	4250	3303	2755	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	18.9	19.6	---
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	7.8	7.2	---
Visc @ 100°C	cSt	ASTM D445	14.4	12.4	12.9	---



Certificate L2367

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

Sample No. : IL06101398

Lab Number : 06101398

Unique Number : 10899628

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

Received : 27 Feb 2024

Tested : 29 Feb 2024

Diagnosed : 29 Feb 2024 - Wes Davis

RUSH TRUCK LEASING - CINCINNATI IDEALEASE

11777 HIGHWAY DRIVE

CINCINNATI, OH

US 45241

Contact: ROBERT BAIER

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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)