



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
162109

Component
Diesel Engine

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

RECOMMENDATION

Resample at the next service interval to monitor. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) DIESEL ENGINE OIL SAE 40. Please confirm.
Please specify the component make and model with your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		IL06055295	IL05254821	---
Sample Date		Client Info		08 Dec 2023	22 Apr 2021	---
Machine Age	mls	Client Info		11265	2667	---
Oil Age	mls	Client Info		0	0	---
Filter Age	mls	Client Info		0	0	---
Oil Changed		Client Info		N/A	N/A	---
Filter Changed		Client Info		N/A	N/A	---
Sample Status				NORMAL	ABNORMAL	---

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>100	14	94	---
Chromium	ppm	ASTM D5185m	>20	1	4	---
Nickel	ppm	ASTM D5185m	>4	<1	1	---
Titanium	ppm	ASTM D5185m		<1	<1	---
Silver	ppm	ASTM D5185m	>3	0	<1	---
Aluminum	ppm	ASTM D5185m	>20	2	29	---
Lead	ppm	ASTM D5185m	>40	<1	12	---
Copper	ppm	ASTM D5185m	>330	2	73	---
Tin	ppm	ASTM D5185m	>15	<1	2	---
Vanadium	ppm	ASTM D5185m		0	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

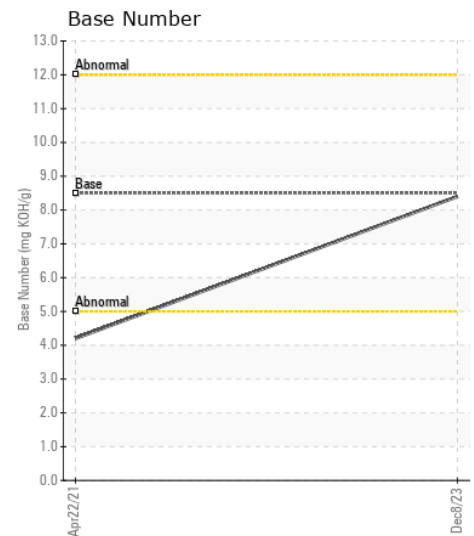
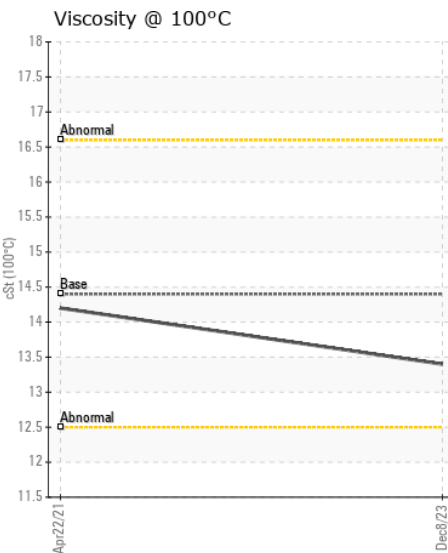
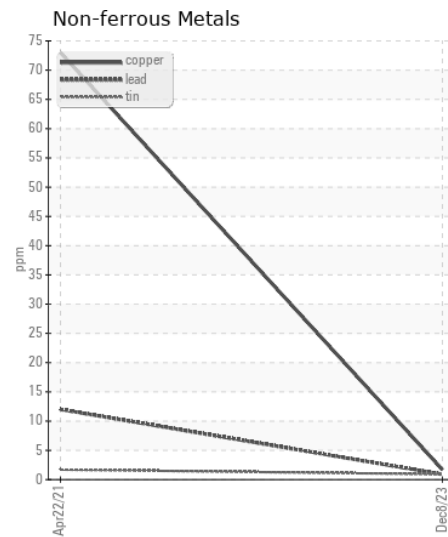
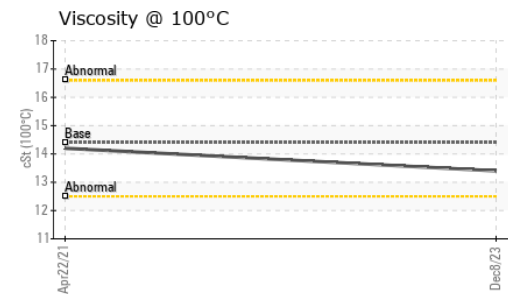
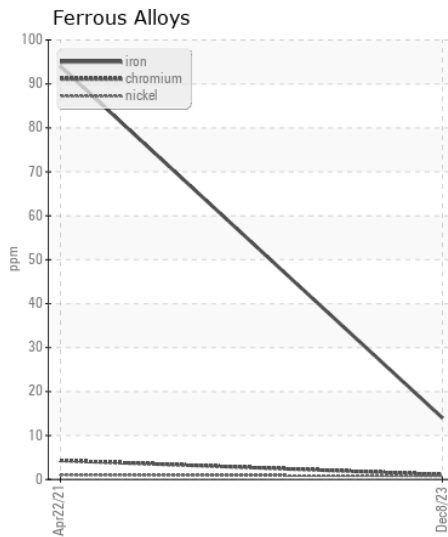
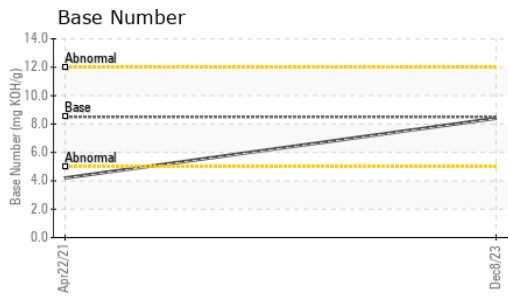
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	7	10	---
Potassium	ppm	ASTM D5185m	>20	5	▲ 85	---
Fuel		WC Method	>5	<1.0	<1.0	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	1.4	▲ 4.7	---
Nitration	Abs/cm	*ASTM D7624	>20	8.8	17.7	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.2	36.4	---
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	>216	0	5	---
Boron	ppm	ASTM D5185m	250	7	19	---
Barium	ppm	ASTM D5185m	10	0	<1	---
Molybdenum	ppm	ASTM D5185m	100	65	64	---
Manganese	ppm	ASTM D5185m		<1	4	---
Magnesium	ppm	ASTM D5185m	450	888	499	---
Calcium	ppm	ASTM D5185m	3000	1090	1813	---
Phosphorus	ppm	ASTM D5185m	1150	864	995	---
Zinc	ppm	ASTM D5185m	1350	1161	1218	---
Sulfur	ppm	ASTM D5185m	4250	3424	2379	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.8	29.8	---
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	8.4	4.2	---
Visc @ 100°C	cSt	ASTM D445	14.4	13.4	14.2	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : IL06055295 **Received** : 09 Jan 2024
Lab Number : 06055295 **Diagnosed** : 10 Jan 2024
Unique Number : 10821244 **Diagnostician** : Wes Davis
Test Package : FLEET

RUSH TRUCK LEASING - CINCINNATI IDEALEASE
 11777 HIGHWAY DRIVE
 CINCINNATI, OH
 US 45241
 Contact: ROBERT BAIER
 baierr@rushenterprises.com
 T: (513)657-7901
 F: (513)733-0537

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)