



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
6226998
 Component
Diesel Engine
 Fluid
{not provided} (--- QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		IL06150019	IL05958416	---
Sample Date		Client Info		15 Apr 2024	21 Sep 2023	---
Machine Age	mls	Client Info		0	0	---
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	NORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	63	93	---
Chromium	ppm	ASTM D5185m	>20	3	4	---
Nickel	ppm	ASTM D5185m	>4	0	<1	---
Titanium	ppm	ASTM D5185m		0	0	---
Silver	ppm	ASTM D5185m	>3	0	0	---
Aluminum	ppm	ASTM D5185m	>20	27	50	---
Lead	ppm	ASTM D5185m	>40	0	0	---
Copper	ppm	ASTM D5185m	>330	4	8	---
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

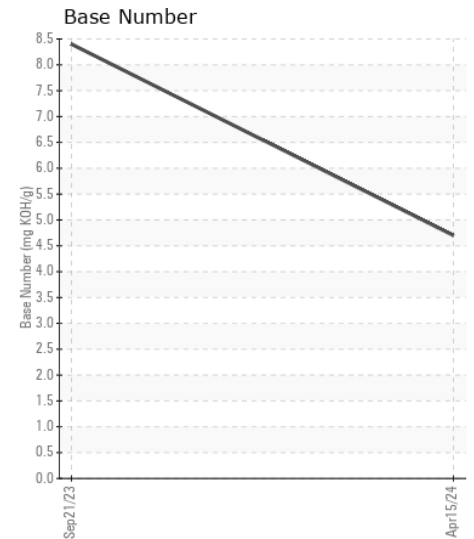
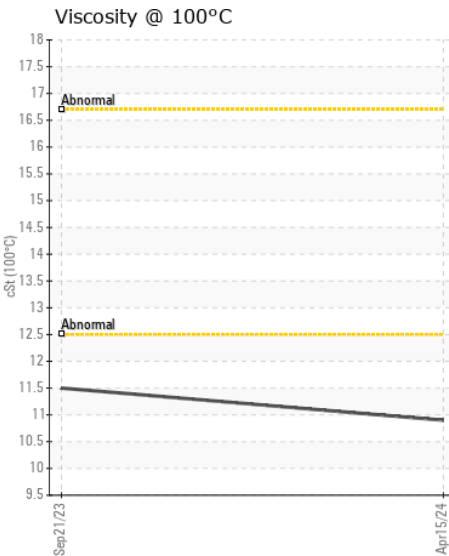
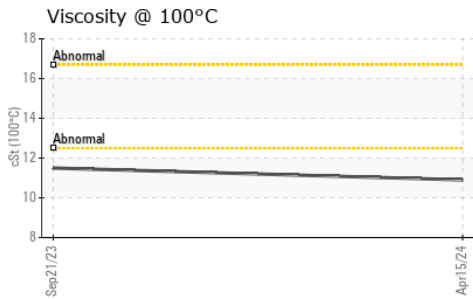
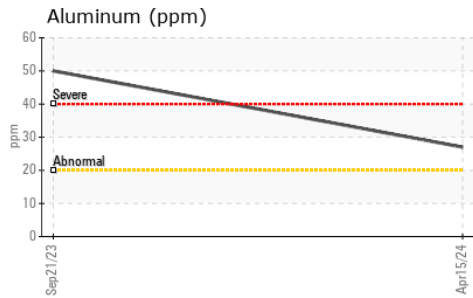
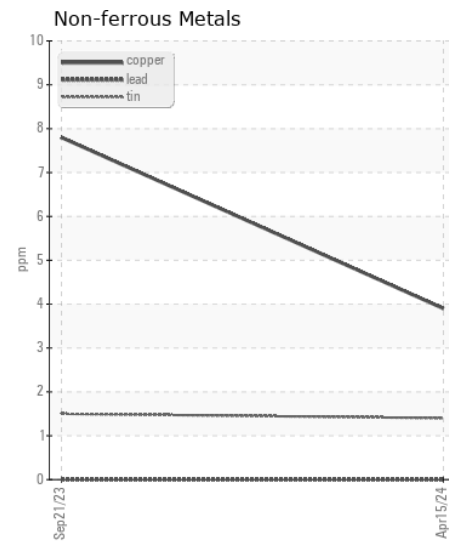
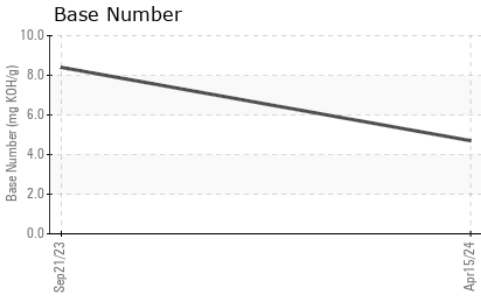
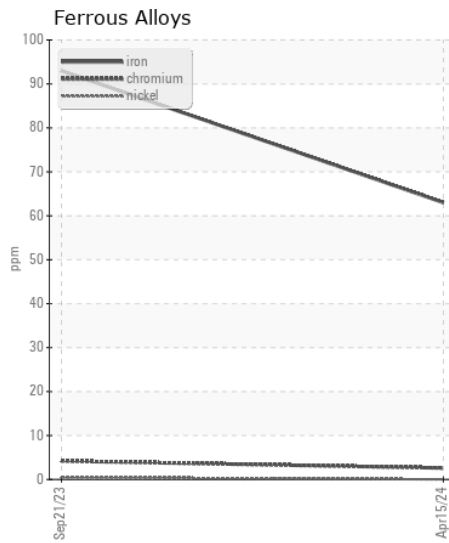
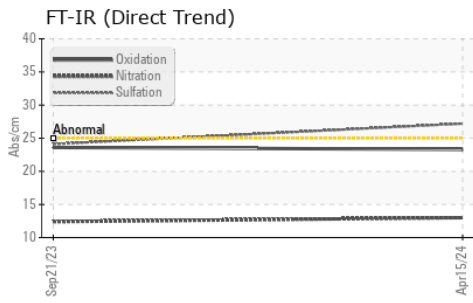
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	13	13	---
Potassium	ppm	ASTM D5185m	>20	51	80	---
Fuel	%	ASTM D3524	>5	<1.0	<1.0	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	1.1	1.2	---
Nitration	Abs/cm	*ASTM D7624	>20	13.0	12.4	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	27.2	24.1	---
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		4	6	---
Boron	ppm	ASTM D5185m		25	69	---
Barium	ppm	ASTM D5185m		0	0	---
Molybdenum	ppm	ASTM D5185m		86	47	---
Manganese	ppm	ASTM D5185m		1	2	---
Magnesium	ppm	ASTM D5185m		125	630	---
Calcium	ppm	ASTM D5185m		2177	1776	---
Phosphorus	ppm	ASTM D5185m		1001	810	---
Zinc	ppm	ASTM D5185m		1160	1028	---
Sulfur	ppm	ASTM D5185m		3916	3058	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	23.3	23.6	---
Base Number (BN)	mg KOH/g	ASTM D2896		4.7	8.4	---
Visc @ 100°C	cSt	ASTM D445		10.9	11.5	---



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : IL06150019 **Received** : 16 Apr 2024
Lab Number : 06150019 **Tested** : 17 Apr 2024
Unique Number : 10980097 **Diagnosed** : 18 Apr 2024 - Sean Felton
Test Package : FLEET (Additional Tests: FuelDilution)

IDEALASE-NORCROSS
 4571 NORTH BUFORD HWY
 NORCROSS, GA
 US 30071-2808
 Contact: RICK MARKS

Certificate L2367 *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: (770)300-0614