



WEAR	ABNORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	ABNORMAL

Machine Id
8317559
 Component
Diesel Engine
 Fluid
S1300 10W30 (--- QTS)

RECOMMENDATION

We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. The oil is near the end of it's useful service life, recommend schedule an oil change. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		IL0036853	IL05967531	---
Sample Date		Client Info		18 Jun 2024	17 Aug 2023	---
Machine Age	mls	Client Info		84821	39887	---
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				ABNORMAL	NORMAL	---

WEAR

Cylinder, crank, or cam shaft wear is indicated.

Iron	ppm	ASTM D5185m	>100	▲ 141	90	---
Chromium	ppm	ASTM D5185m	>20	5	3	---
Nickel	ppm	ASTM D5185m	>4	1	<1	---
Titanium	ppm	ASTM D5185m		<1	0	---
Silver	ppm	ASTM D5185m	>3	<1	<1	---
Aluminum	ppm	ASTM D5185m	>20	● 17	16	---
Lead	ppm	ASTM D5185m	>40	15	12	---
Copper	ppm	ASTM D5185m	>330	17	18	---
Tin	ppm	ASTM D5185m	>15	6	5	---
Vanadium	ppm	ASTM D5185m		0	<1	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

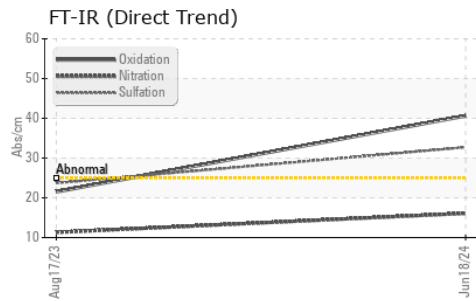
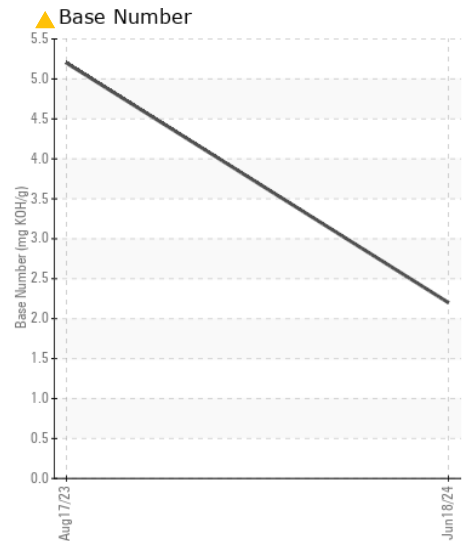
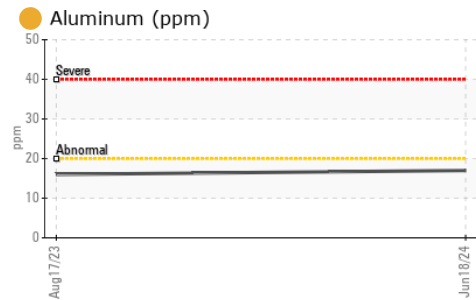
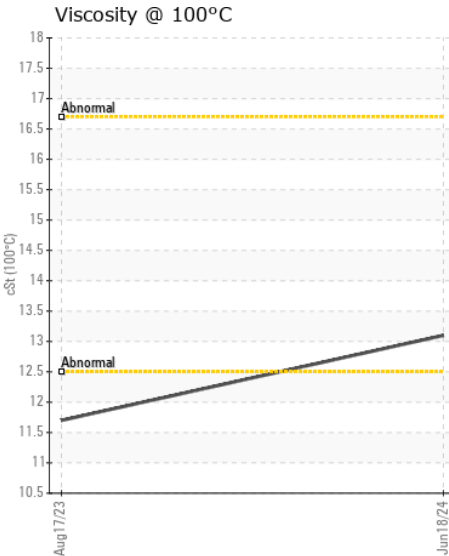
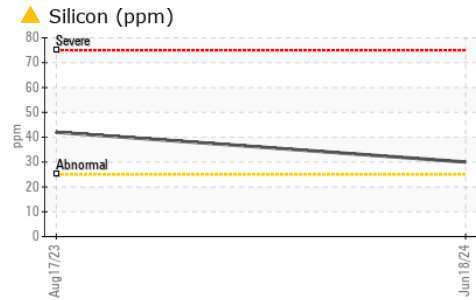
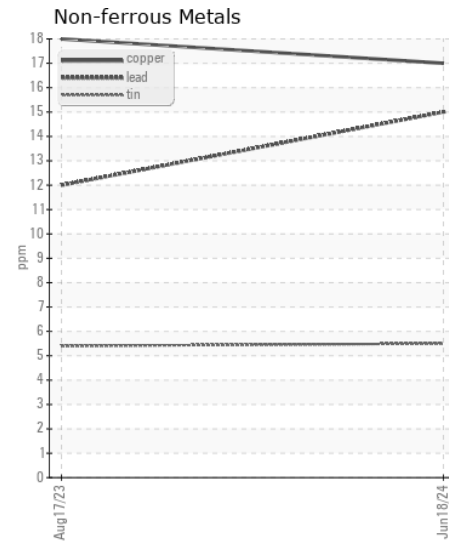
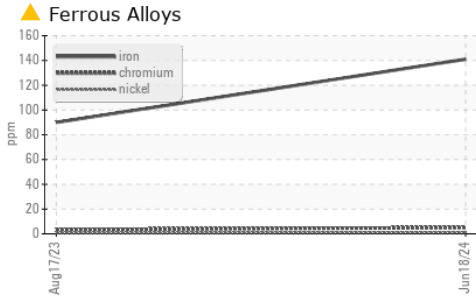
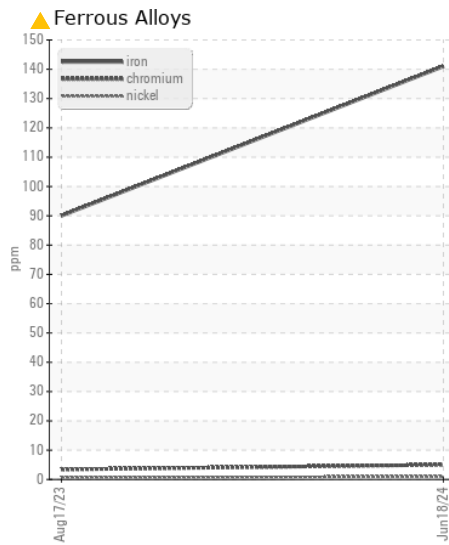
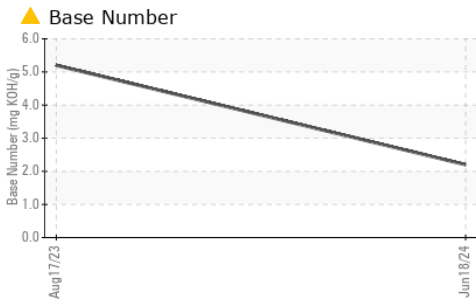
Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

Silicon	ppm	ASTM D5185m	>25	▲ 30	42	---
Potassium	ppm	ASTM D5185m	>20	53	53	---
Fuel		WC Method	>5	<1.0	<1.0	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0.8	0.5	---
Nitration	Abs/cm	*ASTM D7624	>20	16.1	11.3	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	32.7	23.7	---
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 level is low.

Sodium	ppm	ASTM D5185m		5	4	---
Boron	ppm	ASTM D5185m		23	20	---
Barium	ppm	ASTM D5185m		2	0	---
Molybdenum	ppm	ASTM D5185m		56	64	---
Manganese	ppm	ASTM D5185m		6	6	---
Magnesium	ppm	ASTM D5185m		444	456	---
Calcium	ppm	ASTM D5185m		1682	1761	---
Phosphorus	ppm	ASTM D5185m		897	938	---
Zinc	ppm	ASTM D5185m		1109	1238	---
Sulfur	ppm	ASTM D5185m		2699	2748	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	40.6	21.5	---
Base Number (BN)	mg KOH/g	ASTM D2896		▲ 2.2	5.2	---
Visc @ 100°C	cSt	ASTM D445		13.1	11.7	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : IL0036853
Lab Number : 06239703
Unique Number : 11128537
Test Package : FLEET

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

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: (770)300-0614