



WEAR	ABNORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id
4324158
 Component
Diesel Engine
 Fluid
{not provided} (--- QTS)

RECOMMENDATION

We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		IL06217765	---	---
Sample Date		Client Info		23 Jun 2024	---	---
Machine Age	mls	Client Info		0	---	---
Oil Age	mls	Client Info		0	---	---
Filter Age	mls	Client Info		0	---	---
Oil Changed		Client Info		N/A	---	---
Filter Changed		Client Info		N/A	---	---
Sample Status				ABNORMAL	---	---

WEAR

Cylinder, crank, or cam shaft wear is indicated.

Iron	ppm	ASTM D5185m	>100	▲ 128	---	---
Chromium	ppm	ASTM D5185m	>20	2	---	---
Nickel	ppm	ASTM D5185m	>4	0	---	---
Titanium	ppm	ASTM D5185m		0	---	---
Silver	ppm	ASTM D5185m	>3	0	---	---
Aluminum	ppm	ASTM D5185m	>20	● 23	---	---
Lead	ppm	ASTM D5185m	>40	5	---	---
Copper	ppm	ASTM D5185m	>330	193	---	---
Tin	ppm	ASTM D5185m	>15	7	---	---
Vanadium	ppm	ASTM D5185m		<1	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

CONTAMINATION

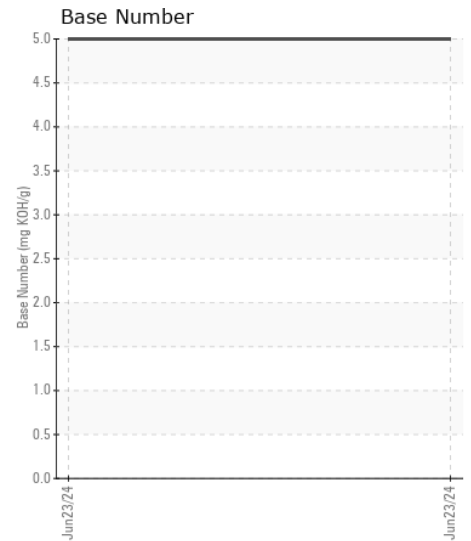
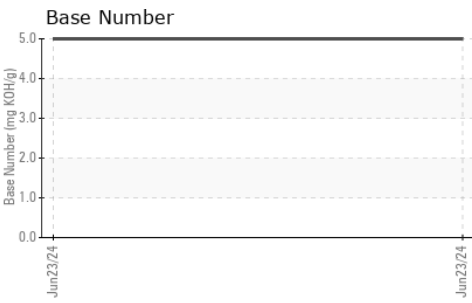
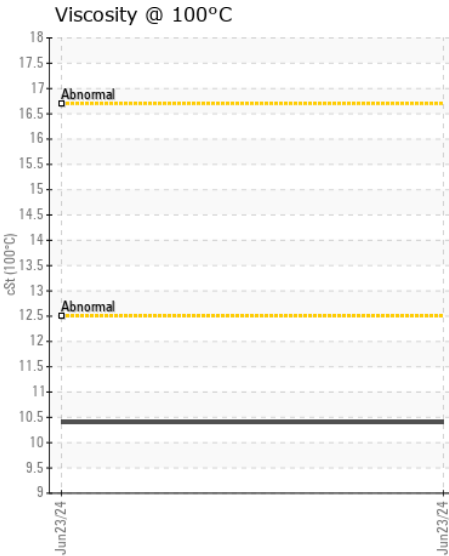
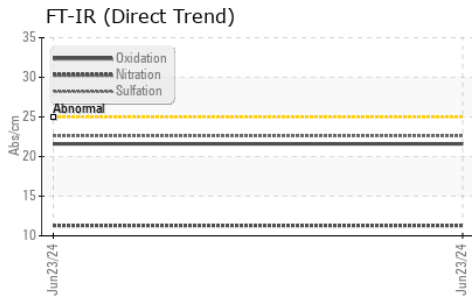
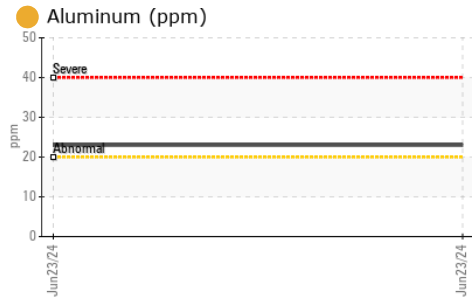
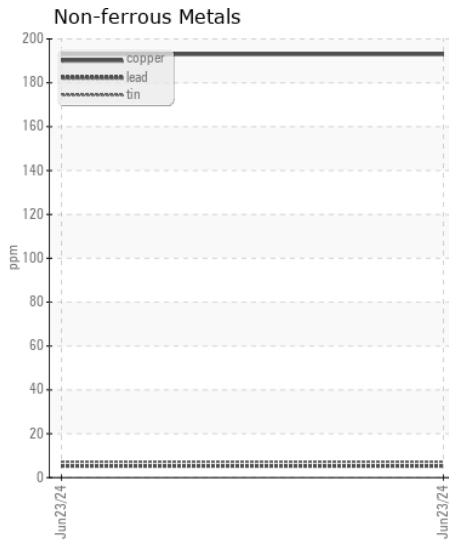
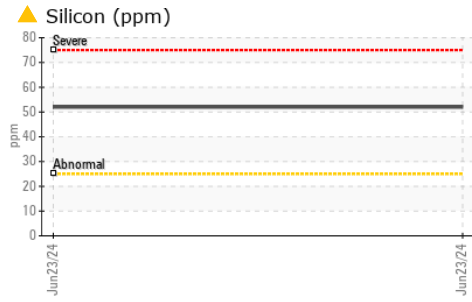
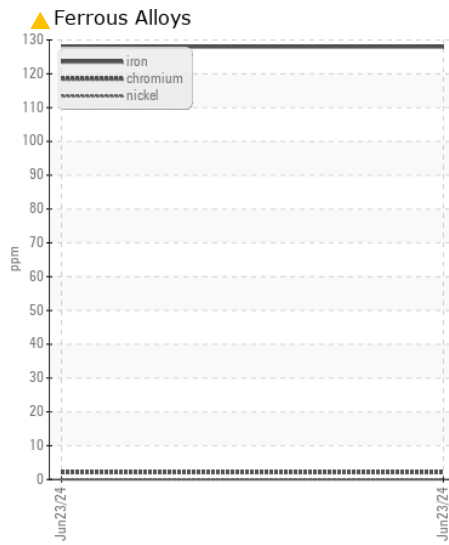
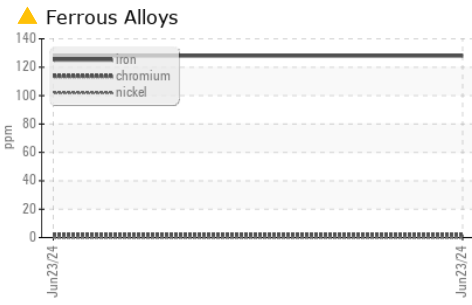
Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

Silicon	ppm	ASTM D5185m	>25	▲ 52	---	---
Potassium	ppm	ASTM D5185m	>20	15	---	---
Fuel	%	ASTM D3524	>5	<1.0	---	---
Water		WC Method	>0.2	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	*ASTM D7844	>3	0.8	---	---
Nitration	Abs/cm	*ASTM D7624	>20	11.3	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.6	---	---
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	---	---

FLUID CONDITION

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

Sodium	ppm	ASTM D5185m		4	---	---
Boron	ppm	ASTM D5185m		70	---	---
Barium	ppm	ASTM D5185m		6	---	---
Molybdenum	ppm	ASTM D5185m		19	---	---
Manganese	ppm	ASTM D5185m		4	---	---
Magnesium	ppm	ASTM D5185m		64	---	---
Calcium	ppm	ASTM D5185m		1378	---	---
Phosphorus	ppm	ASTM D5185m		925	---	---
Zinc	ppm	ASTM D5185m		1203	---	---
Sulfur	ppm	ASTM D5185m		3109	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	21.6	---	---
Base Number (BN)	mg KOH/g	ASTM D2896		5.0	---	---
Visc @ 100°C	cSt	ASTM D445		10.4	---	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : IL06217765
Lab Number : **06217765**
Unique Number : 11090629
Test Package : FLEET (Additional Tests: FuelDilution, PercentFuel)

Received : 24 Jun 2024
Tested : 25 Jun 2024
Diagnosed : 25 Jun 2024 - Don Baldrige

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