



WEAR	ABNORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	ABNORMAL

Machine Id
2424
 Component
Diesel Engine
 Fluid
DIESEL ENGINE OIL SAE 5W30 (--- GAL)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		HRE0000661	---	---
Sample Date		Client Info		09 Jun 2024	---	---
Machine Age	mls	Client Info		105387	---	---
Oil Age	mls	Client Info		50000	---	---
Filter Age	mls	Client Info		50000	---	---
Oil Changed		Client Info		Changed	---	---
Filter Changed		Client Info		Changed	---	---
Sample Status				ABNORMAL	---	---

WEAR

Cylinder, crank, or cam shaft wear is indicated.

Iron	ppm	ASTM D5185m	>100	▲ 153	---	---
Chromium	ppm	ASTM D5185m	>20	10	---	---
Nickel	ppm	ASTM D5185m	>4	1	---	---
Titanium	ppm	ASTM D5185m		<1	---	---
Silver	ppm	ASTM D5185m	>3	<1	---	---
Aluminum	ppm	ASTM D5185m	>20	85	---	---
Lead	ppm	ASTM D5185m	>40	8	---	---
Copper	ppm	ASTM D5185m	>330	27	---	---
Tin	ppm	ASTM D5185m	>15	4	---	---
Vanadium	ppm	ASTM D5185m		0	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

CONTAMINATION

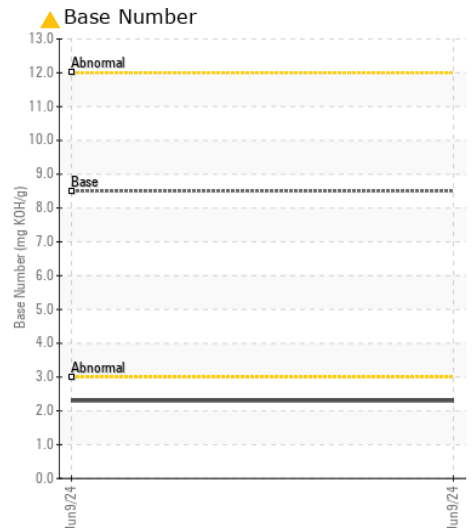
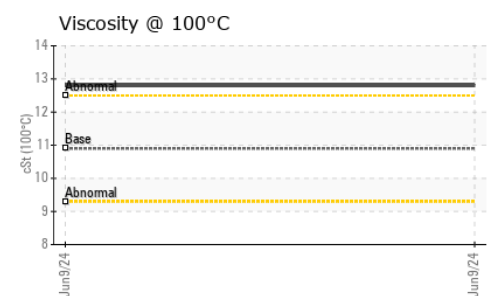
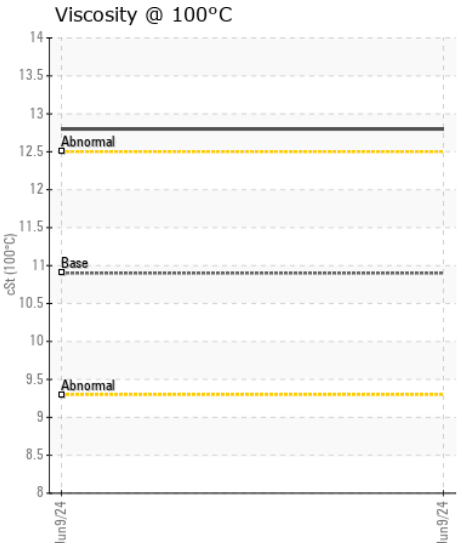
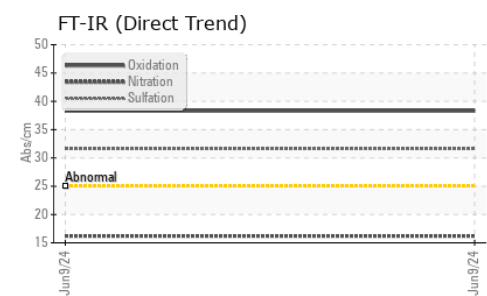
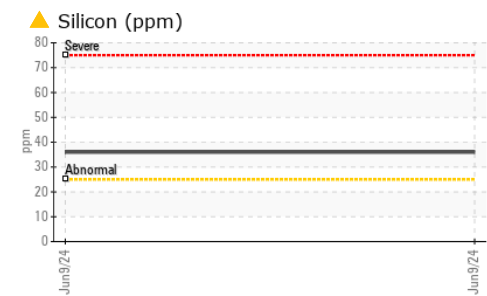
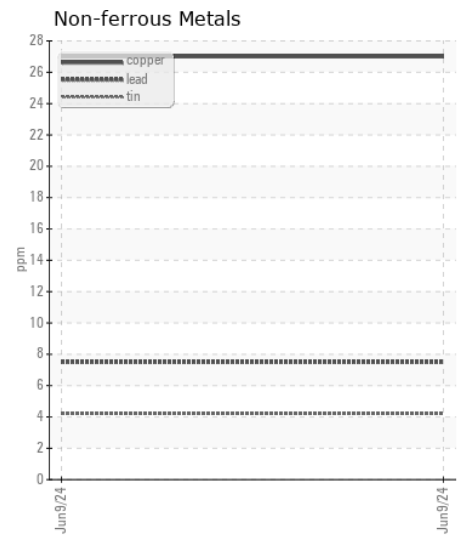
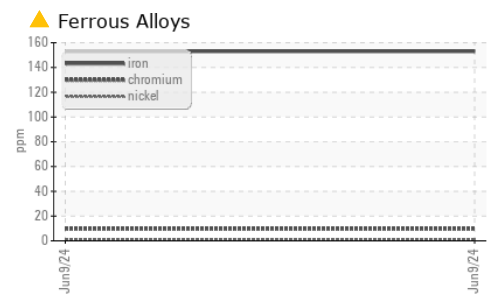
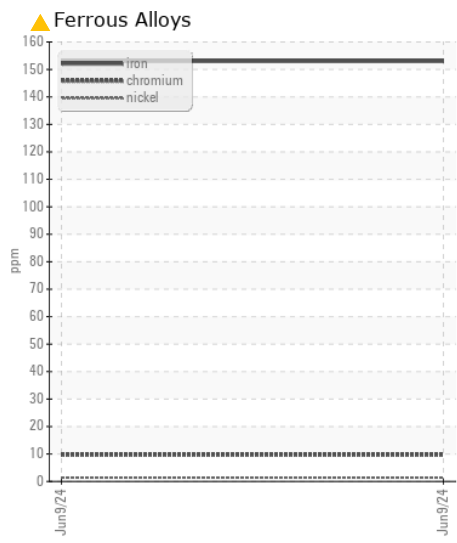
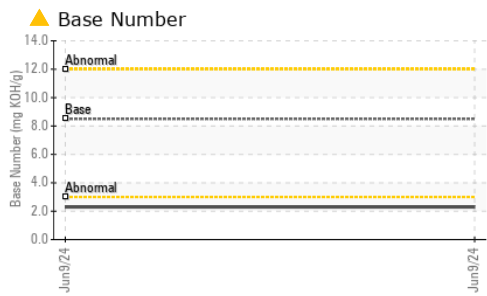
Elemental level of silicon (Si) above normal indicating ingress of seal material. Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components.

Silicon	ppm	ASTM D5185m	>25	▲ 36	---	---
Potassium	ppm	ASTM D5185m	>20	232	---	---
Fuel		WC Method	>5	<1.0	---	---
Water		WC Method	>0.2	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	*ASTM D7844	>3	0.7	---	---
Nitration	Abs/cm	*ASTM D7624	>20	16.2	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	31.6	---	---
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 level is low.

Sodium	ppm	ASTM D5185m		6	---	---
Boron	ppm	ASTM D5185m	250	23	---	---
Barium	ppm	ASTM D5185m	10	1	---	---
Molybdenum	ppm	ASTM D5185m	100	67	---	---
Manganese	ppm	ASTM D5185m		6	---	---
Magnesium	ppm	ASTM D5185m	450	616	---	---
Calcium	ppm	ASTM D5185m	3000	1694	---	---
Phosphorus	ppm	ASTM D5185m	1150	1050	---	---
Zinc	ppm	ASTM D5185m	1350	1376	---	---
Sulfur	ppm	ASTM D5185m	4250	3076	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	38.3	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	▲ 2.3	---	---
Visc @ 100°C	cSt	ASTM D445	10.9	12.8	---	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : HRE0000661
Lab Number : 06217554
Unique Number : 11090418
Test Package : FLEET

Received : 21 Jun 2024
Tested : 25 Jun 2024
Diagnosed : 25 Jun 2024 - Sean Felton

MABE TRUCKING
 PO BOX 1081
 EDEN, NC
 US 27289

Contact: MAINTENANCE
 maintenancemanager@mabetrucking.com

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)

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