



OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ABNORMAL

Machine Id
1461427
 Component
Diesel Engine
 Fluid
DIESEL ENGINE OIL SAE 15W40 (--- QTS)

RECOMMENDATION

We recommend that you drain the oil and perform a filter service on this component if not already done. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		RPL0017056	---	---
Sample Date		Client Info		14 May 2024	---	---
Machine Age	mls	Client Info		108521	---	---
Oil Age	mls	Client Info		59116	---	---
Filter Age	mls	Client Info		59116	---	---
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	▲ 123	---	---
Chromium	ppm	ASTM D5185m	>20	2	---	---
Nickel	ppm	ASTM D5185m	>4	0	---	---
Titanium	ppm	ASTM D5185m		<1	---	---
Silver	ppm	ASTM D5185m	>3	<1	---	---
Aluminum	ppm	ASTM D5185m	>20	16	---	---
Lead	ppm	ASTM D5185m	>40	<1	---	---
Copper	ppm	ASTM D5185m	>330	15	---	---
Tin	ppm	ASTM D5185m	>15	2	---	---
Vanadium	ppm	ASTM D5185m		<1	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

CONTAMINATION

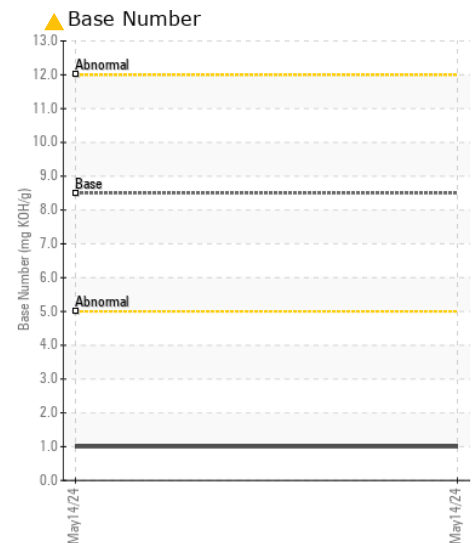
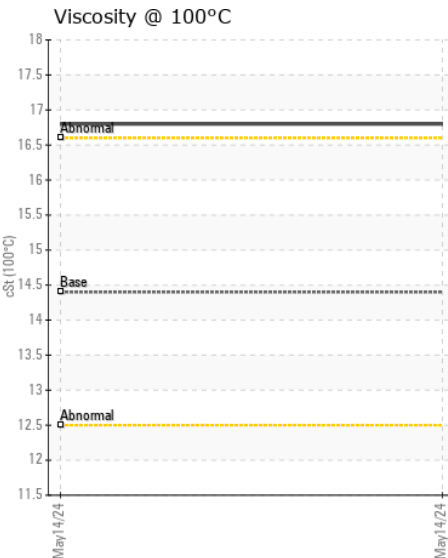
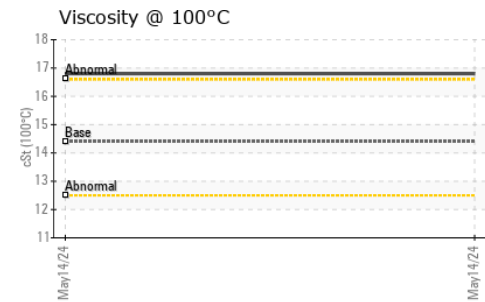
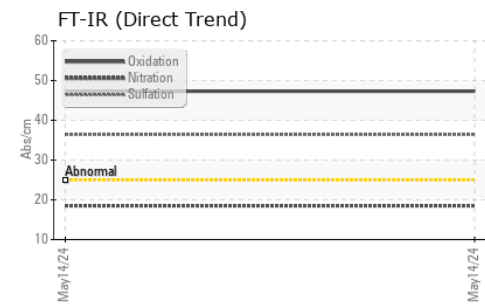
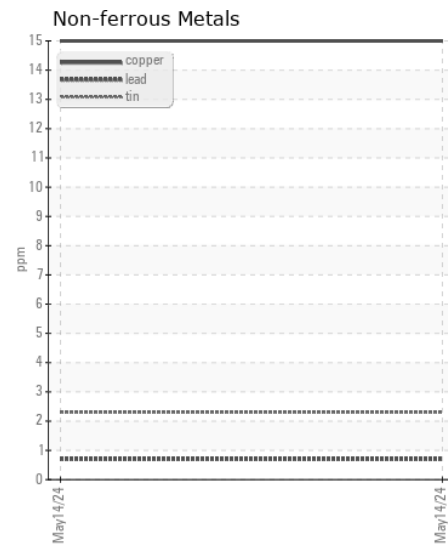
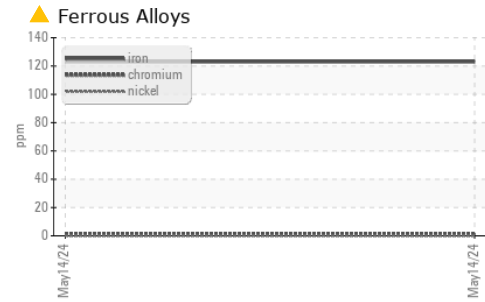
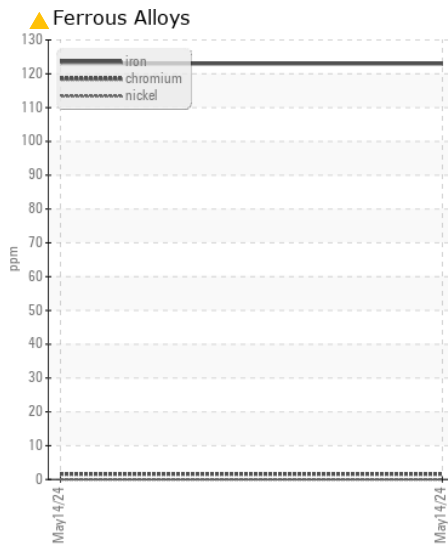
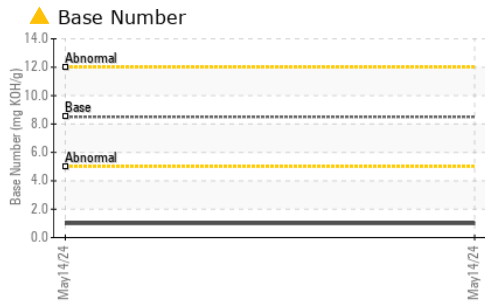
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	13	---	---
Potassium	ppm	ASTM D5185m	>20	43	---	---
Fuel		WC Method	>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	18.5	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	36.4	---	---
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	>158	5	---	---
Boron	ppm	ASTM D5185m	250	45	---	---
Barium	ppm	ASTM D5185m	10	0	---	---
Molybdenum	ppm	ASTM D5185m	100	33	---	---
Manganese	ppm	ASTM D5185m		2	---	---
Magnesium	ppm	ASTM D5185m	450	745	---	---
Calcium	ppm	ASTM D5185m	3000	1702	---	---
Phosphorus	ppm	ASTM D5185m	1150	917	---	---
Zinc	ppm	ASTM D5185m	1350	1085	---	---
Sulfur	ppm	ASTM D5185m	4250	3292	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	47.3	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	▲ 1.0	---	---
Visc @ 100°C	cSt	ASTM D445	14.4	16.8	---	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : RPL0017056

Lab Number : 06187269

Unique Number : 11044021

Test Package : FLEET

Received : 22 May 2024

Tested : 23 May 2024

Diagnosed : 24 May 2024 - Sean Felton

RTL PACLEASE - 7008 - Phoenix

625 South 27th Ave

Phoenix, AZ

US 85009

Contact: Maurice Pilotte

PilotteM@rushenterprises.com

T: (602)566-5712

F:

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)