



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	SEVERE
FLUID CONDITION	ABNORMAL

Machine Id
944
 Component
Diesel Engine
 Fluid
{not provided} (--- QTS)

RECOMMENDATION

We advise that you check the fuel injection system. 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		TLY0002192	TLY0001869	---
Sample Date		Client Info		01 Feb 2024	06 Dec 2023	---
Machine Age	mls	Client Info		0	110059	---
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				SEVERE	SEVERE	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	5	59	---
Chromium	ppm	ASTM D5185m	>20	<1	2	---
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	1	3	---
Lead	ppm	ASTM D5185m	>40	<1	1	---
Copper	ppm	ASTM D5185m	>330	<1	3	---
Tin	ppm	ASTM D5185m	>15	<1	2	---
Vanadium	ppm	ASTM D5185m		0	<1	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

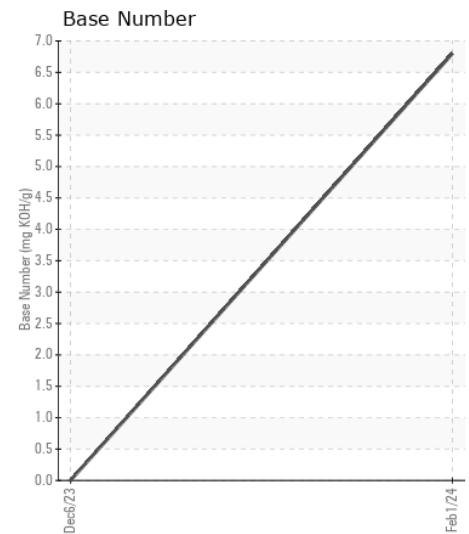
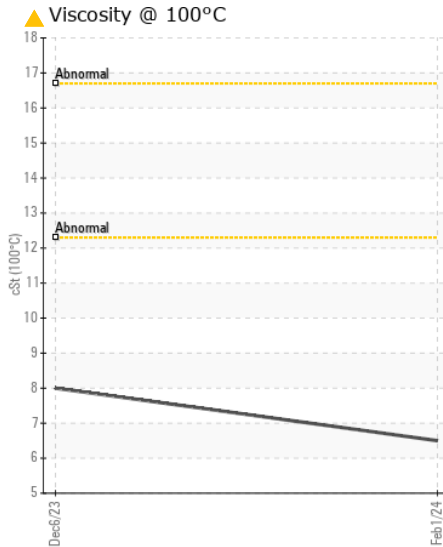
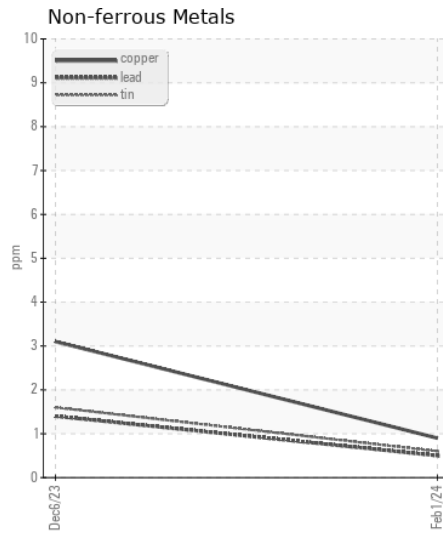
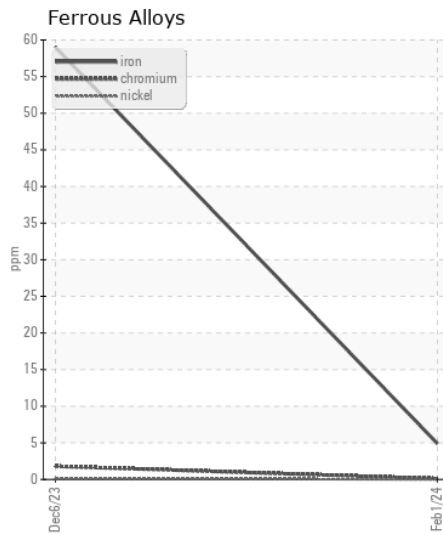
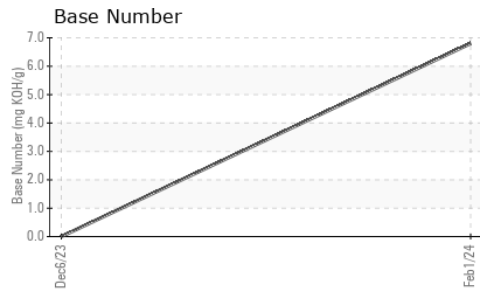
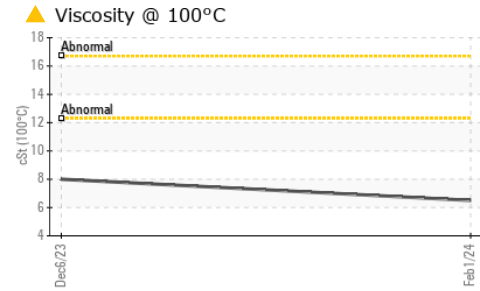
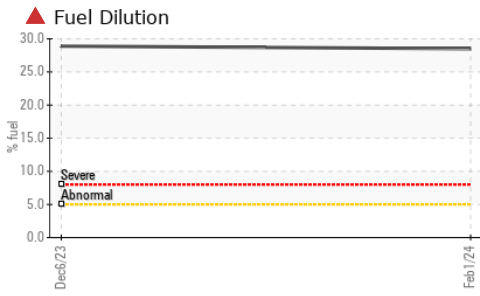
There is a high amount of fuel present in the oil.

Silicon	ppm	ASTM D5185m	>25	4	8	---
Potassium	ppm	ASTM D5185m	>20	<1	3	---
Fuel	%	ASTM D3524	>5	▲ 28.5	▲ 28.9	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0.1	0.7	---
Nitration	Abs/cm	*ASTM D7624	>20	8.9	23.8	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	17.9	32.8	---
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

Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185m		3	15	---
Boron	ppm	ASTM D5185m		31	4	---
Barium	ppm	ASTM D5185m		0	<1	---
Molybdenum	ppm	ASTM D5185m		33	37	---
Manganese	ppm	ASTM D5185m		<1	<1	---
Magnesium	ppm	ASTM D5185m		357	468	---
Calcium	ppm	ASTM D5185m		1019	907	---
Phosphorus	ppm	ASTM D5185m		548	586	---
Zinc	ppm	ASTM D5185m		628	745	---
Sulfur	ppm	ASTM D5185m		1687	1497	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.7	55.3	---
Base Number (BN)	mg KOH/g	ASTM D2896		6.8	▲ 0.0	---
Visc @ 100°C	cSt	ASTM D445		▲ 6.5	▲ 8	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TLY0002192 **Received** : 29 Feb 2024
Lab Number : 06105087 **Tested** : 05 Mar 2024
Unique Number : 10903317 **Diagnosed** : 05 Mar 2024 - Sean Felton
Test Package : CONST (Additional Tests: PercentFuel, TBN)

COCKEYS ENTERPRISES
 3300 TRANSWAY RD
 HALETHORP, MD
 US 21227
 Contact: FRANK ROLNIAK
 frank.rolniak@cockeys.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)

T:
F: