



WEAR CHECK

OIL ANALYSIS REPORT

WEAR
CONTAMINATION
FLUID CONDITION

SEVERE
SEVERE
ABNORMAL

Machine Id

38

Component

Diesel Engine

Fluid

DIESEL ENGINE OIL SAE 10W30 (--- QTS)

RECOMMENDATION

We advise that you check for the source of the coolant leak. Check for low coolant level. 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.

WEAR

Piston and cylinder wear is indicated.

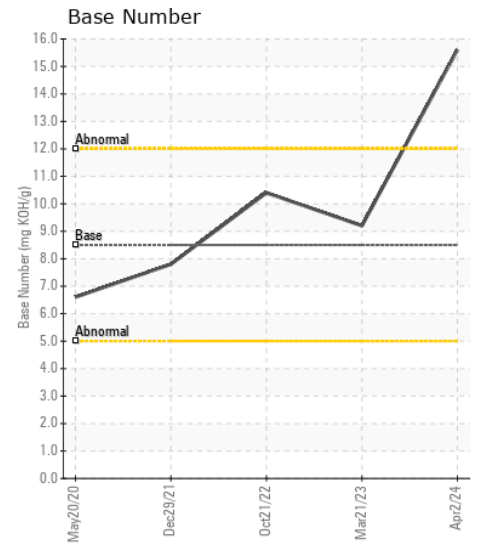
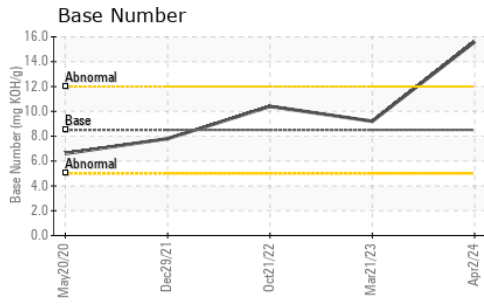
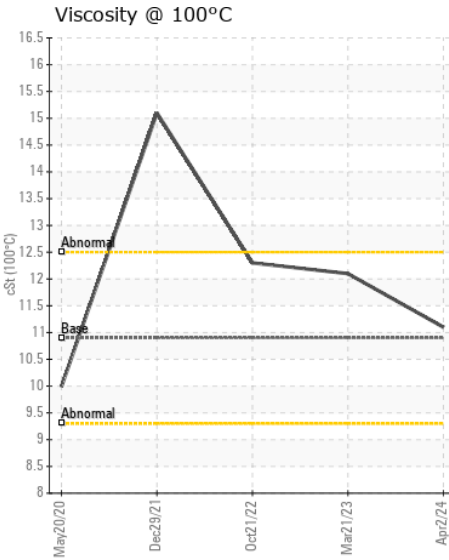
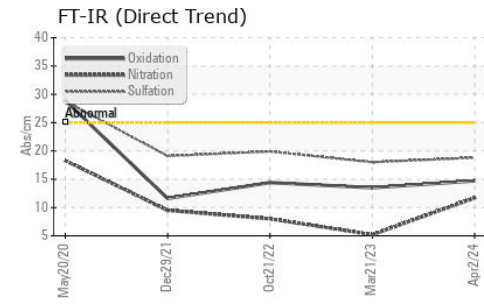
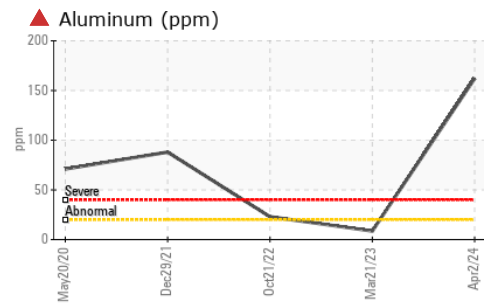
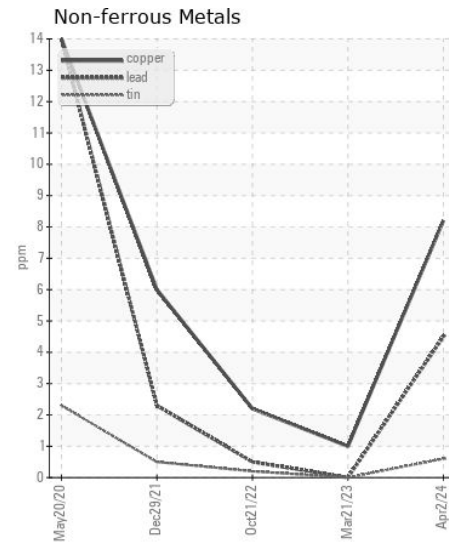
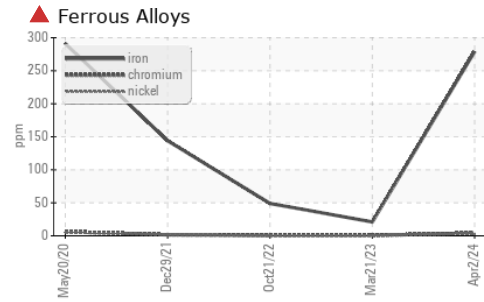
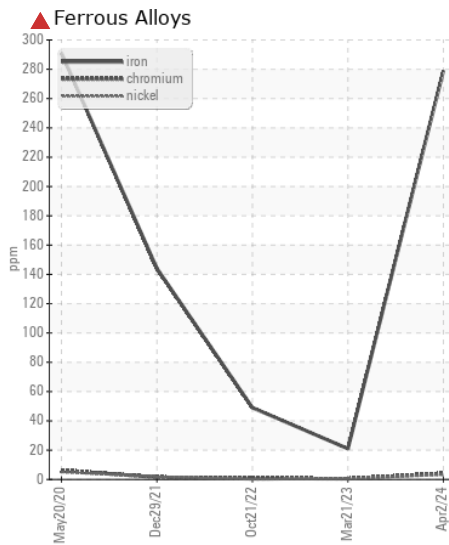
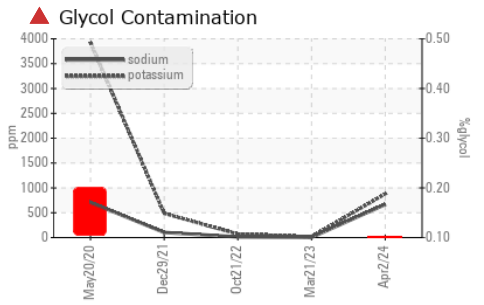
CONTAMINATION

Sodium and/or potassium levels are high. Test for glycol is positive.

FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil. The oil is no longer serviceable due to the presence of contaminants.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0886830	WC0762916	WC0730688
Sample Date		Client Info		02 Apr 2024	21 Mar 2023	21 Oct 2022
Machine Age	hrs	Client Info		5795	75164	75089
Oil Age	hrs	Client Info		5795	12000	0
Filter Age	hrs	Client Info		5795	12000	0
Oil Changed		Client Info		N/A	Changed	Changed
Filter Changed		Client Info		N/A	Changed	Changed
Sample Status				SEVERE	ATTENTION	ATTENTION
Iron	ppm	ASTM D5185m	>100	▲ 279	21	49
Chromium	ppm	ASTM D5185m	>20	4	<1	<1
Nickel	ppm	ASTM D5185m	>4	3	<1	0
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	▲ 162	9	23
Lead	ppm	ASTM D5185m	>40	4	0	<1
Copper	ppm	ASTM D5185m	>330	8	1	2
Tin	ppm	ASTM D5185m	>15	<1	0	<1
Vanadium	ppm	ASTM D5185m		0	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>25	18	4	4
Potassium	ppm	ASTM D5185m	>20	▲ 880	13	71
Fuel		WC Method	>5	<1.0	1.5	2.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol	%	*ASTM D2982		▲ 0.10	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.9	0.1	0.6
Nitration	Abs/cm	*ASTM D7624	>20	11.7	5.2	8.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.8	18.0	19.9
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
Sodium	ppm	ASTM D5185m		▲ 667	4	13
Boron	ppm	ASTM D5185m	250	27	117	90
Barium	ppm	ASTM D5185m	10	<1	0	<1
Molybdenum	ppm	ASTM D5185m	100	136	65	63
Manganese	ppm	ASTM D5185m		3	1	<1
Magnesium	ppm	ASTM D5185m	450	872	377	311
Calcium	ppm	ASTM D5185m	3000	1286	1707	1810
Phosphorus	ppm	ASTM D5185m	1150	1166	977	992
Zinc	ppm	ASTM D5185m	1350	1301	1224	1164
Sulfur	ppm	ASTM D5185m	4250	4060	3513	3353
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.7	13.5	14.4
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	15.6	9.2	10.4
Visc @ 100°C	cSt	ASTM D445	10.9	11.1	12.1	12.3



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0886830 **Received** : 16 Apr 2024
Lab Number : 06150126 **Tested** : 17 Apr 2024
Unique Number : 10980204 **Diagnosed** : 22 Apr 2024 - Jonathan Hester
Test Package : FLEET (Additional Tests: Glycol)

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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)