



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
1015
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0897924	WC0893972	WC0894037
Sample Date		Client Info		05 Apr 2024	23 Feb 2024	22 Jan 2024
Machine Age	mls	Client Info		889361	0	0
Oil Age	mls	Client Info		0	0	0
Filter Age	mls	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>90	17	16	14
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>2	0	0	1
Titanium	ppm	ASTM D5185m	>2	0	0	0
Silver	ppm	ASTM D5185m	>2	0	0	<1
Aluminum	ppm	ASTM D5185m	>20	<1	<1	2
Lead	ppm	ASTM D5185m	>40	<1	0	<1
Copper	ppm	ASTM D5185m	>330	<1	<1	<1
Tin	ppm	ASTM D5185m	>15	0	<1	<1
Vanadium	ppm	ASTM D5185m		<1	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

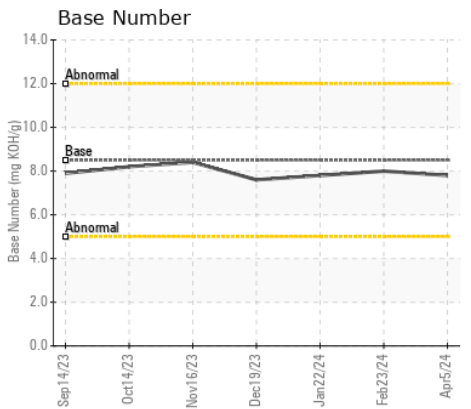
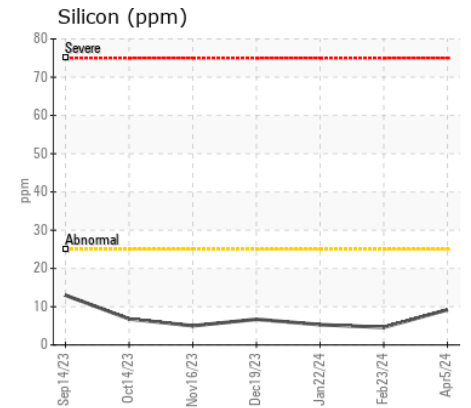
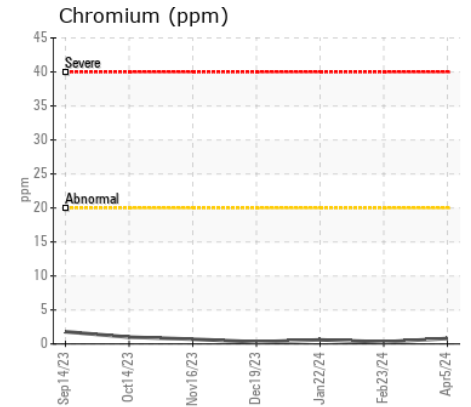
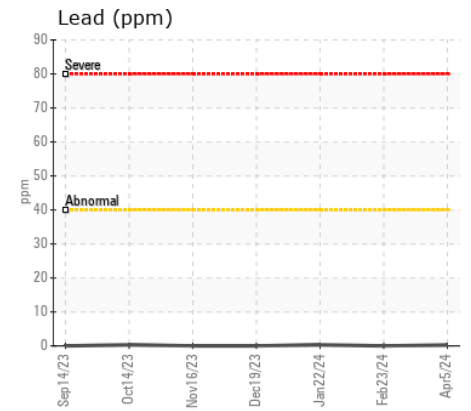
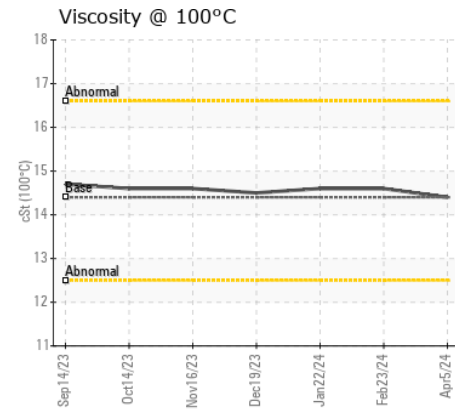
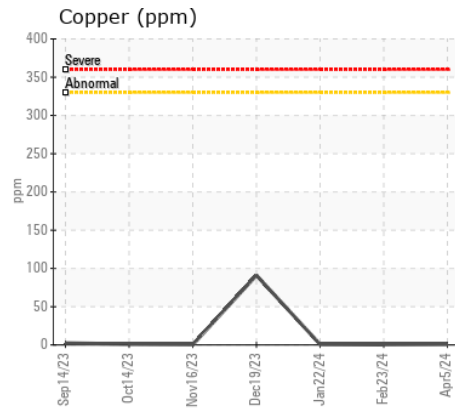
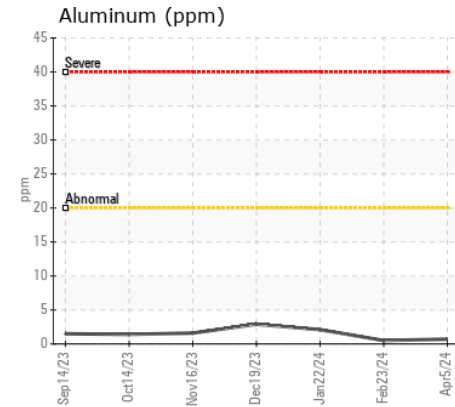
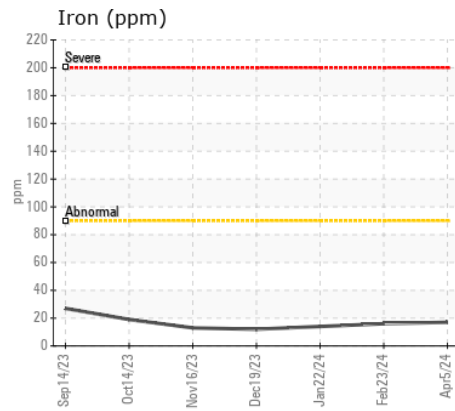
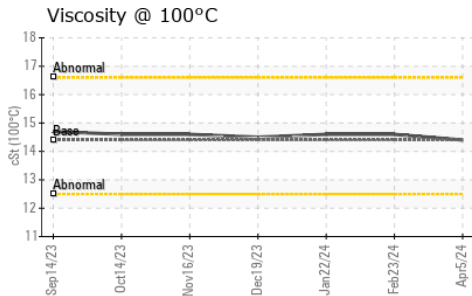
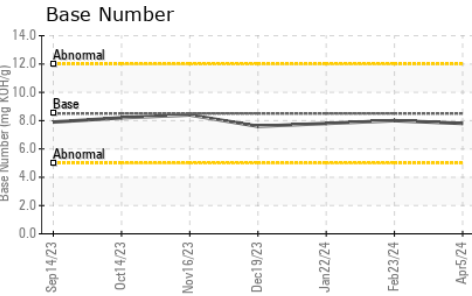
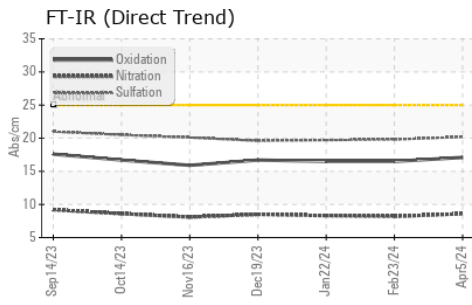
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	9	5	5
Potassium	ppm	ASTM D5185m	>20	1	<1	5
Fuel		WC Method	>3.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>6	0.5	0.5	0.5
Nitration	Abs/cm	*ASTM D7624	>20	8.6	8.2	8.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.2	19.8	19.7
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

FLUID CONDITION

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

Sodium	ppm	ASTM D5185m	>158	4	3	5
Boron	ppm	ASTM D5185m	250	<1	0	4
Barium	ppm	ASTM D5185m	10	0	0	0
Molybdenum	ppm	ASTM D5185m	100	59	63	59
Manganese	ppm	ASTM D5185m		<1	0	<1
Magnesium	ppm	ASTM D5185m	450	950	1142	966
Calcium	ppm	ASTM D5185m	3000	1065	1210	1026
Phosphorus	ppm	ASTM D5185m	1150	986	1179	1082
Zinc	ppm	ASTM D5185m	1350	1194	1414	1297
Sulfur	ppm	ASTM D5185m	4250	3233	3374	3007
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.1	16.5	16.5
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	7.8	8.0	7.8
Visc @ 100°C	cSt	ASTM D445	14.4	14.4	14.6	14.6



Certificate L2367

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

Sample No. : WC0897924

Lab Number : 06151537

Unique Number : 10981615

Test Package : MOB 1 (Additional Tests: TBN)

Received : 17 Apr 2024

Tested : 18 Apr 2024

Diagnosed : 18 Apr 2024 - Wes Davis

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)

GO DURHAM - RAPT

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