



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
3365
Component
Diesel Engine
Fluid
{not provided} (--- QTS)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		RW0004945	RW0004109	RW0003130
Sample Date		Client Info		15 Feb 2024	22 Dec 2022	21 Apr 2022
Machine Age	hrs	Client Info		1642	1368	1317
Oil Age	hrs	Client Info		274	0	0
Filter Age	hrs	Client Info		274	0	1317
Oil Changed		Client Info		Changed	N/A	Changed
Filter Changed		Client Info		Changed	N/A	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	2	13	13
Chromium	ppm	ASTM D5185m	>20	0	<1	<1
Nickel	ppm	ASTM D5185m	>4	<1	0	<1
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m	>3	0	0	<1
Aluminum	ppm	ASTM D5185m	>20	2	2	3
Lead	ppm	ASTM D5185m	>40	<1	<1	<1
Copper	ppm	ASTM D5185m	>330	4	9	11
Tin	ppm	ASTM D5185m	>15	<1	<1	<1
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

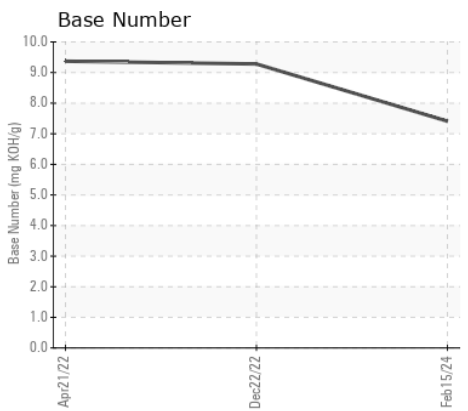
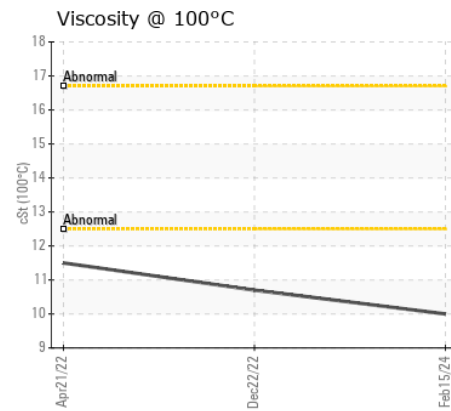
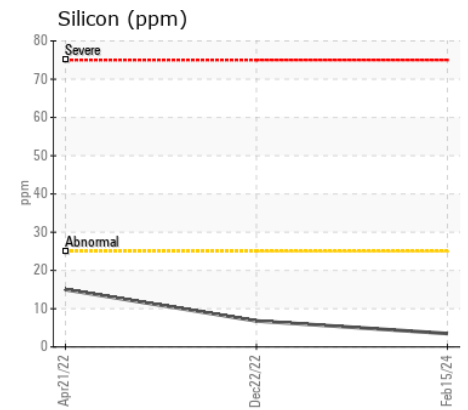
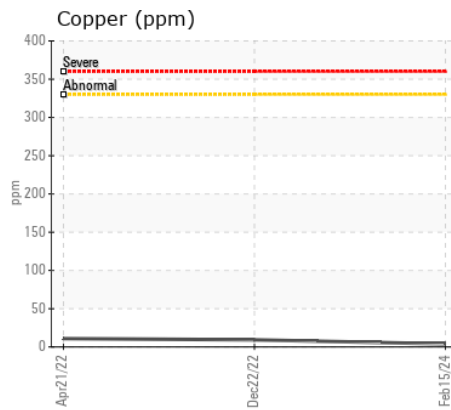
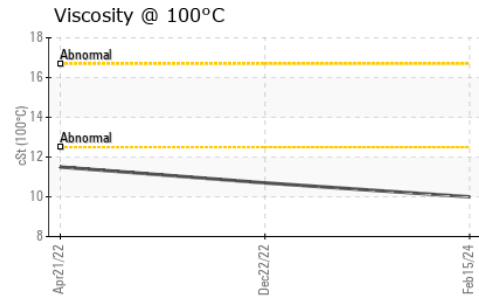
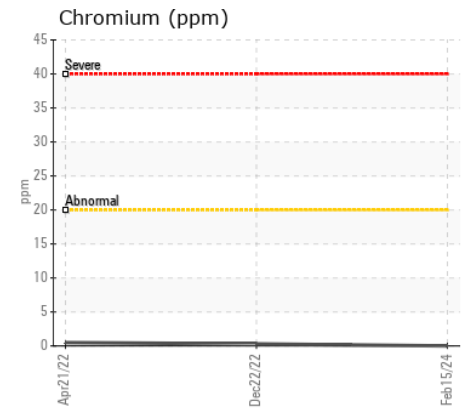
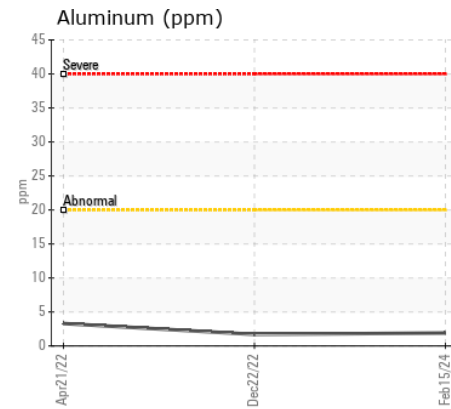
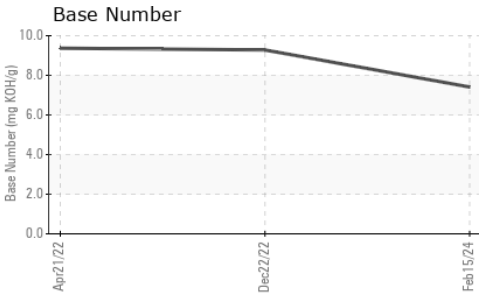
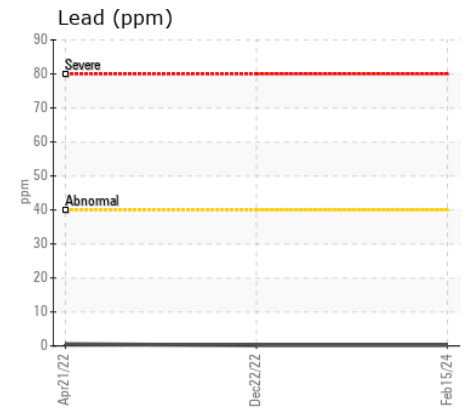
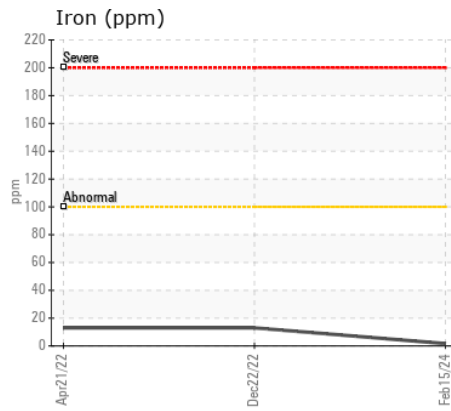
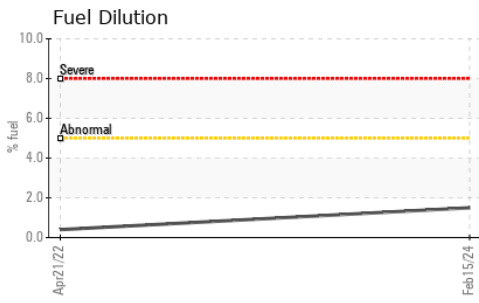
Fuel content negligible. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	4	7	15
Potassium	ppm	ASTM D5185m	>20	3	4	<1
Fuel	%	ASTM D3524	>5	1.5	<1.0	0.4
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.1	0.2	0.2
Nitration	Abs/cm	*ASTM D7624	>20	4.5	6.7	7.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	16.1	18.8	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

FLUID CONDITION

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

Sodium	ppm	ASTM D5185m		<1	0	3
Boron	ppm	ASTM D5185m		77	3	10
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		61	65	56
Manganese	ppm	ASTM D5185m		<1	<1	1
Magnesium	ppm	ASTM D5185m		478	602	889
Calcium	ppm	ASTM D5185m		896	1222	1373
Phosphorus	ppm	ASTM D5185m		569	817	1003
Zinc	ppm	ASTM D5185m		714	1011	1258
Sulfur	ppm	ASTM D5185m		2094	2454	2904
Oxidation	Abs/.1mm	*ASTM D7414	>25	13.4	18.6	20.7
Base Number (BN)	mg KOH/g	ASTM D2896		7.41	9.28	9.37
Visc @ 100°C	cSt	ASTM D445		10.0	10.7	11.5



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : RW0004945 **Received** : 23 Feb 2024
Lab Number : 06098645 **Tested** : 27 Feb 2024
Unique Number : 10896875 **Diagnosed** : 27 Feb 2024 - Sean Felton
Test Package : MOB 2 (Additional Tests: FuelDilution, PercentFuel)

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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)