



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	SEVERE
FLUID CONDITION	SEVERE

Machine Id
1676
 Component
Diesel Engine
 Fluid
DIESEL ENGINE OIL SAE 15W40 (--- QTS)

RECOMMENDATION

We advise that you check the fuel injection system. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition. Please specify the component make and model with your next sample.

WEAR

All component wear rates are normal.

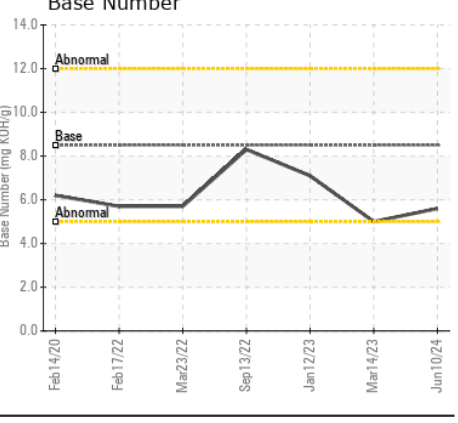
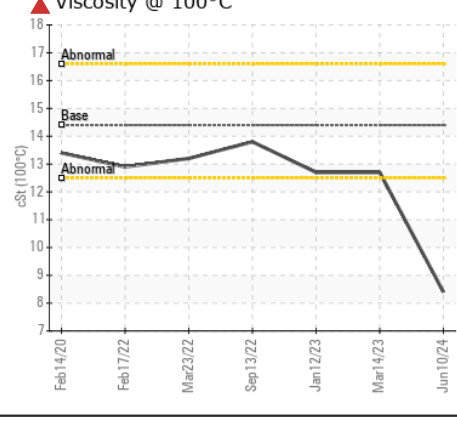
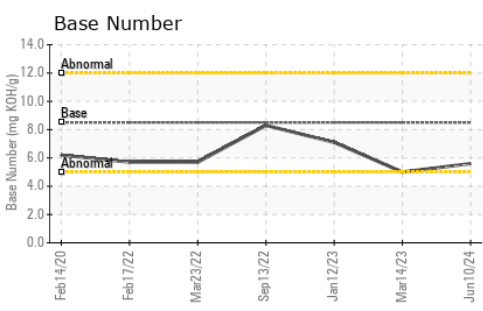
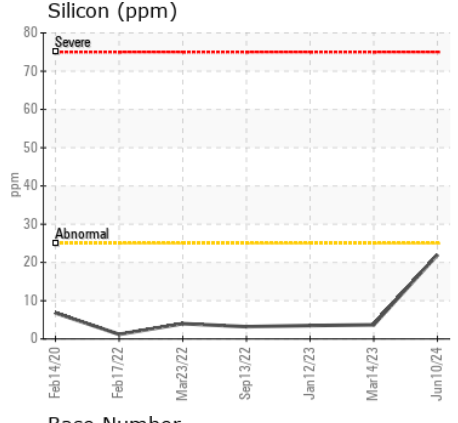
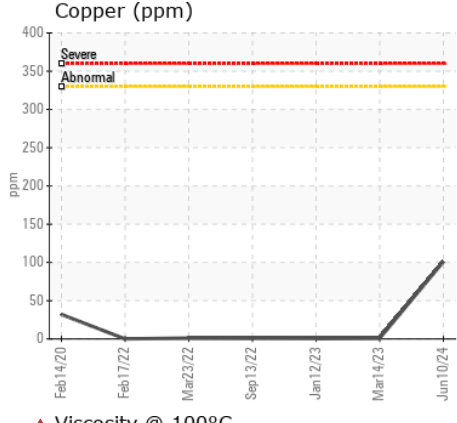
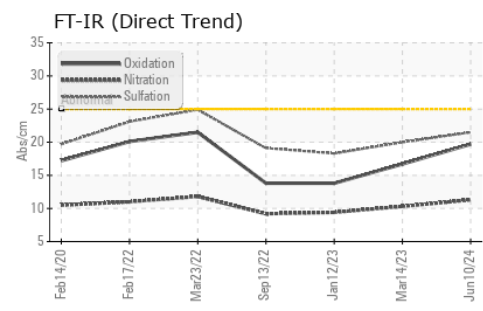
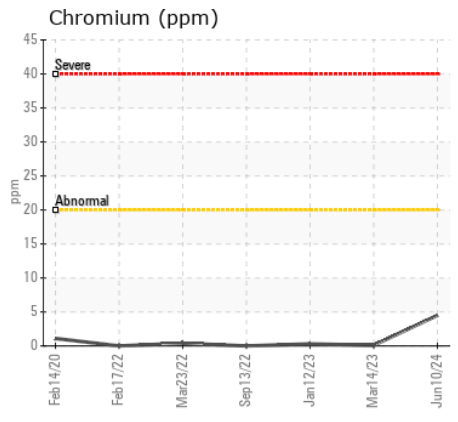
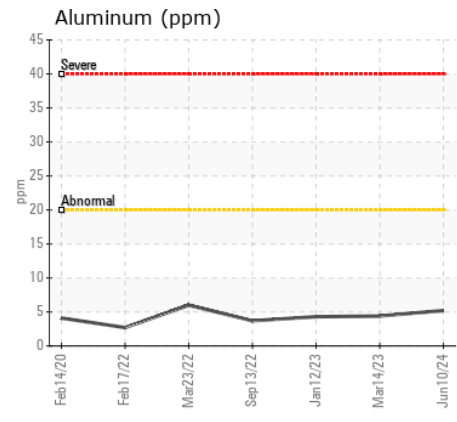
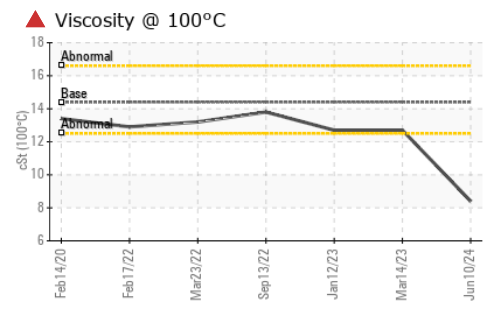
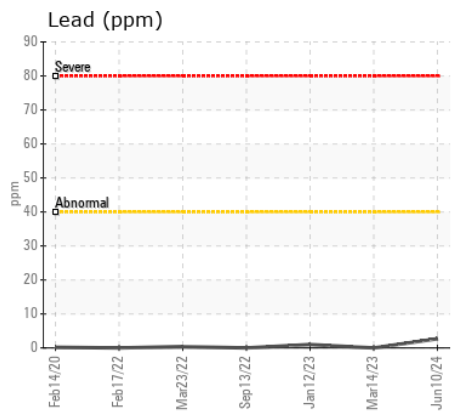
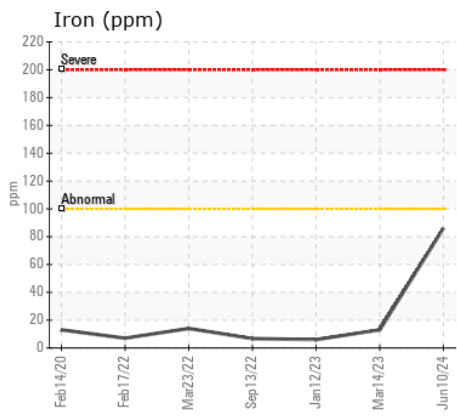
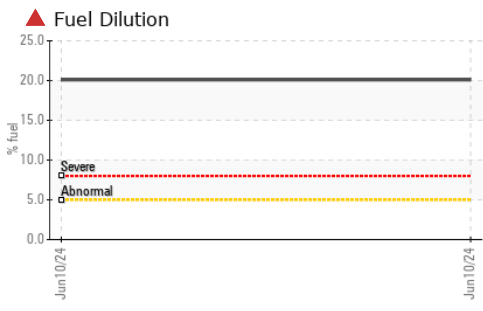
CONTAMINATION

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

FLUID CONDITION

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

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0948930	WC0792935	WC0772933
Sample Date		Client Info		10 Jun 2024	14 Mar 2023	12 Jan 2023
Machine Age	mls	Client Info		214273	190733	184222
Oil Age	mls	Client Info		0	0	0
Filter Age	mls	Client Info		0	0	0
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Filter Changed		Client Info		Not Changd	Changed	Not Changd
Sample Status				SEVERE	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>100	86	13	6
Chromium	ppm	ASTM D5185m	>20	4	<1	<1
Nickel	ppm	ASTM D5185m	>4	0	<1	<1
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>3	0	0	<1
Aluminum	ppm	ASTM D5185m	>20	5	4	4
Lead	ppm	ASTM D5185m	>40	3	0	1
Copper	ppm	ASTM D5185m	>330	101	1	<1
Tin	ppm	ASTM D5185m	>15	<1	<1	<1
Vanadium	ppm	ASTM D5185m		0	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>25	22	4	4
Potassium	ppm	ASTM D5185m	>20	3	7	2
Fuel	%	ASTM D3524	>5	▲ 20.1	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.7	0.5	0.3
Nitration	Abs/cm	*ASTM D7624	>20	11.3	10.3	9.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.5	20.0	18.3
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	>158	4	0	2
Boron	ppm	ASTM D5185m	250	45	24	39
Barium	ppm	ASTM D5185m	10	2	0	1
Molybdenum	ppm	ASTM D5185m	100	72	88	74
Manganese	ppm	ASTM D5185m		4	<1	<1
Magnesium	ppm	ASTM D5185m	450	269	60	58
Calcium	ppm	ASTM D5185m	3000	1464	2198	1913
Phosphorus	ppm	ASTM D5185m	1150	743	958	890
Zinc	ppm	ASTM D5185m	1350	860	1163	1113
Sulfur	ppm	ASTM D5185m	4250	2733	3477	3841
Oxidation	Abs/.1mm	*ASTM D7414	>25	19.7	16.7	13.8
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	5.6	5.0	7.1
Visc @ 100°C	cSt	ASTM D445	14.4	▲ 8.4	12.7	12.7



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0948930 **Received** : 26 Jun 2024
Lab Number : 06220873 **Tested** : 28 Jun 2024
Unique Number : 11099070 **Diagnosed** : 28 Jun 2024 - Wes Davis
Test Package : MOB 1 (Additional Tests: FuelDilution, PercentFuel, TBN)

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 F: x:

Certificate L2367
 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)