OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	ABNORMAL

Machine Id
255465
Component
Diesel Engine
Fluid
EXXON 15W40 (--- QTS)

RECOMMENDATION

The oil change at the time of sampling has been noted. 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

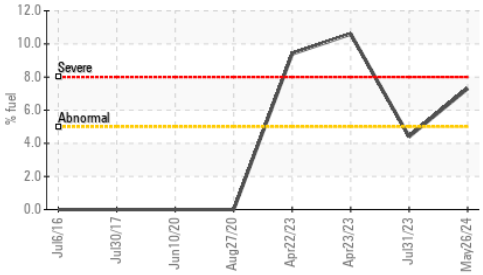
There is a moderate amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

FLUID CONDITION

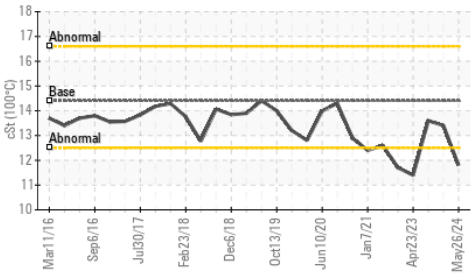
The BN result indicates that there is suitable alkalinity remaining in the oil. Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0891605	WC0861093	WC0840881
Sample Date		Client Info		26 May 2024	17 Oct 2023	31 Jul 2023
Machine Age	mls	Client Info		411551	0	401573
Oil Age	mls	Client Info		0	0	0
Filter Age	mls	Client Info		0	0	0
Oil Changed		Client Info		Changed	N/A	Changed
Filter Changed		Client Info		Changed	N/A	Changed
Sample Status				ABNORMAL	NORMAL	MARGINAL
Iron	ppm	ASTM D5185m	>100	7	6	22
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>4	0	<1	0
Titanium	ppm	ASTM D5185m		<1	0	<1
Silver	ppm	ASTM D5185m	>3	<1	0	0
Aluminum	ppm	ASTM D5185m	>20	1	2	<1
Lead	ppm	ASTM D5185m	>40	0	0	0
Copper	ppm	ASTM D5185m	>330	<1	0	<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
Silicon	ppm	ASTM D5185m	>25	3	4	7
Potassium	ppm	ASTM D5185m	>20	2	2	<1
Fuel	%	ASTM D3524	>5	▲ 7.3	<1.0	▲ 4.4
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.2	0.3	0.5
Nitration	Abs/cm	*ASTM D7624	>20	10.6	10.2	12.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.2	21.0	23.5
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		<1	2	3
Boron	ppm	ASTM D5185m		0	2	0
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		59	57	64
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		976	931	1039
Calcium	ppm	ASTM D5185m		1060	1036	1092
Phosphorus	ppm	ASTM D5185m		1029	1097	1040
Zinc	ppm	ASTM D5185m		1212	1242	1255
Sulfur	ppm	ASTM D5185m		3567	3137	3486
Oxidation	Abs/.1mm	*ASTM D7414	>25	18.6	19.3	23.7
Base Number (BN)	mg KOH/g	ASTM D2896		9.0	8.6	7.0
Visc @ 100°C	cSt	ASTM D445	14.4	▲ 11.8	13.4	13.6

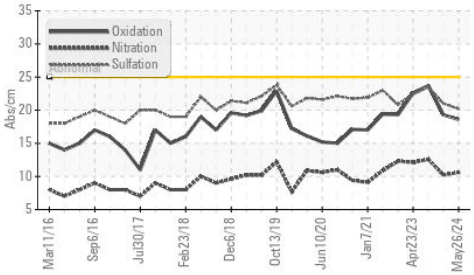
Fuel Dilution



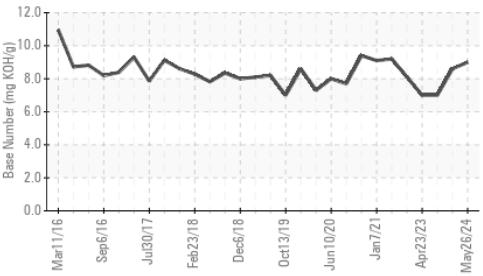
Viscosity @ 100°C



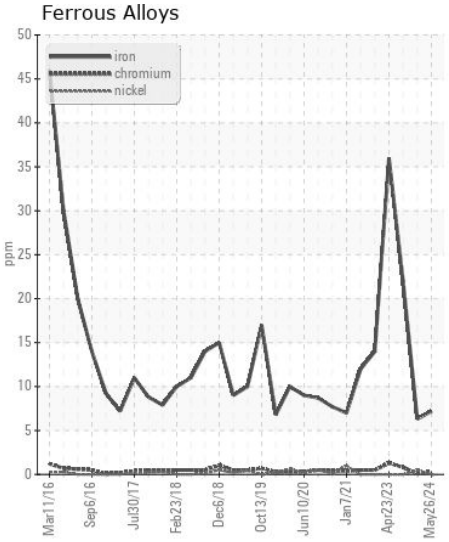
FT-IR (Direct Trend)



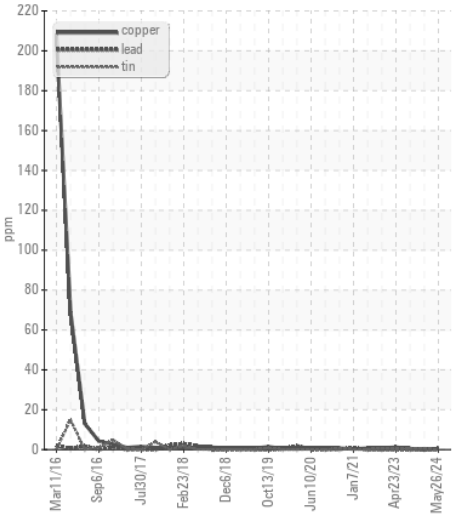
Base Number



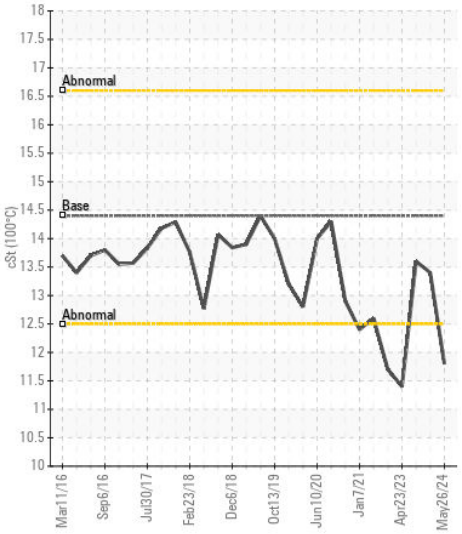
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



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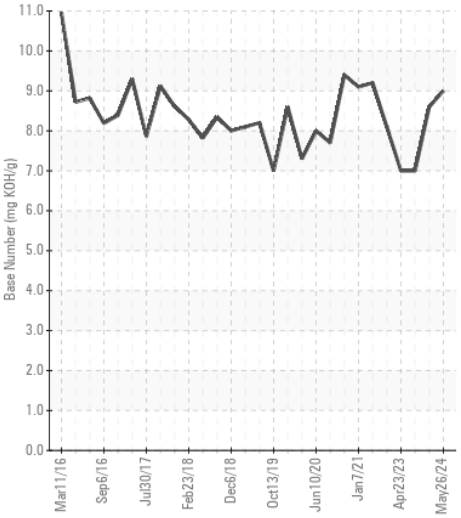

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0891605
Lab Number : 06191530
Unique Number : 11048282
Test Package : FLEET (Additional Tests: FuelDilution, PercentFuel)

Received : 24 May 2024
Tested : 30 May 2024
Diagnosed : 30 May 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)

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