CONST

WEAR CHECK

OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION

Machine Id
F17
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 15W40 (--- GAL)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

WEAR

The aluminum level is abnormal. All other component wear rates are normal.

CONTAMINATION

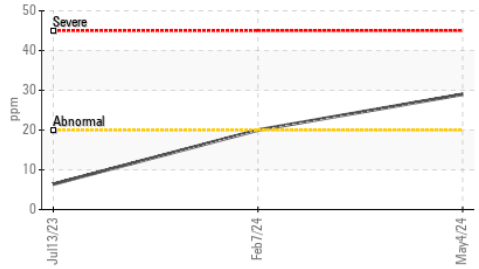
Tests indicate that there is no fuel present in the oil. There is no indication of any contamination in the oil.

FLUID CONDITION

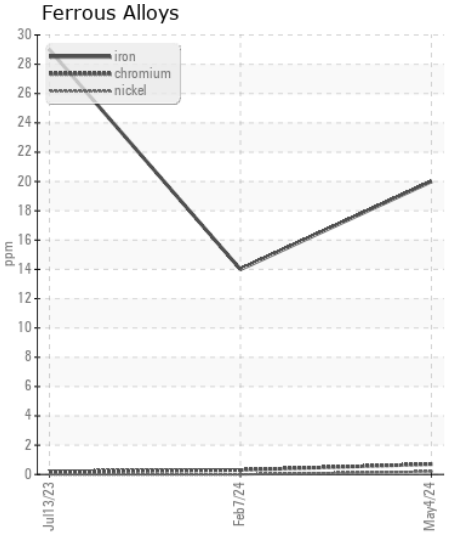
The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0874314	WC0874282	WC0758917
Sample Date		Client Info		04 May 2024	07 Feb 2024	13 Jul 2023
Machine Age	hrs	Client Info		0	13976	220669
Oil Age	hrs	Client Info		0	546	644
Filter Age	hrs	Client Info		0	546	0
Oil Changed		Client Info		Changed	Changed	N/A
Filter Changed		Client Info		Changed	N/A	N/A
Sample Status				ABNORMAL	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>120	20	14	29
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>5	<1	0	0
Titanium	ppm	ASTM D5185m	>2	<1	<1	<1
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>20	▲ 29	20	6
Lead	ppm	ASTM D5185m	>40	<1	0	<1
Copper	ppm	ASTM D5185m	>330	6	3	3
Tin	ppm	ASTM D5185m	>15	<1	<1	<1
Vanadium	ppm	ASTM D5185m		<1	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>25	9	4	8
Potassium	ppm	ASTM D5185m	>20	17	14	2
Fuel	%	ASTM D3524	>3.0	0.3	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol	%	*ASTM D2982		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>4	0.4	0.4	0.7
Nitration	Abs/cm	*ASTM D7624	>20	8.8	9.1	10.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.5	19.6	23.8
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	2	4	8
Boron	ppm	ASTM D5185m	250	12	8	20
Barium	ppm	ASTM D5185m	10	2	0	0
Molybdenum	ppm	ASTM D5185m	100	103	63	85
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m	450	828	892	154
Calcium	ppm	ASTM D5185m	3000	1186	1164	2170
Phosphorus	ppm	ASTM D5185m	1150	1031	1008	1008
Zinc	ppm	ASTM D5185m	1350	1144	1218	1246
Sulfur	ppm	ASTM D5185m	4250	3108	3078	4017
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.7	14.6	18.0
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	6.5	6.7	5.0
Visc @ 100°C	cSt	ASTM D445	14.4	● 11.6	12.6	13.4

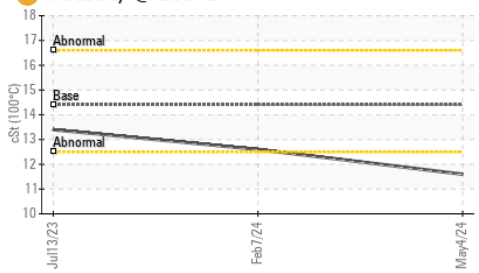
Aluminum (ppm)



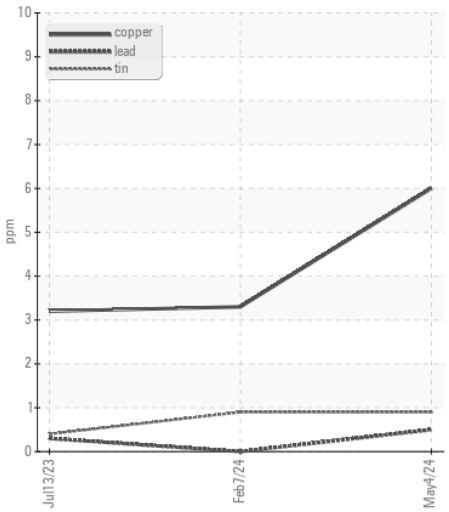
Ferrous Alloys



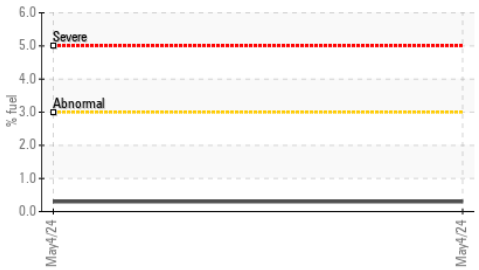
Viscosity @ 100°C



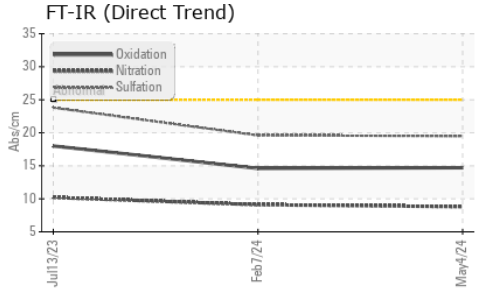
Non-ferrous Metals



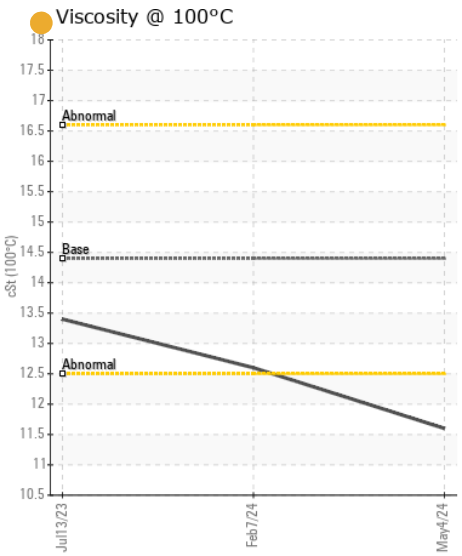
Fuel Dilution



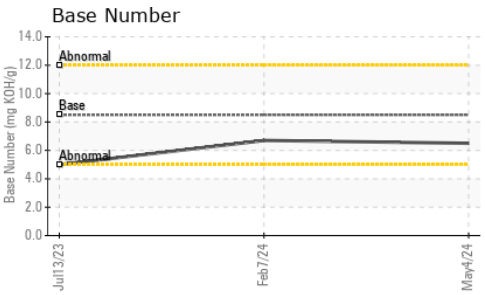
FT-IR (Direct Trend)



Viscosity @ 100°C



Base Number



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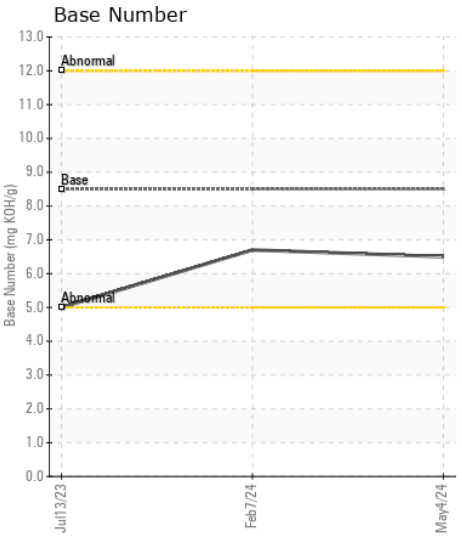

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0874314
Lab Number : 06176804
Unique Number : 11022857
Test Package : CONST (Additional Tests: FuelDilution, Glycol, PercentFuel, TBN)

Received : 13 May 2024
Tested : 15 May 2024
Diagnosed : 15 May 2024 - Sean Felton

Apple Valley Waste - EHT Location
6626 Delilah Road
Egg Harbor Township, NJ
US 08234
Contact: Service Manager

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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