



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
L4522
 Component
Diesel Engine
 Fluid
DIESEL ENGINE OIL SAE 15W40 (--- GAL)

RECOMMENDATION

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		WC0874313	WC0758919	WC0758901
Sample Date		Client Info		03 May 2024	18 Jul 2023	16 Jan 2023
Machine Age	mls	Client Info		73037	6684	6122
Oil Age	mls	Client Info		0	553	377
Filter Age	mls	Client Info		0	553	377
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>80	29	20	18
Chromium	ppm	ASTM D5185m	>5	2	<1	<1
Nickel	ppm	ASTM D5185m	>2	<1	0	0
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m	>3	<1	0	<1
Aluminum	ppm	ASTM D5185m	>30	6	4	4
Lead	ppm	ASTM D5185m	>30	<1	<1	1
Copper	ppm	ASTM D5185m	>150	5	4	2
Tin	ppm	ASTM D5185m	>5	<1	<1	<1
Vanadium	ppm	ASTM D5185m		<1	<1	0
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.

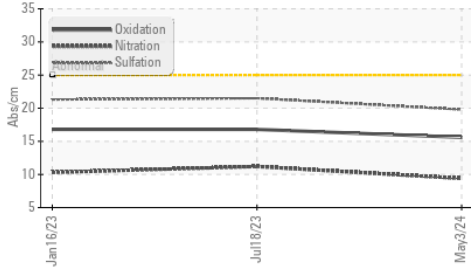
Silicon	ppm	ASTM D5185m	>20	15	9	8
Potassium	ppm	ASTM D5185m	>20	7	4	3
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.6	0.8	0.5
Nitration	Abs/cm	*ASTM D7624	>20	9.4	11.2	10.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.8	21.5	21.3
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

FLUID CONDITION

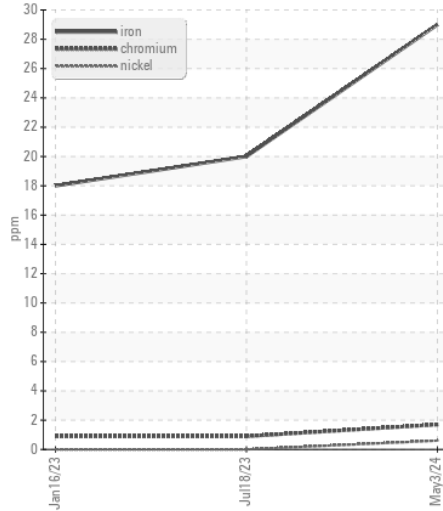
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>158	8	6	1
Boron	ppm	ASTM D5185m	250	11	27	21
Barium	ppm	ASTM D5185m	10	2	0	0
Molybdenum	ppm	ASTM D5185m	100	101	82	71
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m	450	1024	110	130
Calcium	ppm	ASTM D5185m	3000	1752	2130	2040
Phosphorus	ppm	ASTM D5185m	1150	1439	927	902
Zinc	ppm	ASTM D5185m	1350	1626	1194	1173
Sulfur	ppm	ASTM D5185m	4250	4586	4153	4008
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.6	16.8	16.8
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	7.4	5.6	5.7
Visc @ 100°C	cSt	ASTM D445	14.4	12.9	12.5	13.3

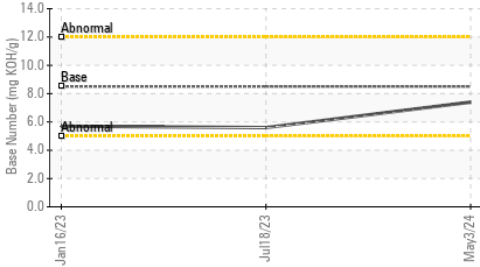
FT-IR (Direct Trend)



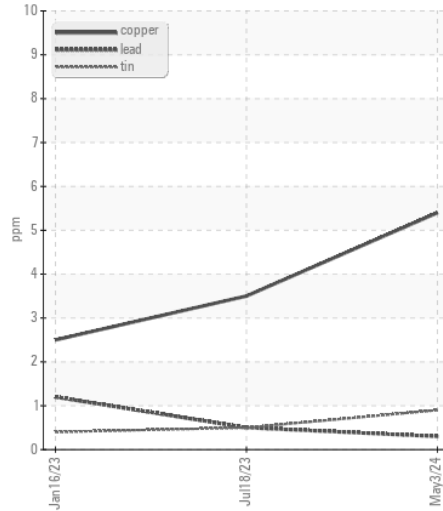
Ferrous Alloys



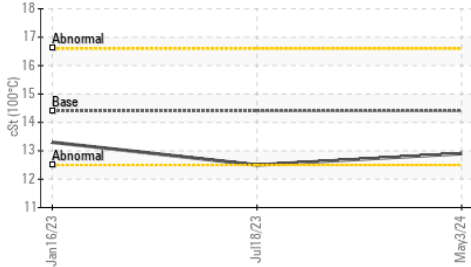
Base Number



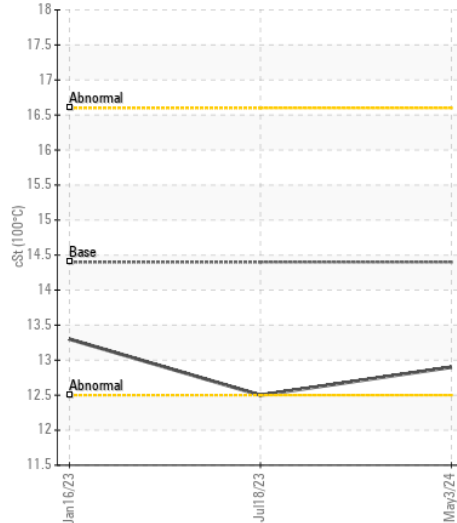
Non-ferrous Metals



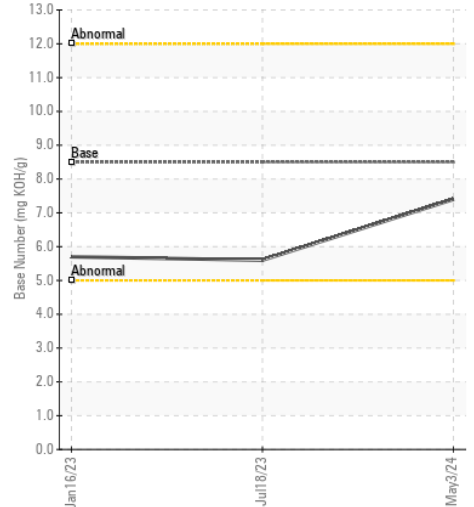
Viscosity @ 100°C



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : WC0874313 Received : 13 May 2024
 Lab Number : 06176807 Tested : 14 May 2024
 Unique Number : 11022860 Diagnosed : 14 May 2024 - Wes Davis
 Test Package : CONST (Additional Tests: TBN)

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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F: