



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION



Machine Id
G90
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 15W40 (--- GAL)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0874320	WC0874310	WC0874285
Sample Date		Client Info		10 May 2024	10 Apr 2024	30 Jan 2024
Machine Age	mls	Client Info		119539	10608	0
Oil Age	mls	Client Info		0	0	617
Filter Age	mls	Client Info		0	0	617
Oil Changed		Client Info		Not Chngd	Changed	Changed
Filter Changed		Client Info		Not Chngd	Changed	Changed
Sample Status				ATTENTION	ATTENTION	MARGINAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>120	4	5	8
Chromium	ppm	ASTM D5185m	>20	<1	0	<1
Nickel	ppm	ASTM D5185m	>5	<1	0	<1
Titanium	ppm	ASTM D5185m	>2	<1	0	<1
Silver	ppm	ASTM D5185m	>2	1	0	0
Aluminum	ppm	ASTM D5185m	>20	2	2	2
Lead	ppm	ASTM D5185m	>40	<1	0	0
Copper	ppm	ASTM D5185m	>330	1	0	<1
Tin	ppm	ASTM D5185m	>15	<1	<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

CONTAMINATION

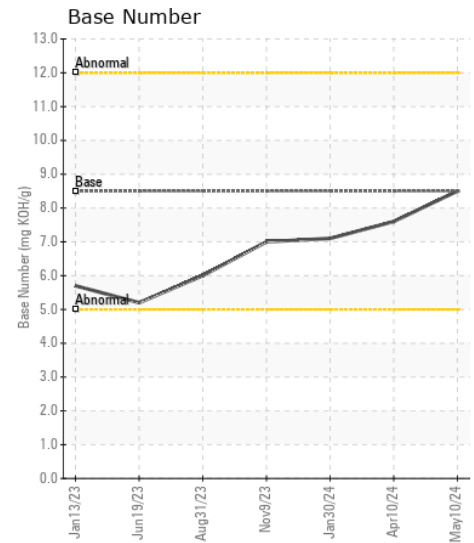
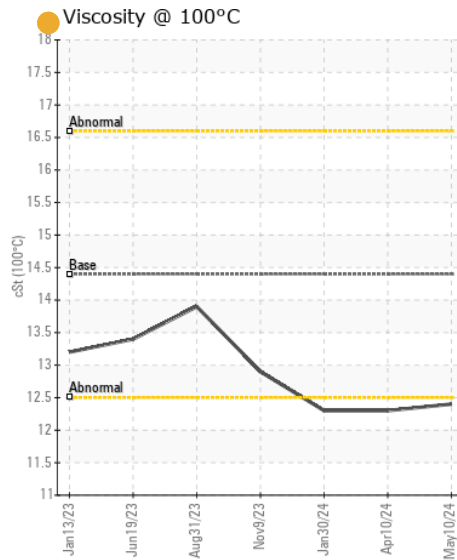
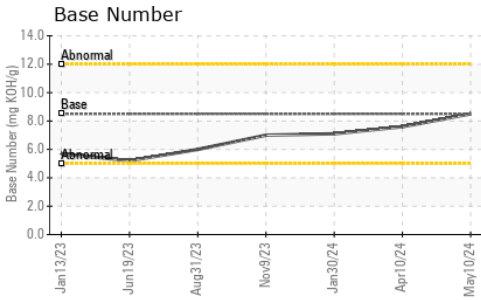
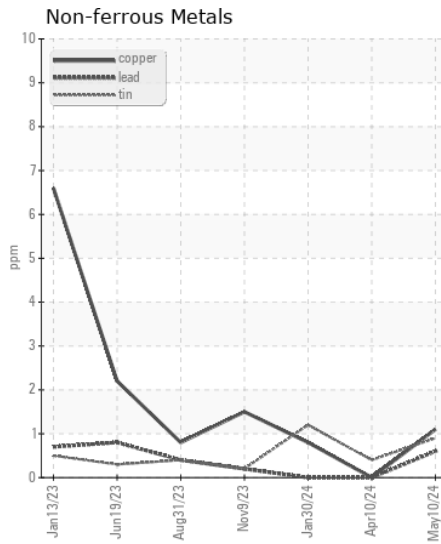
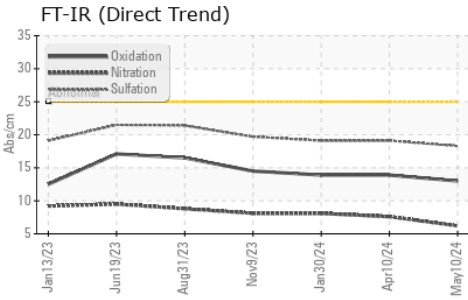
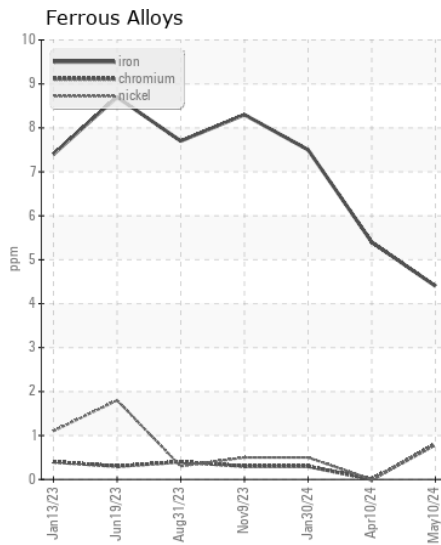
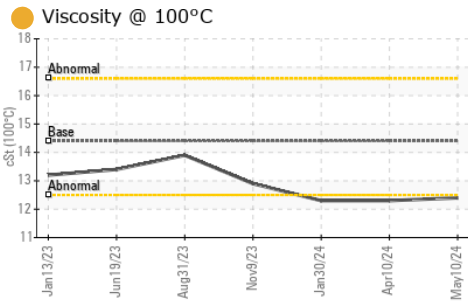
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	5	7	4
Potassium	ppm	ASTM D5185m	>20	3	1	1
Fuel		WC Method	>3.0	<1.0	<1.0	0.3
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>4	0.3	0.6	0.6
Nitration	Abs/cm	*ASTM D7624	>20	6.2	7.6	8.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.3	19.1	19.1
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 oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Sodium	ppm	ASTM D5185m	>158	3	3	4
Boron	ppm	ASTM D5185m	250	12	10	9
Barium	ppm	ASTM D5185m	10	<1	0	0
Molybdenum	ppm	ASTM D5185m	100	66	67	62
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m	450	857	871	874
Calcium	ppm	ASTM D5185m	3000	1141	1202	1129
Phosphorus	ppm	ASTM D5185m	1150	974	996	956
Zinc	ppm	ASTM D5185m	1350	1144	1217	1181
Sulfur	ppm	ASTM D5185m	4250	3254	3691	2842
Oxidation	Abs/.1mm	*ASTM D7414	>25	13.0	13.9	13.9
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	8.5	7.6	7.1
Visc @ 100°C	cSt	ASTM D445	14.4	12.4	12.3	12.3



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0874320 **Received** : 28 May 2024
Lab Number : 06192023 **Tested** : 29 May 2024
Unique Number : 11048775 **Diagnosed** : 30 May 2024 - Sean Felton
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)

T:
F: