



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION

Area
[PMOAS3340285]
 Machine Id
NL56FG04 148905-0707 - FIRE STATION 3
 Component
Diesel Engine
 Fluid
DIESEL ENGINE OIL SAE 5W30 (--- QTS)

RECOMMENDATION

No corrective action is recommended at this time. 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		DC0035249	DC0027720	DC0020398
Sample Date		Client Info		03 Apr 2024	03 Apr 2023	19 Apr 2022
Machine Age	hrs	Client Info		216	0	176
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	N/A	Changed
Filter Changed		Client Info		Changed	N/A	N/A
Sample Status				ATTENTION	ATTENTION	ATTENTION

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	4	5	6
Chromium	ppm	ASTM D5185m	>20	0	1	0
Nickel	ppm	ASTM D5185m	>4	0	<1	<1
Titanium	ppm	ASTM D5185m		0	<1	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	<1	<1	1
Lead	ppm	ASTM D5185m	>40	<1	<1	2
Copper	ppm	ASTM D5185m	>330	0	1	<1
Tin	ppm	ASTM D5185m	>15	0	1	1
Vanadium	ppm	ASTM D5185m		<1	1	0
White Metal	scalar	*Visual	NONE	NONE	LIGHT	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

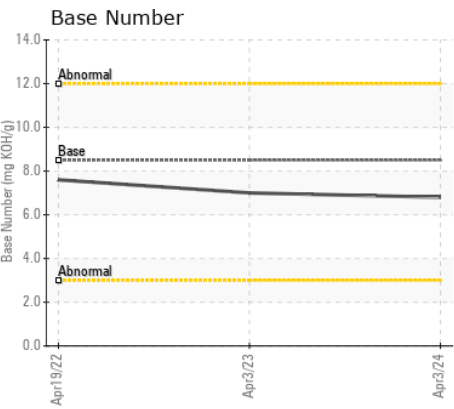
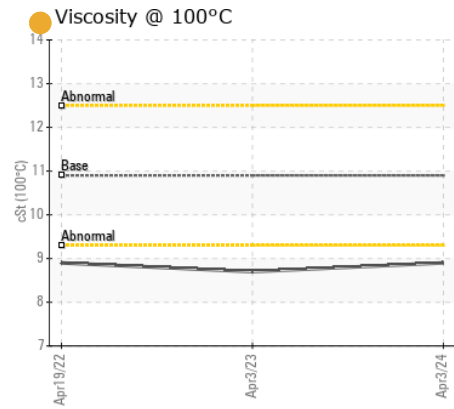
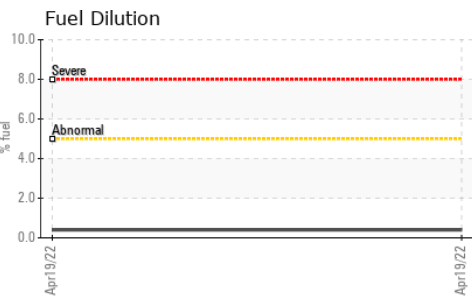
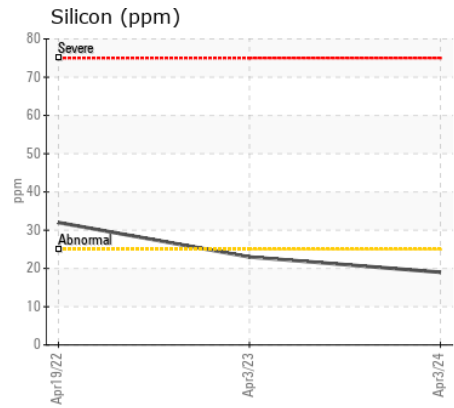
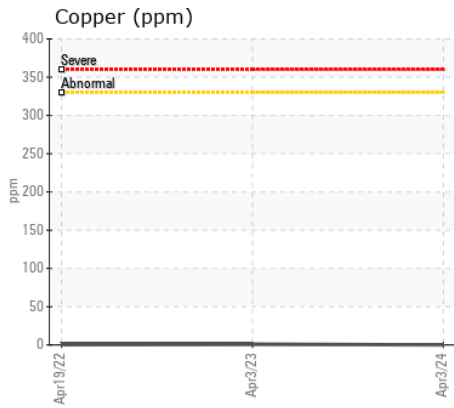
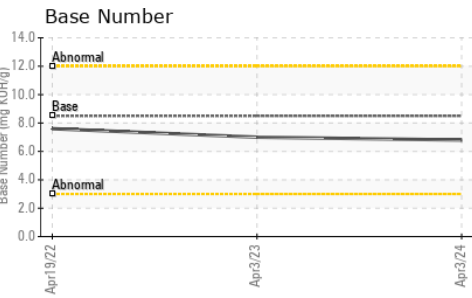
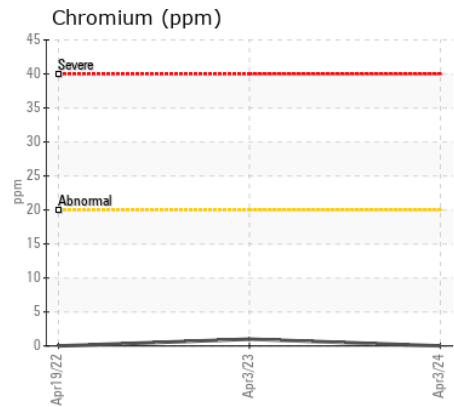
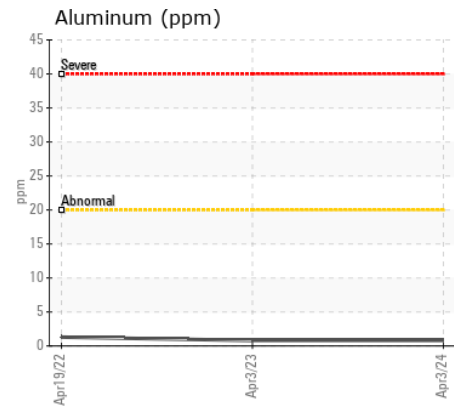
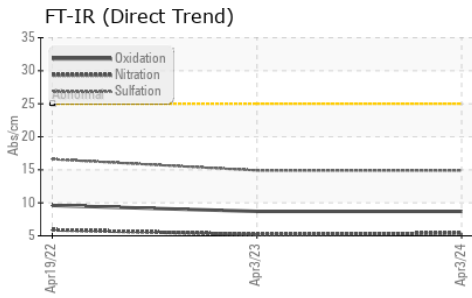
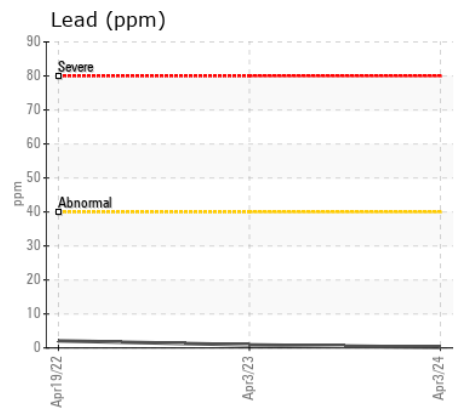
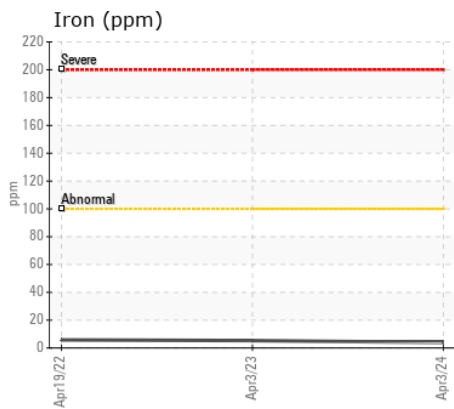
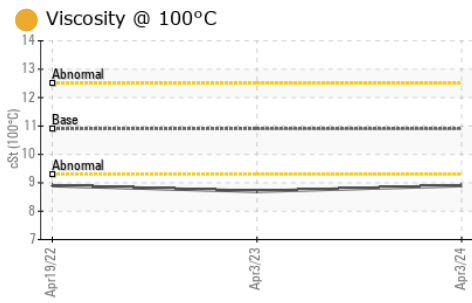
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	19	23	32
Potassium	ppm	ASTM D5185m	>20	<1	2	0
Fuel	%	ASTM D3524	>5	<1.0	<1.0	0.4
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0	0	0
Nitration	Abs/cm	*ASTM D7624	>20	5.4	5.2	5.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	14.9	14.9	16.6
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		<1	2	2
Boron	ppm	ASTM D5185m	250	126	123	112
Barium	ppm	ASTM D5185m	10	0	0	0
Molybdenum	ppm	ASTM D5185m	100	45	37	36
Manganese	ppm	ASTM D5185m		0	2	<1
Magnesium	ppm	ASTM D5185m	450	689	689	699
Calcium	ppm	ASTM D5185m	3000	837	822	892
Phosphorus	ppm	ASTM D5185m	1150	652	597	641
Zinc	ppm	ASTM D5185m	1350	764	710	721
Sulfur	ppm	ASTM D5185m	4250	2926	2656	2186
Oxidation	Abs/.1mm	*ASTM D7414	>25	8.7	8.7	9.6
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	6.8	7.0	7.6
Visc @ 100°C	cSt	ASTM D445	10.9	8.9	8.7	8.9



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : DC0035249 **Received** : 23 Apr 2024
Lab Number : 06157478 **Tested** : 24 Apr 2024
Unique Number : 10992901 **Diagnosed** : 25 Apr 2024 - Jonathan Hester
Test Package : MOB 1 (Additional Tests: FuelDilution, TBN)

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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)