

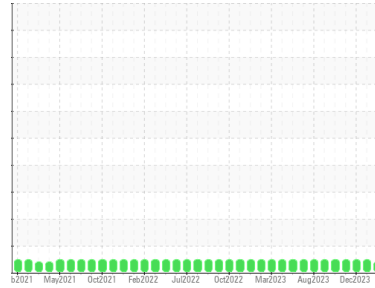


OIL ANALYSIS REPORT

Sample Rating Trend

ADDITIVES

Area
Tri State
 Machine Id
[Tri State] Oil - Port Genset
 Component
Port Genset
 Fluid
DIESEL ENGINE OIL SAE 15W40 (5 GAL)



DIAGNOSIS

▲ Recommendation

Resample at the next service interval to monitor. (Customer Sample Comment: Top Up Amount: 2 GAL)

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

▲ 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.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0874789	WC0845751	WC0769584
Sample Date	Client Info		20 Mar 2024	26 Jan 2024	22 Dec 2023
Machine Age	hrs	Client Info	13620	12979	12598
Oil Age	hrs	Client Info	233	317	257
Oil Changed	Client Info		Changed	Changed	Changed
Sample Status			ABNORMAL	NORMAL	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>4.0	<1.0	<1.0	<1.0
Glycol	WC Method		NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	>50	8	8	5
Chromium	ppm	ASTM D5185m	>4	<1	<1	<1
Nickel	ppm	ASTM D5185m	>2	<1	0	0
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m	>5	<1	0	0
Aluminum	ppm	ASTM D5185m	>12	2	1	1
Lead	ppm	ASTM D5185m	>17	<1	0	0
Copper	ppm	ASTM D5185m	>70	1	2	1
Tin	ppm	ASTM D5185m	>15	<1	0	<1
Vanadium	ppm	ASTM D5185m		<1	0	0
Cadmium	ppm	ASTM D5185m		<1	0	0

ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m	250	9	8	11
Barium	ppm	ASTM D5185m	10	0	0	0
Molybdenum	ppm	ASTM D5185m	100	66	64	61
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m	450	▲ 1447	1515	1437
Calcium	ppm	ASTM D5185m	3000	1175	1156	1080
Phosphorus	ppm	ASTM D5185m	1150	1121	1116	1065
Zinc	ppm	ASTM D5185m	1350	1290	1347	1288
Sulfur	ppm	ASTM D5185m	4250	3568	3512	3398

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>25	5	5	3
Sodium	ppm	ASTM D5185m	>158	<1	1	2
Potassium	ppm	ASTM D5185m	>20	2	0	<1
Water	%	ASTM D6304	>0.1	NEG	NEG	NEG

INFRA-RED

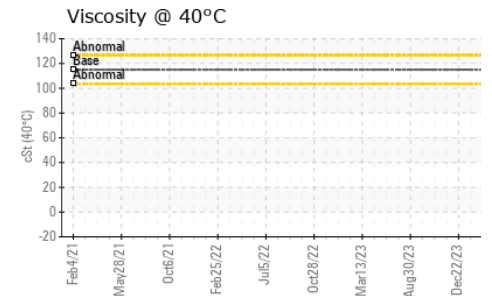
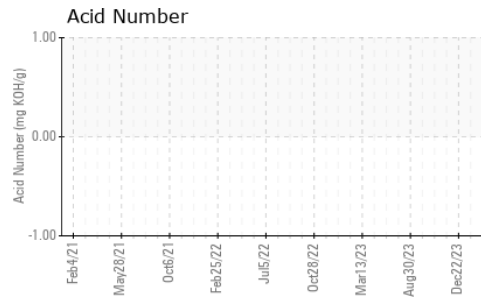
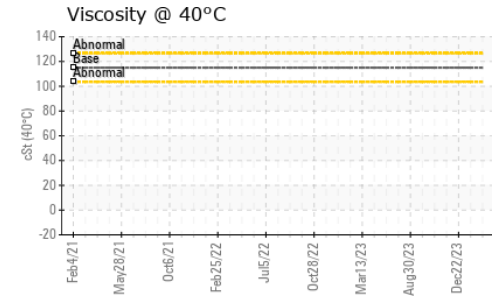
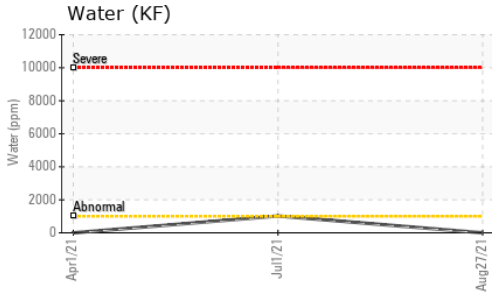
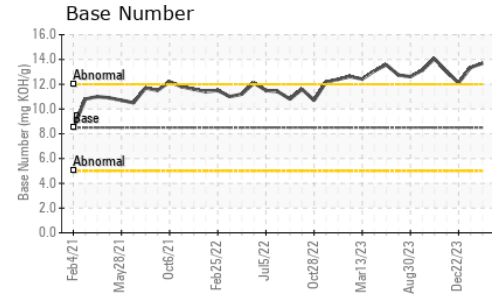
	method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844		0.1	0.8	0.1
Nitration	Abs/cm	*ASTM D7624	>20	7.1	8.4	6.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.4	21.3	19.3

FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.9	16.8	15.7
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	13.70	13.35	12.10



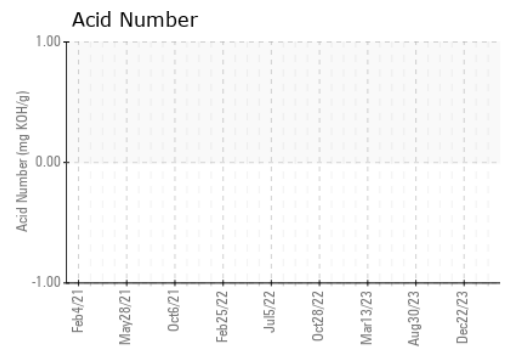
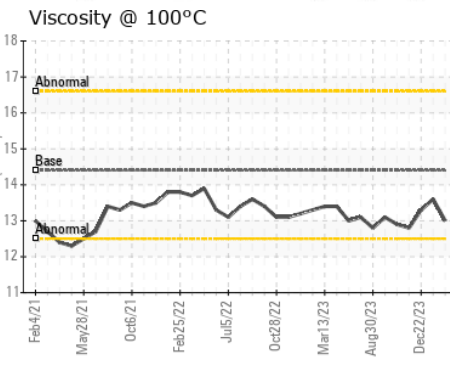
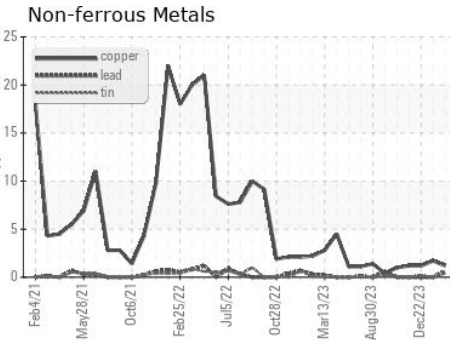
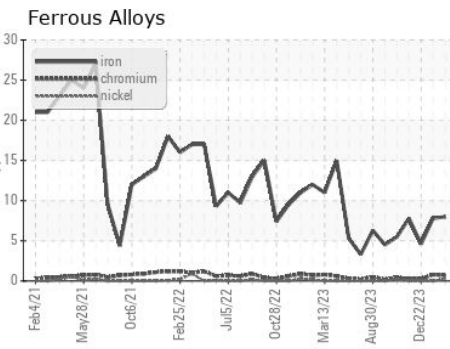
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	14.4	13.0	13.6

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0874789 **Received** : 27 Mar 2024
Lab Number : **06130841** **Tested** : 01 Apr 2024
Unique Number : 10950306 **Diagnosed** : 01 Apr 2024 - Jonathan Hester
Test Package : IND 2 (Additional Tests: KF, KV40, TAN Man)

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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)