WEAR CONTAMINATION FLUID CONDITION

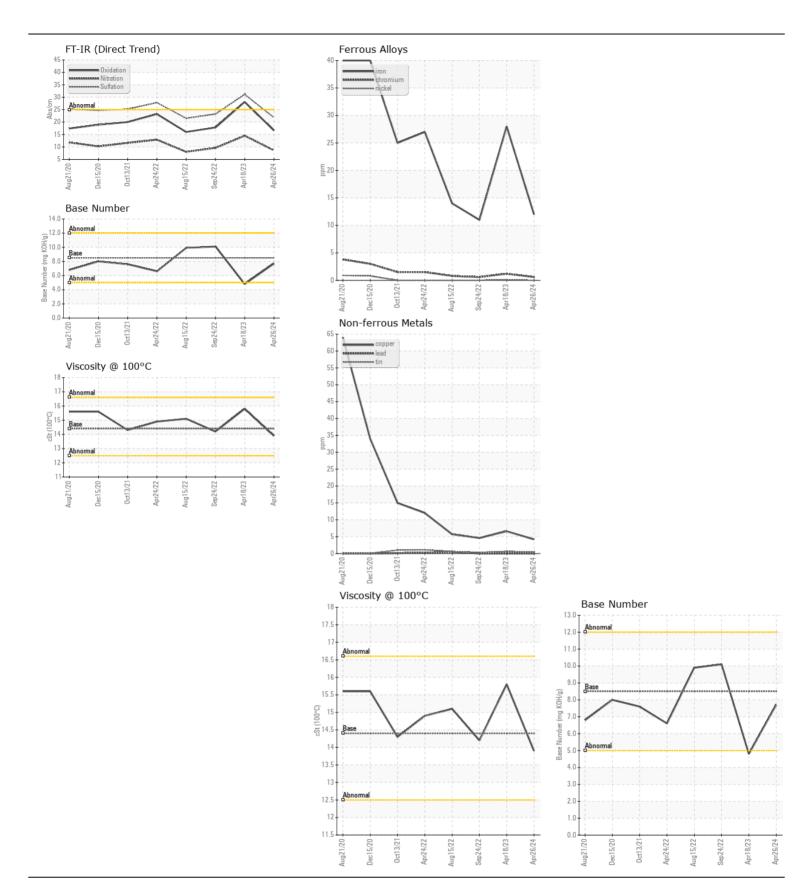
NORMAL NORMAL NORMAL

Machine Id

29364

Component Diesel Engine

DIESEL ENGINE OIL SAE 15W40 (QTS)							
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor. Please specify the component make and model with your next sample. Please specify the brand, type, and viscosity of the oil on your next sample.	Sample Number		Client Info		WC0904503	WC0797899	WC0738709
	Sample Date		Client Info		26 Apr 2024	18 Apr 2023	24 Sep 2022
	Machine Age	mls	Client Info		442186	393236	327747
	Oil Age	mls	Client Info		10000	65513	41442
	Filter Age	mls	Client Info		10000	65513	41442
	Oil Changed		Client Info		Changed	Changed	Changed
	Filter Changed		Client Info		Changed	Changed	Changed
	Sample Status				NORMAL	ABNORMAL	NORMAL
WEAR	Iron	ppm	ASTM D5185m	>100	12	28	11
WLAN	Chromium	ppm	ASTM D5185m		<1	1	<1
All component wear rates are normal.	Nickel	ppm	ASTM D5185m		0	<1	0
	Titanium	ppm	ASTM D5185m	7	<1	0	0
	Silver	ppm	ASTM D5185m	>3	0	0	0
	Aluminum	ppm	ASTM D5185m		6	13	5
	Lead	ppm	ASTM D5185m		0	0	0
	Copper	ppm	ASTM D5185m		4	7	5
	Tin	ppm	ASTM D5185m		<1	<1	<1
	Vanadium	ppm	ASTM D5185m		<1	0	0
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION	Ciliaan		ACTM DC10C	05			4
CONTAMINATION	Silicon Potassium	ppm	ASTM D5185m ASTM D5185m		6 10	9	4
There is no indication of any contamination in the oil.	Fuel	ppm	WC Method	>5	<1.0	<1.0	<1.0
	Water		WC Method		NEG	NEG	NEG
	Glycol		WC Method	<i>></i> 0.2	NEG	NEG	NEG
	Soot %	%	*ASTM D7844	\3	0.5	1.4	0.6
	Nitration	Abs/cm	*ASTM D7624	>20	8.6	14.5	9.6
	Sulfation	Abs/.1mm	*ASTM D7415		21.8	31.1	23.2
	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	Sodium	nnm	ASTM D5185m	. 150	3	-1	-1
FLUID CONDITION	Boron	ppm	ASTM D5185m		186	<1 3	<1
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.	Barium	ppm	ASTM D5185m		0	0	0
	Molybdenum	ppm	ASTM D5185m		77	75	64
	Manganese	ppm	ASTM D5185m	100	<1	<1	<1
	Magnesium	ppm	ASTM D5185m	450	702	962	984
	Calcium	ppm	ASTM D5185m	3000	1238	1286	1102
	Phosphorus	ppm	ASTM D5185m		1116	1107	1032
	Zinc	ppm	ASTM D5185m		1274	1401	1275
	Sulfur	ppm	ASTM D5185m		3363	3221	3413
		Abs/.1mm	*ASTM D7414		16.6	28.1	17.8
	Oxidation	AU5/.1111111	AOTIVI DI TIT	725	10.0	20.1	
	Base Number (BN)		ASTM D2896		7.7	4.8	10.1







Certificate L2367

Laboratory Sample No.

: WC0904503 Lab Number : 06174846 Unique Number : 11020899 Test Package : FLEET

To discuss this sample report, contact Customer Service at 1-800-237-1369.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 09 May 2024 **Tested** : 10 May 2024

Diagnosed : 10 May 2024 - Wes Davis

SALEM NATIONALEASE CORPORATION

198 PARK PLAZA DRIVE WINSTON SALEM, NC

US 27105 Contact: Audrey Hopkins

Audrey.Hopkins@salemcorp.com

* - 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: (336)767-9642 F: x: