WEAR CONTAMINATION FLUID CONDITION

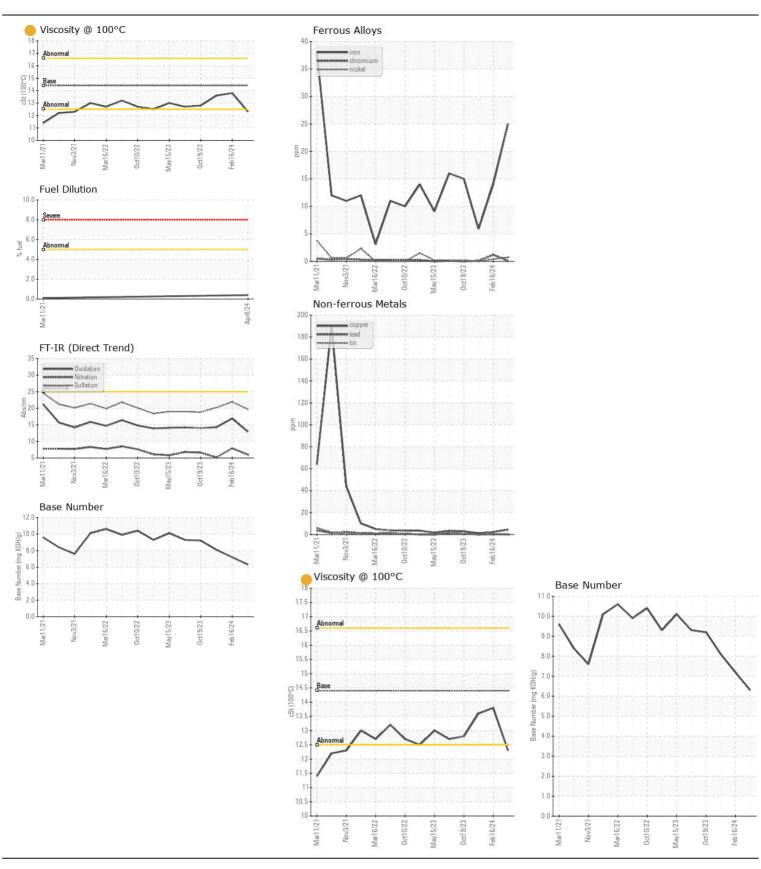
NORMAL NORMAL ATTENTION

Machine Id

15278

Component Diesel Engine

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
HESSIMILITERATION	Sample Number	00	Client Info	21111071011	WC0903544	WC0841961	WC085827
Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.	Sample Date		Client Info		08 Apr 2024	16 Feb 2024	07 Nov 202
	Machine Age	mls	Client Info		221731	429323	199734
	Oil Age	mls	Client Info		11363	0	4760
	Filter Age	mls	Client Info		11363	0	4760
	Oil Changed		Client Info		Changed	N/A	Changed
	Filter Changed		Client Info		Changed	N/A	Changed
	Sample Status				ATTENTION	NORMAL	NORMAL
WEAR	Iron	ppm	ASTM D5185m	>100	25	14	6
All component wear rates are normal.	Chromium	ppm	ASTM D5185m	>20	<1	1	<1
	Nickel	ppm	ASTM D5185m	>4	<1	<1	0
	Titanium	ppm	ASTM D5185m		0	<1	0
	Silver	ppm	ASTM D5185m	>3	0	0	0
	Aluminum	ppm	ASTM D5185m	>20	4	10	2
	Lead	ppm	ASTM D5185m	>40	0	<1	0
	Copper	ppm	ASTM D5185m	>330	4	2	1
	Tin	ppm	ASTM D5185m	>15	<1	<1	0
	Vanadium	ppm	ASTM D5185m		0	<1	0
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	4	6	4
	Potassium	ppm	ASTM D5185m	>20	4	2	2
Fuel content negligible. There is no indication of any contamination in the oil.	Fuel	%	ASTM D3524	>5	0.4	<1.0	<1.0
	Water		WC Method	>0.2	NEG	NEG	NEG
	Glycol		WC Method		NEG	NEG	NEG
	Soot %	%	*ASTM D7844	>3	0.2	0.4	0.1
	Nitration	Abs/cm	*ASTM D7624	>20	6.0	7.9	5.2
	Sulfation	Abs/.1mm	*ASTM D7415	>30	19.7	21.9	20.2
	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	NORM
	Odor	scalar	*Visual	NORML	NORML	NORML	NORM
<u></u>	Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
FLUID CONDITION	Sodium	ppm	ASTM D5185m		<1	2	0
The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.	Boron	ppm	ASTM D5185m		324	230	396
	Barium	ppm	ASTM D5185m		<1	<1	2
	Molybdenum	ppm	ASTM D5185m		72	84	80
	Manganese	ppm	ASTM D5185m		<1	<1	0
	Magnesium	ppm	ASTM D5185m		382	531	428
	Calcium	ppm	ASTM D5185m		1203	1299	1233
	Phosphorus	ppm	ASTM D5185m		1030	1039	964
	Zinc	ppm	ASTM D5185m		1219	1231	1129
	Sulfur	ppm	ASTM D5185m	05	3728	3153	3220
	Oxidation Base Number (BN)	Abs/.1mm	*ASTM D7414 ASTM D2896	>25	12.9 6.3	16.9 7.2	14.3 8.1







Laboratory Sample No.

Lab Number : 06149385

: WC0903544 Unique Number: 10979463

: WearCheck USA - 501 Madison Ave., Cary, NC 27513

Tested Diagnosed Test Package: FLEET (Additional Tests: FuelDilution, PercentFuel)

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

Received

: 19 Apr 2024 : 19 Apr 2024 - Don Baldridge

: 15 Apr 2024

198 PARK PLAZA DRIVE WINSTON SALEM, NC US 27105 Contact: Audrey Hopkins

Certificate L2367 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.

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SALEM NATIONALEASE CORPORATION

Contact/Location: Audrey Hopkins - SALWIN

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