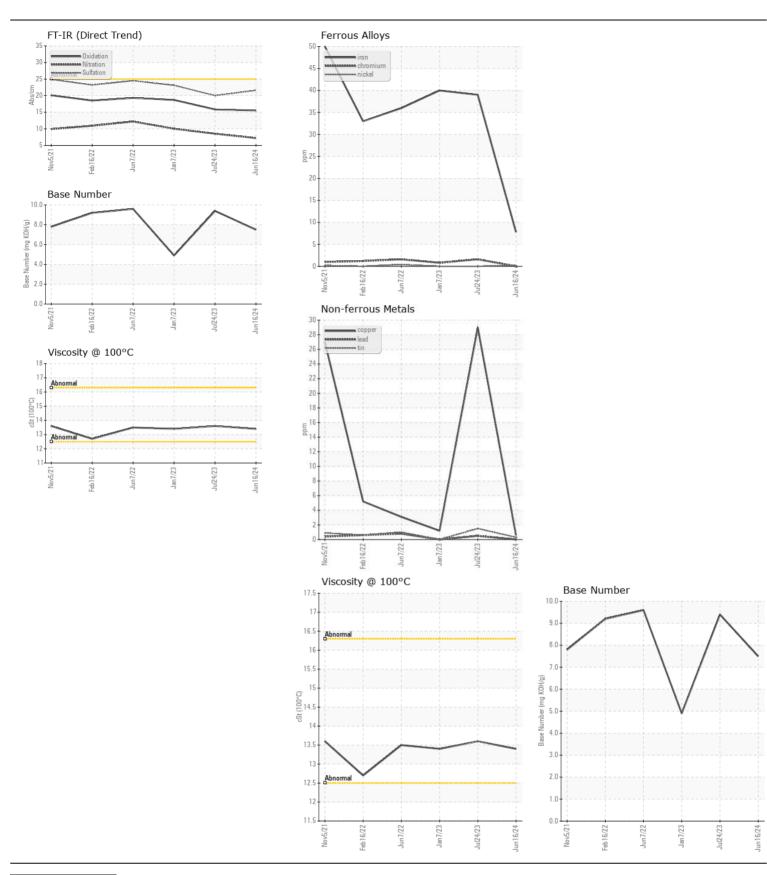
**WEAR** CONTAMINATION **FLUID CONDITION** 

**NORMAL NORMAL NORMAL** 

Machine Id

13700 Component Diesel Engine

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
	Sample Number		Client Info		WC0938996	WC0829416	WC0711000
Resample at the next service interval to monitor. Please specify the component make and model with your next sample.	Sample Date		Client Info		16 Jun 2024	24 Jul 2023	07 Jan 202
	Machine Age	mls	Client Info		0	74072	46708
	Oil Age	mls	Client Info		0	74072	0
	Filter Age	mls	Client Info		0	74072	0
	Oil Changed		Client Info		N/A	N/A	Changed
	Filter Changed		Client Info		N/A	N/A	Changed
	Sample Status				NORMAL	NORMAL	NORMAL
WEAR	Iron	nnm	ASTM D5185m	. 100		39	40
VEAR	Iron	ppm			8 0	2	40
All component wear rates are normal.	Chromium Nickel	ppm	ASTM D5185m ASTM D5185m		<1	0	<1
	Titanium	ppm	ASTM D5185m	>4	<1	<1	0
	Silver	ppm	ASTM D5185m	. 2	0	0	0
	Aluminum	ppm	ASTM D5185m		4	9	4
	Lead	ppm	ASTM D5185m		0	<1	0
	Copper	ppm	ASTM D5185m		<1	29	1
	Tin	ppm	ASTM D5185m		<1	2	0
	Vanadium	ppm	ASTM D5185m	710	0	0	0
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	5	6	7
Elevated aluminum (AI) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m	>20	6	23	8
	Fuel		WC Method	>5	<1.0	<1.0	<1.0
	Water		WC Method	>0.2	NEG	NEG	NEG
	Glycol		WC Method		NEG	NEG	NEG
	Soot %	%	*ASTM D7844	>3	0.4	0.6	1.1
	Nitration	Abs/cm	*ASTM D7624	>20	7.2	8.5	10.0
	Sulfation	Abs/.1mm	*ASTM D7415	>30	21.6	20.0	23.1
	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	NORM
	Odor	scalar	*Visual	NORML	NORML	NORML	NORM
	Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
FLUID CONDITION	Sodium	nnm	ASTM D5185m	<11R	2	5	<1
LOID CONDITION	Boron	ppm	ASTM D5185m	>110	350	2	181
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		81	67	74
	Manganese	ppm	ASTM D5185m		<1	2	<1
	Magnesium	ppm	ASTM D5185m		443	1055	504
	Calcium	ppm	ASTM D5185m		1362	1168	1326
	Phosphorus	ppm	ASTM D5185m		1060	1031	915
	Zinc	ppm	ASTM D5185m		1269	1311	1184
	Sulfur	ppm	ASTM D5185m		3849	2562	3660
	Oxidation	Abs/.1mm	*ASTM D7414	>25	15.5	15.8	18.7
	Base Number (BN)			7 2 3	7.5	9.4	4.9
	Visc @ 100°C	cSt	ASTM D445		13.4	13.6	13.4







Certificate L2367

Laboratory Sample No.

Lab Number : 06217601 Unique Number : 11090465 Test Package : FLEET

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : WC0938996

Received : 21 Jun 2024 **Tested** Diagnosed

: 24 Jun 2024 : 24 Jun 2024 - Wes Davis

SALEM NATIONALEASE CORPORATION

198 PARK PLAZA DRIVE WINSTON SALEM, NC

US 27105 Contact: Audrey Hopkins

Audrey.Hopkins@salemcorp.com T: (336)767-9642

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) F: x: