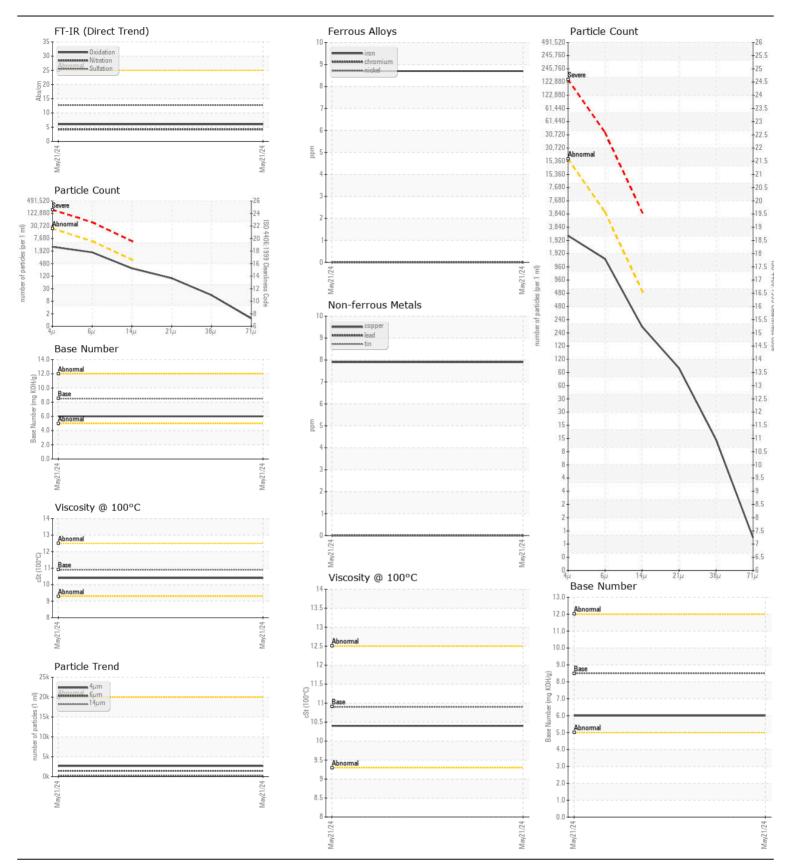
**WEAR** CONTAMINATION **FLUID CONDITION**  **NORMAL NORMAL NORMAL** 

Machine Id

1567 1567 Component Diesel Engine

DIESEL ENGINE OIL SAE 10W30 ( GAL)							
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
HEGOMMENDATION	Sample Number		Client Info		WC0939262		
Resample at the next service interval to monitor.	Sample Date		Client Info		21 May 2024		
	Machine Age	hrs	Client Info		6397		
	Oil Age	hrs	Client Info		6397		
	Filter Age	hrs	Client Info		6397		
	Oil Changed		Client Info		Changed		
	Filter Changed		Client Info		N/A		
	Sample Status				NORMAL		
WEAR	Iron	ppm	ASTM D5185m	<b>\100</b>	9		
WEAR	Chromium	ppm	ASTM D5185m		0		
All component wear rates are normal.	Nickel	ppm	ASTM D5185m		0		
	Titanium	ppm	ASTM D5185m	- 1	0		
	Silver	ppm	ASTM D5185m	>3	Ö		
	Aluminum	ppm	ASTM D5185m		3		
	Lead	ppm	ASTM D5185m		0		
	Copper	ppm	ASTM D5185m	>330	8		
	Tin	ppm	ASTM D5185m		0		
	Vanadium	ppm	ASTM D5185m		0		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTABUNATION			AOTM DE 40E	05			
CONTAMINATION	Silicon	ppm	ASTM D5185m		11		
The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m		4		
	Fuel		WC Method	-	<1.0		
	Water Glycol		WC Method	>0.2	NEG NEG		
	Soot %	%	*ASTM D7844	~ 2	0		
	Nitration	Abs/cm	*ASTM D7624		4.2		
	Sulfation	Abs/.1mm	*ASTM D7624		12.7		
	Particles >4µm	AUS/. 1111111	ASTM D7647		2688		
	Particles >6µm		ASTM D7647		1464		
	Particles >14µm		ASTM D7647		249		
	Particles >21µm		ASTM D7647		84		
	Particles >38µm		ASTM D7647		13		
	Particles >71µm		ASTM D7647		1		
	Oil Cleanliness		ISO 4406 (c)		19/18/15		
	Silt	scalar	*Visual	NONE	NONE		
	Debris	scalar	*Visual	NONE	NONE		
	Sand/Dirt	scalar	*Visual	NONE	NONE		
	Appearance	scalar	*Visual	NORML	NORML		
	Odor	scalar	*Visual	NORML	NORML		
	Emulsified Water	scalar	*Visual	>0.2	NEG		
FLUID CONDITION	Sodium	nnm	ASTM D5185m		1		
FLUID CONDITION	Boron	ppm	ASTM D5105m	250	106		
The BN result indicates that there is suitable alkalinity remaining in the	Barium	ppm	ASTM D5185m		0		
oil. The condition of the oil is suitable for further service.	Molybdenum	ppm	ASTM D5185m		48		
	Manganese	ppm	ASTM D5185m		3		
	Magnesium	ppm	ASTM D5185m	450	403		
	Calcium	ppm	ASTM D5185m	3000	1094		
	Phosphorus	ppm	ASTM D5185m	1150	588		
	Zinc	ppm	ASTM D5185m	1350	677		
	Sulfur	ppm	ASTM D5185m	4250	2480		
	Oxidation	Abs/.1mm	*ASTM D7414		6.0		
	Base Number (BN)				6.0		
	Visc @ 100°C	cSt	ASTM D445	10.9	10.4		





Certificate L2367

Laboratory Sample No. Lab Number

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : 06191747

: WC0939262 Unique Number : 11048499

\* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Received **Tested** Diagnosed

: 30 May 2024 Test Package: CONST (Additional Tests: PrtCount, TBN)

: 30 May 2024 - Sean Felton To discuss this sample report, contact Customer Service at 1-800-237-1369.

: 24 May 2024

US 27509 Contact: Leigh Dennis rdennis@thesunrockgroup.com T: (919)575-4505

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

Contact/Location: Leigh Dennis - CARBUTNC

F: (919)575-0162

PO BOX 25

BUTNER, NC

**CAROLINA SUNROCK**