

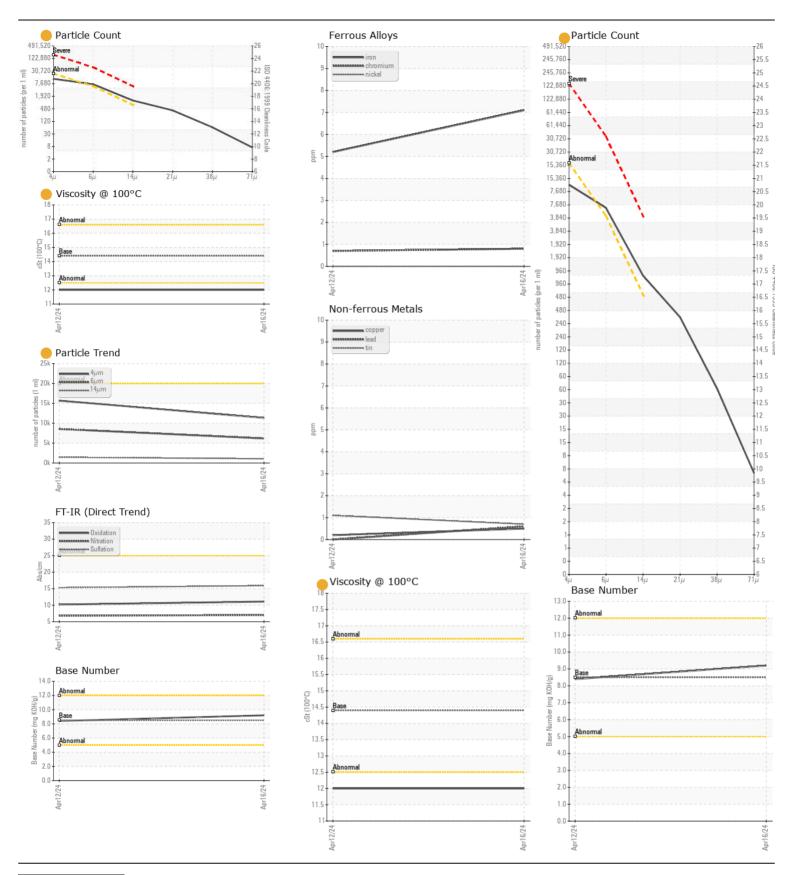
**WEAR** CONTAMINATION **FLUID CONDITION** 

**NORMAL ATTENTION ATTENTION** 

**Mobile Fleet** 

7091 7091 Component Diesel Engine

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
	Sample Number		Client Info		WC0919143	WC0919101	
Oil and filter change at the time of sampling has been noted. No	Sample Date		Client Info		16 Apr 2024	12 Apr 2024	
corrective action is recommended at this time. Resample at the next service interval to monitor.	Machine Age	hrs	Client Info		8867	8867	
	Oil Age	hrs	Client Info		8867	0	
	Filter Age	hrs	Client Info		8867	0	
	Oil Changed		Client Info		Changed	Not Changd	
	Filter Changed		Client Info		Changed	Not Changd	
	Sample Status				ATTENTION	ABNORMAL	
WEAD	lvan	12 12 122	ASTM D5185m	. 100	7	-	
WEAR	Iron	ppm			7	5	
All component wear rates are normal.	Chromium	ppm	ASTM D5185m	-	<1	<1	
All component wear rates are normal.	Nickel	ppm	ASTM D5185m	>4	0	0	
	Titanium	ppm	ASTM D5185m	. 0	0		
	Silver	ppm	ASTM D5185m		0	0 2	
	Aluminum	ppm	ASTM D5185m		3		
	Lead	ppm	ASTM D5185m	>40	<1	0	
	Copper	ppm	ASTM D5185m		<1	<1	
	Tin	ppm	ASTM D5185m ASTM D5185m	>10	<1 <1	1 0	
	Vanadium	ppm		NONE	NONE	NONE	
	White Metal	scalar	*Visual	NONE			
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
CONTAMINATION	Silicon	ppm	ASTM D5185m	<b>\25</b>	8	8	
CONTAMINATION	Potassium	ppm	ASTM D5185m		2	3	
There is a moderate amount of particulates present in the oil.	Fuel	ppiii	WC Method	>5	<1.0	1.2	
	Water		WC Method		NEG	NEG	
	Glycol		WC Method	<i>&gt;</i> 0.∠	NEG	NEG	
	Soot %	%	*ASTM D7844	<b>\</b> 3	0.1	0.1	
	Nitration	Abs/cm	*ASTM D7624	>20	7.0	6.8	
	Sulfation		*ASTM D7024		15.9	15.3	
	Particles >4µm	AU3/.1111111	ASTM D7413		11327	15686	
	Particles >6µm		ASTM D7647		6170	▲ 8545	
	Particles >14µm		ASTM D7647		1050	▲ 1454	
	Particles >21µm		ASTM D7647		354	▲ 490	
	Particles >38µm		ASTM D7647		55	<u> </u>	
	Particles >71µm		ASTM D7647		6	8	
	Oil Cleanliness			>21/19/16	21/20/17	<u>^</u> 21/20/18	
	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		*Visual	NORML	NORML	NORML	
	Emulsified Water			>0.2	NEG	NEG	
FLUID CONDITION	Sodium	ppm	ASTM D5185m	>158	0	<1	
	Boron	ppm	ASTM D5185m	250	12	12	
The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.	Barium	ppm	ASTM D5185m	10	0	0	
	Molybdenum	ppm	ASTM D5185m	100	13	9	
	Manganese	ppm	ASTM D5185m		0	0	
	Magnesium	ppm	ASTM D5185m	450	125	93	
	Calcium	ppm	ASTM D5185m	3000	2858	2909	
	Phosphorus	ppm	ASTM D5185m	1150	1213	1110	
	Zinc	ppm	ASTM D5185m	1350	1395	1391	
		nnm	ASTM D5185m	4250	4190	4297	
	Sulfur	ppm					
	Oxidation	Abs/.1mm	*ASTM D7414	>25	11.1	10.2	
		Abs/.1mm		>25			





Certificate L2367

Report Id: CARBUTNC [WUSCAR] 06154184 (Generated: 04/23/2024 17:09:39) Rev: 1

Laboratory Sample No.

Lab Number : 06154184

Unique Number : 10989607

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : WC0919143 Received **Tested** 

Diagnosed Test Package : CONST ( Additional Tests: PrtCount, TBN )

: 19 Apr 2024 : 23 Apr 2024 : 23 Apr 2024 - Don Baldridge

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.

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) F: (919)575-0162

**CAROLINA SUNROCK** 

Contact/Location: Leigh Dennis - CARBUTNC

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