

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

**NORMAL ATTENTION NORMAL** 

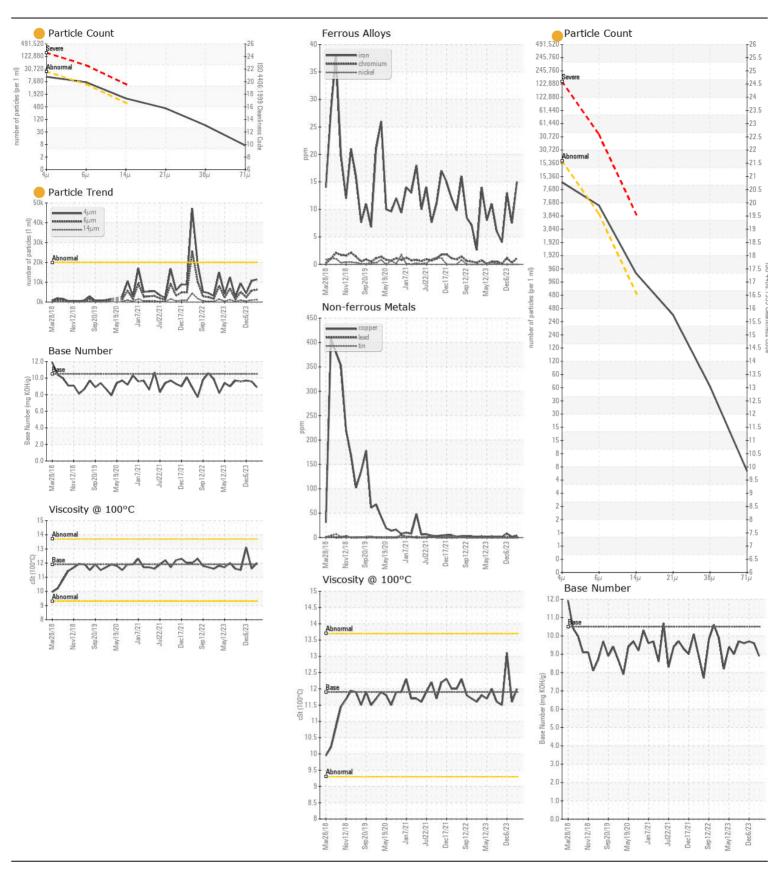
**Mobile Fleet** 

8113 8113

Component
Diesel Engine

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
1129311111211311	Sample Number		Client Info		WC0918603	WC0885886	WC086164
Oil and filter change at the time of sampling has been noted. No	Sample Date		Client Info		19 Mar 2024	24 Jan 2024	06 Dec 202
corrective action is recommended at this time. Resample at the next service interval to monitor.	Machine Age	hrs	Client Info		13357	12982	12720
	Oil Age	hrs	Client Info		375	263	299
	Filter Age	hrs	Client Info		375	263	299
	Oil Changed		Client Info		Changed	Not Changd	Changed
	Filter Changed		Client Info		Changed	Not Changd	Changed
	Sample Status				ATTENTION	ATTENTION	NORMAL
WEAR	Iron	ppm	ASTM D5185m	>100	15	8	13
	Chromium	ppm	ASTM D5185m	>20	1	<1	1
All component wear rates are normal.	Nickel	ppm		>4	0	0	0
	Titanium	ppm	ASTM D5185m		0	0	0
	Silver	ppm	ASTM D5185m		0	0	0
	Aluminum	ppm	ASTM D5185m		14	6	12
	Lead	ppm	ASTM D5185m	>40	0	0	0
	Copper	ppm	ASTM D5185m		4	2	8
	Tin	ppm		>15	<1	0	0
	Vanadium	ppm	ASTM D5185m		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	7	6	8
	Potassium	ppm	ASTM D5185m	>20	35	13	8
There is a moderate amount of particulates present in the oil.	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	0.6	0.2	0.2
	Nitration	Abs/cm	*ASTM D7624	>20	8.2	6.0	5.3
	Sulfation	Abs/.1mm	*ASTM D7415		22.0	21.5	18.1
	Particles >4µm		ASTM D7647		11440	10605	4358
	Particles >6µm		ASTM D7647		6232	5777	2374
	Particles >14μm		ASTM D7647		1061	983	404
	Particles >21µm		ASTM D7647		957	331	136
	Particles >38µm		ASTM D7647	>40	<b>5</b> 5	51	21
	Particles >71µm		ASTM D7647		6	5	2
	Oil Cleanliness Silt	acalar	ISO 4406 (c) *Visual	>21/19/16 NONE	21/20/17	21/20/17	19/18/1 NONE
	Debris	scalar	*Visual	NONE	NONE 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
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FLUID CONDITION	Sodium	ppm	ASTM D5185m		3	2	4
The BN recult indicates that there is suitable alkalinity remaining in the	Boron	ppm	ASTM D5185m		27	45	10
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 ASTM D5185m		49	45	69
	Manganese	ppm			<1 572	<1 561	946
	Magnesium Calcium	ppm	ASTM D5185m ASTM D5185m		573 1648	561 1634	1089
	Phosphorus	ppm	ASTM D5185m		797	772	1089
	Zinc	ppm	ASTM D5185m		956	933	1215
	Sulfur	ppm	ASTM D5185m		2773	2592	3087
	Oxidation	Abs/.1mm	*ASTM D7414	>25	20.3	19.0	13.5
	Base Number (BN)		ASTM D2896		8.9	9.6	9.7

Visc @ 100°C cSt ASTM D445 11.9





Laboratory Sample No. Lab Number

: WC0918603 : 06125566

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

Unique Number : 10939717 Diagnosed Test Package : CONST ( Additional Tests: PrtCount, TBN )

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.

: 22 Mar 2024 : 25 Mar 2024 - Don Baldridge

: 21 Mar 2024

US 27509 Contact: Leigh Dennis

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**CAROLINA SUNROCK** 

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

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