

WEAR CONTAMINATION FLUID CONDITION

NORMAL ATTENTION NORMAL

Mobile Fleet

6424 6424

Diesel Engine

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
RECOMMENDATION	Sample Number	OOW	Client Info	LIIIIUADII	WC0939416	WC0918709	
No corrective action is recommended at this time. Oil and filter change	Sample Date		Client Info		21 May 2024	04 Apr 2024	13 Feb 2024
at the time of sampling has been noted. Resample at the next service	Machine Age	hrs	Client Info		11977	11706	11473
interval to monitor.	Oil Age	hrs	Client Info		504	233	288
	Filter Age	hrs	Client Info		504	233	288
	Oil Changed		Client Info		Changed	Not Changd	Changed
	Filter Changed		Client Info		Changed	Not Changd	
	Sample Status				ATTENTION	NORMAL	ATTENTION
WEAR	Iron	ppm	ASTM D5185m	>100	15	8	17
WEAR	Chromium	ppm	ASTM D5185m	>20	1	0	<1
All component wear rates are normal.	Nickel	ppm	ASTM D5185m		<1	0	0
	Titanium	ppm	ASTM D5185m		<1	0	0
	Silver	ppm	ASTM D5185m	>3	<1	0	0
	Aluminum	ppm	ASTM D5185m	>20	4	2	3
	Lead	ppm	ASTM D5185m	>40	<1	0	0
	Copper	ppm	ASTM D5185m		9	4	11
	Tin	ppm	ASTM D5185m	>15	1	0	0
	Vanadium	ppm	ASTM D5185m		<1	0	0
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	6	5	6
	Potassium	ppm	ASTM D5185m	>20	5	0	<1
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	0.3	0.2	0.4
	Nitration	Abs/cm	*ASTM D7624		7.6	6.3	8.0
	Sulfation	Abs/.1mm			22.4	22.2	22.8
	Particles >4µm		ASTM D7647		8822	1305	9996
	Particles >6µm		ASTM D7647		4806	711	5445
	Particles >14µm		ASTM D7647		818	121	927
	Particles >21µm Particles >38µm		ASTM D7647 ASTM D7647		275 43	41 6	48
	Particles >30µm		ASTM D7647		43	1	5
	Oil Cleanliness		ISO 4406 (c)		20/19/17	18/17/14	20/20/17
	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	NORML
	Odor	scalar	*Visual	NORML	NORML	NORML	NORML
	Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
FLUID CONDITION	Sodium	ppm	ASTM D5185m		2	2	2
T LOID CONDITION	Boron	ppm	ASTM D5185m		51	56	40
The BN result indicates that there is suitable alkalinity remaining in the	Barium	ppm	ASTM D5185m		0	0	0
oil. The condition of the oil is suitable for further service.	Molybdenum	ppm	ASTM D5185m		50	43	42
	Manganese	ppm	ASTM D5185m		<1	<1	<1
	Magnesium	ppm	ASTM D5185m		553	499	494
	Calcium	ppm	ASTM D5185m		1807	1631	1581
	Phosphorus	ppm	ASTM D5185m		868	744	704
	Zinc	ppm	ASTM D5185m		1020	874	856

Sulfur

Oxidation

Visc @ 100°C cSt

ppm ASTM D5185m

Base Number (BN) mg KOH/g ASTM D2896 10.5

Abs/.1mm *ASTM D7414 >25

ASTM D445 11.9

2691

20.7

9.4

11.4

2930

21.6

8.7

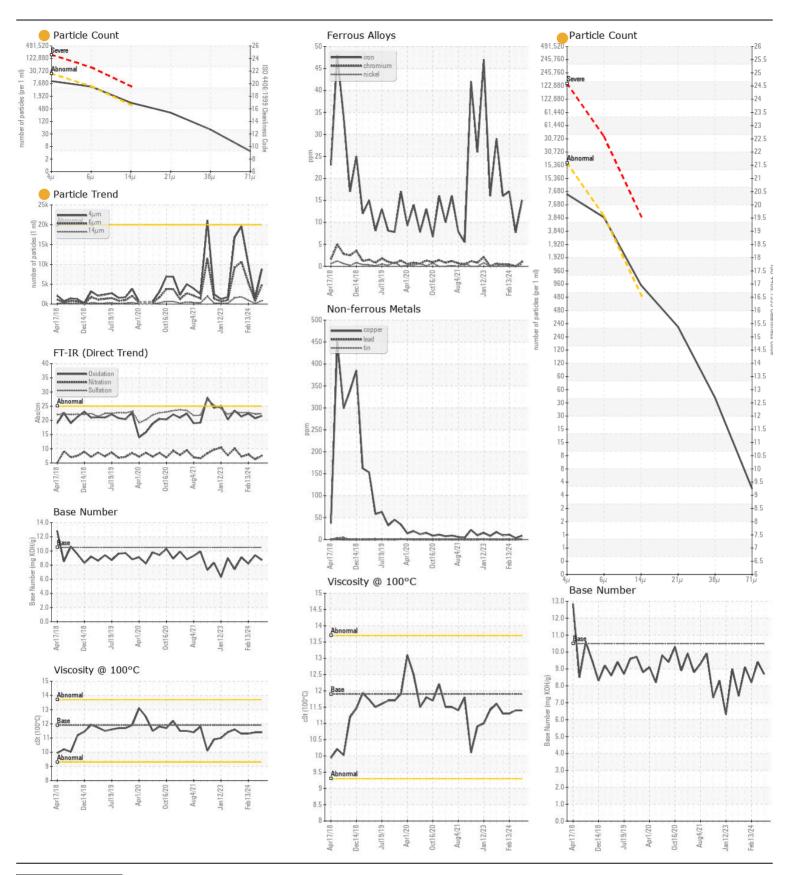
11.4

2173

22.4

8.2

11.3





Certificate L2367

Laboratory Sample No. Lab Number

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : WC0939416 : 06189094

Received **Tested**

Unique Number : 11045846 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.

: 28 May 2024 - Don Baldridge US 27509 Contact: Leigh Dennis rdennis@thesunrockgroup.com

: 23 May 2024

: 28 May 2024

T: (919)575-4505 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: (919)575-0162

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BUTNER, NC

CAROLINA SUNROCK