

## WEAR NORMAL CONTAMINATION ATTENTION FLUID CONDITION NORMAL

## **Mobile Fleet**

781 781 Component Diesel Engine Fluid MOBIL 15W40 (12 GAL)

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
	Sample Number		Client Info		WC0937819	WC0861698	WC0861697
Oil and filter change at the time of sampling has been noted. No	Sample Date		Client Info		08 Jul 2024	21 Apr 2024	24 Feb 2024
corrective action is recommended at this time. Resample at the next	Machine Age	hrs	Client Info		7921	7679	7333
service interval to monitor.	Oil Age	hrs	Client Info		244	0	170
	Filter Age	hrs	Client Info		244	0	170
	Oil Changed		Client Info		Changed	N/A	Changed
	Filter Changed		Client Info		Changed	N/A	Changed
	Sample Status		Onent into		ATTENTION	NORMAL	NORMAL
						NOTIVIAL	NOTIVIAL
WEAR	Iron	ppm	ASTM D5185m	>75	27	22	6
MEAIL	Chromium	ppm	ASTM D5185m		1	<1	<1
All component wear rates are normal.	Nickel	ppm	ASTM D5185m		<1	0	<1
	Titanium	ppm	ASTM D5185m		71	<1	<1
	Silver	ppm	ASTM D5185m		0	0	0
	Aluminum	ppm	ASTM D5185m		3	4	1
	Lead	ppm	ASTM D5185m		3	3	<1
	Copper	ppm	ASTM D5185m		3	0	2
	Tin	ppm	ASTM D5185m		-3 <1	<1	<1
	Vanadium	ppm	ASTM D5185m	20	<1	0	<1
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Tellow Wetai	Scalal	visuai	NONL	NONE	NONL	NONL
CONTAMINATION	Silicon	ppm	ASTM D5185m	>35	5	12	5
CONTRIMINATION	Potassium	ppm	ASTM D5185m		5	3	4
There is a moderate amount of particulates present in the oil.	Fuel	ppiii	WC Method		<1.0	<1.0	<1.0
	Water		WC Method		NEG	NEG	NEG
	Glycol		WC Method	20.2	NEG	NEG	NEG
	Soot %	%	*ASTM D7844	~3	1.6	1.2	0.2
	Nitration	Abs/cm	*ASTM D7624	>20	10.9	9.0	6.8
	Sulfation	Abs/.1mm	*ASTM D7624	-	24.9	24.5	19.1
	Particles >4µm	AU5/.111111	ASTM D7413 ASTM D7647	>20000	12736	3802	2740
	Particles >6µm		ASTM D7647 ASTM D7647		6938	2071	1493
	Particles >0µm Particles >14µm		ASTM D7647 ASTM D7647		1181	352	254
	Particles >21µm		ASTM D7647 ASTM D7647		398	119	86
	Particles >38µm		ASTM D7647 ASTM D7647		61	18	13
	Particles >71µm		ASTM D7647 ASTM D7647		6	2	1
	Oil Cleanliness		ISO 4406 (c)	>21/19/16	21/20/17	19/18/16	19/18/15
	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		*Visual	>0.2	NEG	NEG	NEG
		Scalal	visuai	>0.2	NEG	NLG	NLG
FLUID CONDITION	Sodium	ppm	ASTM D5185m	>118	3	6	4
	Boron	ppm	ASTM D5185m	2110	71	46	85
The BN result indicates that there is suitable alkalinity remaining in the	Barium	ppm	ASTM D5185m		<1	0	1
oil. The condition of the oil is suitable for further service.	Molybdenum	ppm	ASTM D5185m		16	45	10
	Manganese	ppm	ASTM D5185m		<1	<1	<1
	Magnesium	ppm	ASTM D5185m		461	535	555
	Calcium	ppm	ASTM D5185m		1820	1707	1081
	Phosphorus	ppm	ASTM D5185m		956	776	648
	Zinc	ppm	ASTM D5185m		1176	918	726
	Sulfur	ppm	ASTM D5185m		3585	2787	3423
	Oxidation	Abs/.1mm	*ASTM D7414	>25	20.0	22.0	13.7
	Daga Number (DNI)			~	20.0	0.0	7 7

Base Number (BN) mg KOH/g ASTM D2896

ASTM D445

Visc @ 100°C cSt

9.0

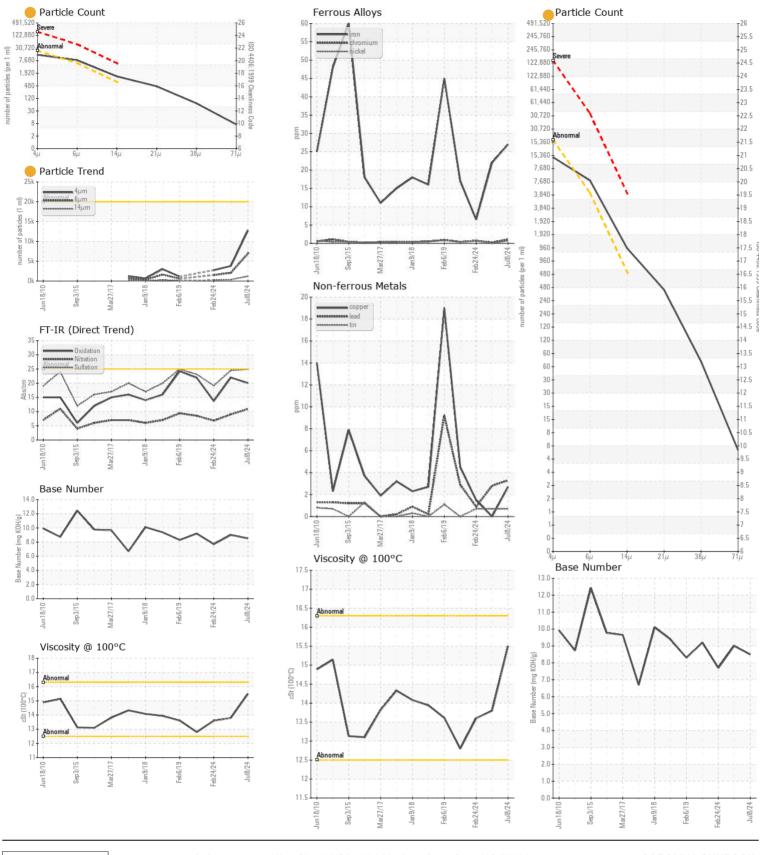
13.8

7.7

13.6

8.5

15.5



**CAROLINA SUNROCK** Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 : WC0937819 PO BOX 25 Sample No. Received : 17 Jul 2024 8 : 06239017 BUTNER, NC Lab Number Tested : 18 Jul 2024 : 18 Jul 2024 - Don Baldridge US 27509 Unique Number : 11127851 Diagnosed Test Package : CONST (Additional Tests: PrtCount, TBN) Contact: Leigh Dennis Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. rdennis@thesunrockgroup.com \* - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: (919)575-4505 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: (919)575-0162

Contact/Location: Leigh Dennis - CARBUTNC Page 2 of 2