



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ATTENTION
FLUID CONDITION	NORMAL

Area  
**Mobile Fleet**  
 Machine Id  
**8113 8113**  
 Component  
**Diesel Engine**  
 Fluid  
**MOBIL DELVAC 1300 SUPER 10W30 (10 GAL)**

## RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0919111</b>	WC0918603	WC0885886
Sample Date		Client Info		<b>24 Apr 2024</b>	19 Mar 2024	24 Jan 2024
Machine Age	hrs	Client Info		<b>13640</b>	13357	12982
Oil Age	hrs	Client Info		<b>283</b>	375	263
Filter Age	hrs	Client Info		<b>283</b>	375	263
Oil Changed		Client Info		<b>Not Chngd</b>	Changed	Not Chngd
Filter Changed		Client Info		<b>Not Chngd</b>	Changed	Not Chngd
Sample Status				<b>ATTENTION</b>	ATTENTION	ATTENTION

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>8</b>	15	8
Chromium	ppm	ASTM D5185m	>20	<b>1</b>	1	<1
Nickel	ppm	ASTM D5185m	>4	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>9</b>	14	6
Lead	ppm	ASTM D5185m	>40	<b>&lt;1</b>	0	0
Copper	ppm	ASTM D5185m	>330	<b>4</b>	4	2
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	<1	0
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

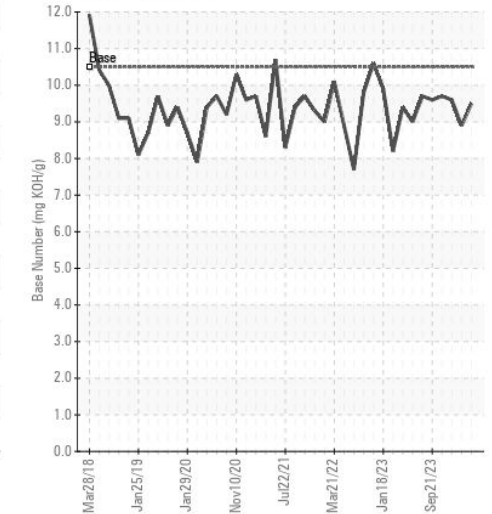
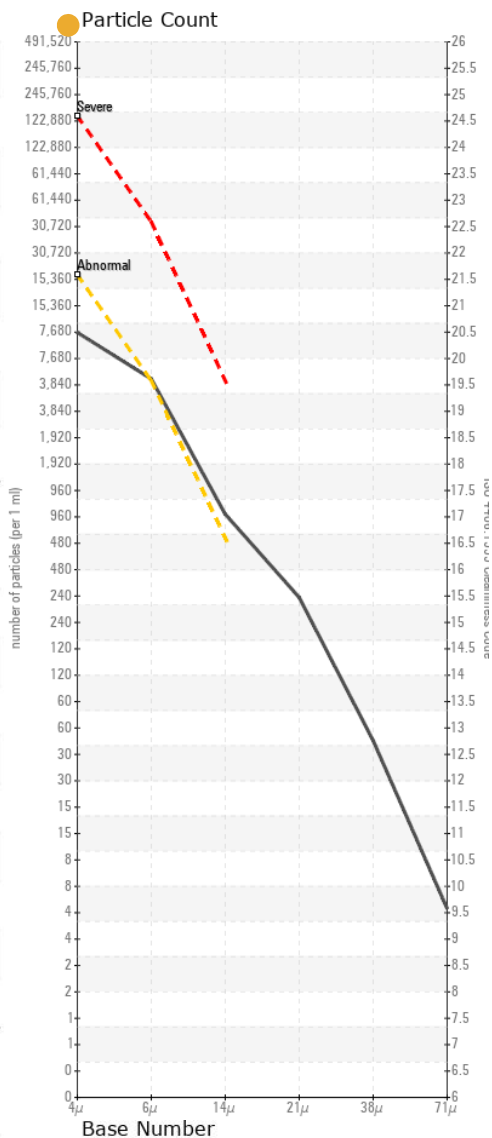
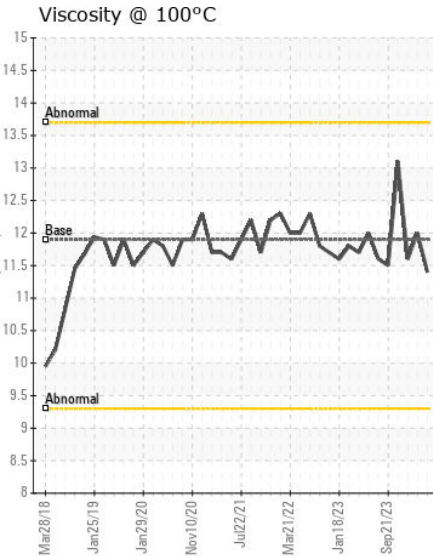
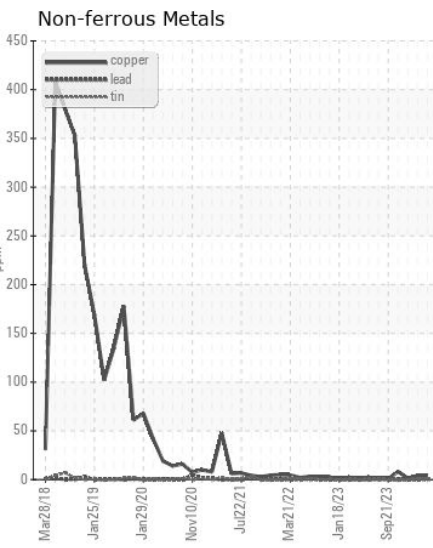
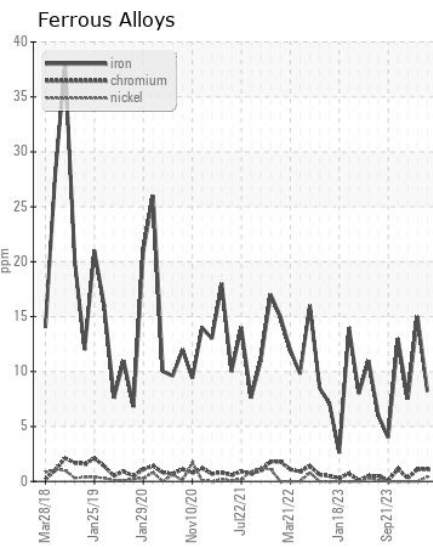
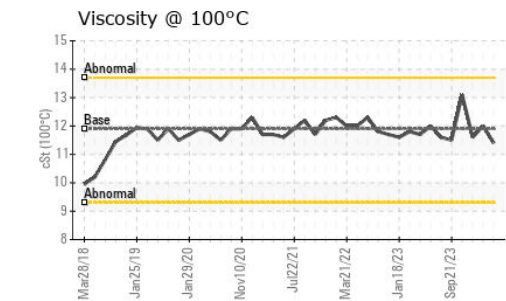
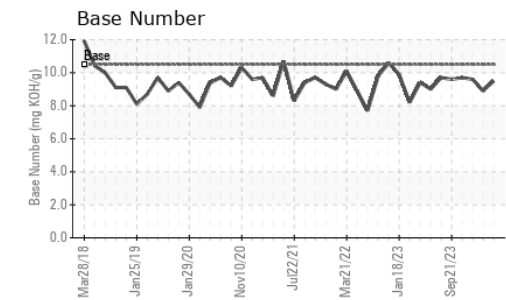
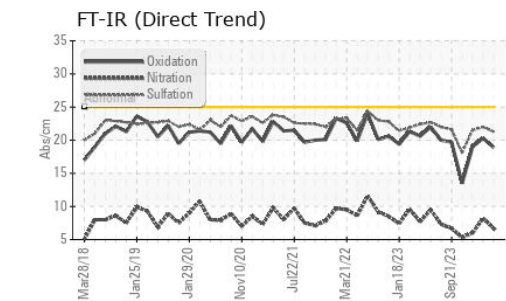
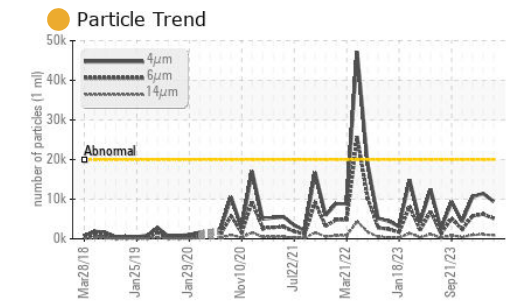
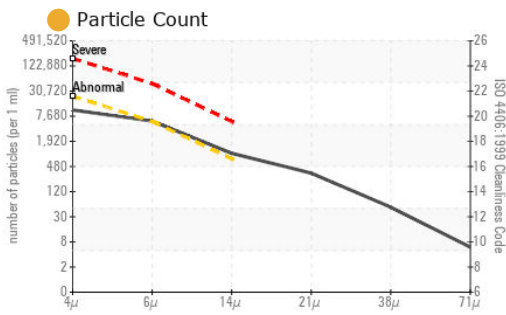
There is a moderate amount of particulates present in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>9</b>	7	6
Potassium	ppm	ASTM D5185m	>20	<b>19</b>	35	13
Fuel		WC Method	>5	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.3</b>	0.6	0.2
Nitration	Abs/cm	*ASTM D7624	>20	<b>6.7</b>	8.2	6.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>21.3</b>	22.0	21.5
Particles >4µm		ASTM D7647	>20000	<b>9396</b>	11440	10605
Particles >6µm		ASTM D7647	>5000	<b>5118</b>	6232	5777
Particles >14µm		ASTM D7647	>640	<b>871</b>	1061	983
Particles >21µm		ASTM D7647	>160	<b>293</b>	357	331
Particles >38µm		ASTM D7647	>40	<b>45</b>	55	51
Particles >71µm		ASTM D7647	>10	<b>5</b>	6	5
Oil Cleanliness		ISO 4406 (c)	>21/19/16	<b>20/20/17</b>	21/20/17	21/20/17
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	NEG	NEG

## FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>2</b>	3	2
Boron	ppm	ASTM D5185m		<b>43</b>	27	45
Barium	ppm	ASTM D5185m		<b>1</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>50</b>	49	45
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>507</b>	573	561
Calcium	ppm	ASTM D5185m		<b>1608</b>	1648	1634
Phosphorus	ppm	ASTM D5185m		<b>730</b>	797	772
Zinc	ppm	ASTM D5185m		<b>902</b>	956	933
Sulfur	ppm	ASTM D5185m		<b>2590</b>	2773	2592
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>18.9</b>	20.3	19.0
Base Number (BN)	mg KOH/g	ASTM D2896	10.5	<b>9.5</b>	8.9	9.6
Visc @ 100°C	cSt	ASTM D445	11.9	<b>11.4</b>	12.0	11.6



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0919111 **Received** : 26 Apr 2024  
**Lab Number** : 06161332 **Tested** : 30 Apr 2024  
**Unique Number** : 10996755 **Diagnosed** : 30 Apr 2024 - Jonathan Hester  
**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.  
 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

**CAROLINA SUNROCK**  
 PO BOX 25  
 BUTNER, NC  
 US 27509  
 Contact: Leigh Dennis  
 rdennis@thesunrockgroup.com  
 T: (919)575-4505  
 F: (919)575-0162