



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	ABNORMAL

Area

Mobile Fleet

Machine Id

8022 8022

Component

Diesel Engine

Fluid

MOBIL DELVAC 1300 SUPER 10W30 (10 GAL)

RECOMMENDATION

We advise that you check for the source of the coolant leak. Check for low coolant level. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0902822	WC0861745	WC0834932
Sample Date		Client Info		06 Feb 2024	27 Nov 2023	18 Jul 2023
Machine Age	hrs	Client Info		14893	14648	14349
Oil Age	hrs	Client Info		245	305	727
Filter Age	hrs	Client Info		245	305	727
Oil Changed		Client Info		Changed	Not Changd	Changed
Filter Changed		Client Info		Changed	Not Changd	Changed
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	12	10	21
Chromium	ppm	ASTM D5185m	>20	<1	<1	2
Nickel	ppm	ASTM D5185m	>4	0	0	0
Titanium	ppm	ASTM D5185m		0	<1	0
Silver	ppm	ASTM D5185m	>3	<1	0	<1
Aluminum	ppm	ASTM D5185m	>20	4	3	7
Lead	ppm	ASTM D5185m	>40	0	1	0
Copper	ppm	ASTM D5185m	>330	2	3	4
Tin	ppm	ASTM D5185m	>15	<1	<1	<1
Vanadium	ppm	ASTM D5185m		0	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

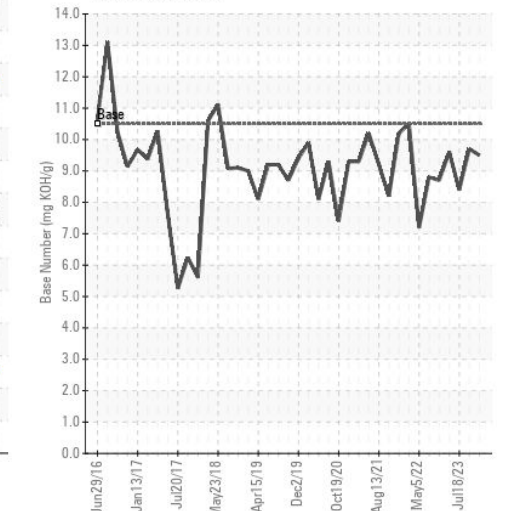
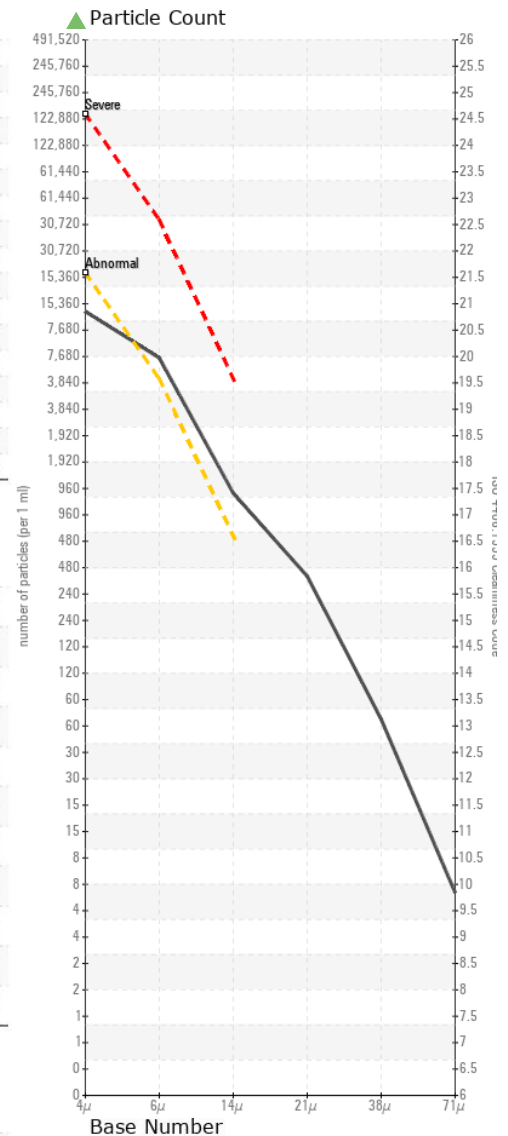
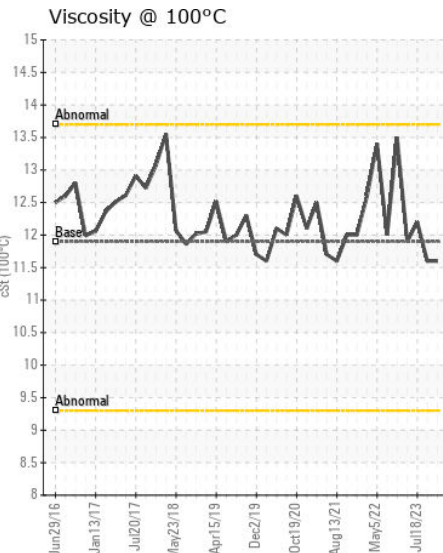
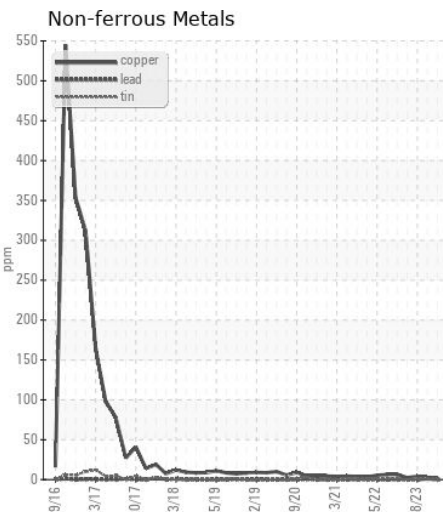
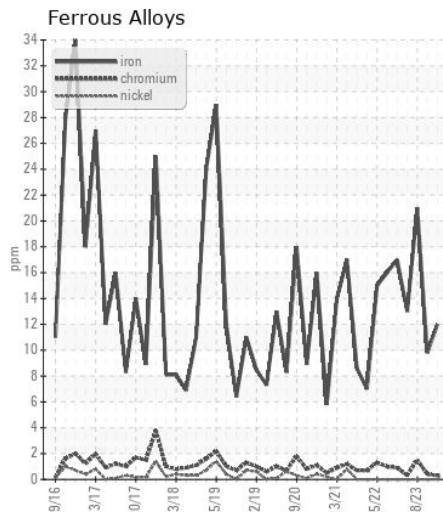
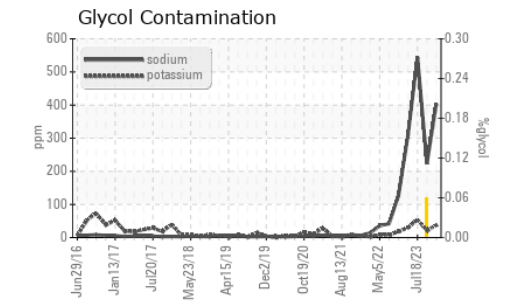
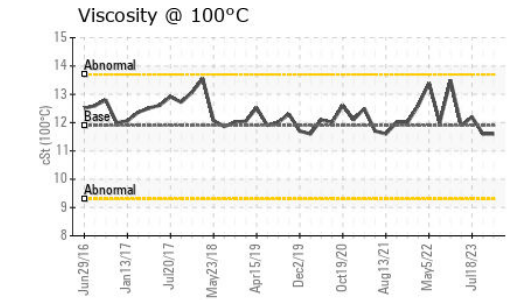
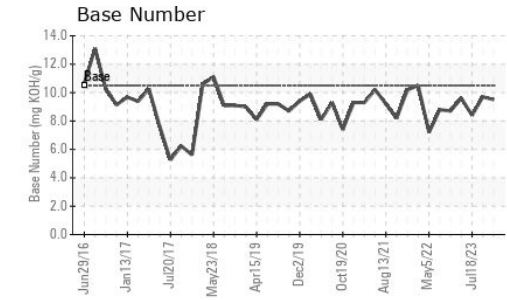
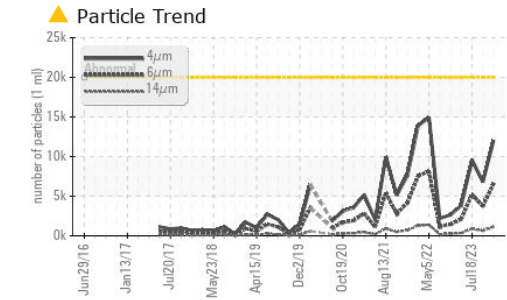
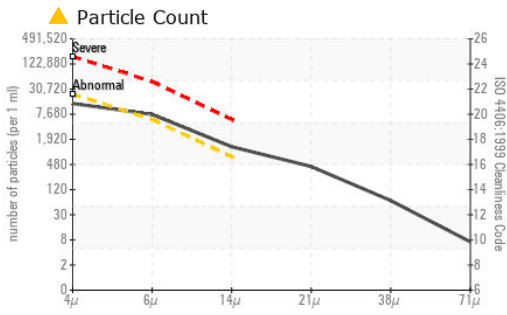
Sodium and/or potassium levels are high. There is a moderate amount of particulates present in the oil.

Silicon	ppm	ASTM D5185m	>25	5	8	12
Potassium	ppm	ASTM D5185m	>20	▲ 37	▲ 22	▲ 54
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol	%	*ASTM D2982		NEG	▲ 0.06	NEG
Soot %	%	*ASTM D7844	>3	0.2	0.2	0.3
Nitration	Abs/cm	*ASTM D7624	>20	8.8	7.4	10.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.2	21.9	22.7
Particles >4µm		ASTM D7647	>20000	12058	6794	9588
Particles >6µm		ASTM D7647	>5000	▲ 6569	3701	▲ 5223
Particles >14µm		ASTM D7647	>640	▲ 1118	630	▲ 889
Particles >21µm		ASTM D7647	>160	▲ 377	212	▲ 299
Particles >38µm		ASTM D7647	>40	▲ 58	33	▲ 46
Particles >71µm		ASTM D7647	>10	6	3	5
Oil Cleanliness		ISO 4406 (c)	>21/19/16	▲ 21/20/17	20/19/16	▲ 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

The BN result indicates that there is suitable alkalinity remaining in the oil.

Sodium	ppm	ASTM D5185m		▲ 404	▲ 223	▲ 544
Boron	ppm	ASTM D5185m		33	37	22
Barium	ppm	ASTM D5185m		<1	0	0
Molybdenum	ppm	ASTM D5185m		65	51	74
Manganese	ppm	ASTM D5185m		1	<1	<1
Magnesium	ppm	ASTM D5185m		513	501	565
Calcium	ppm	ASTM D5185m		1610	1651	1802
Phosphorus	ppm	ASTM D5185m		777	688	752
Zinc	ppm	ASTM D5185m		914	926	1002
Sulfur	ppm	ASTM D5185m		2426	2375	3051
Oxidation	Abs/.1mm	*ASTM D7414	>25	21.4	20.5	23.1
Base Number (BN)	mg KOH/g	ASTM D2896	10.5	9.5	9.7	8.4
Visc @ 100°C	cSt	ASTM D445	11.9	11.6	11.6	12.2



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0902822 **Received** : 08 Feb 2024
Lab Number : 06083515 **Tested** : 12 Feb 2024
Unique Number : 10870960 **Diagnosed** : 12 Feb 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