



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ATTENTION
FLUID CONDITION	NORMAL

Area
Mobile Fleet
 Machine Id
8104 8104
 Component
Diesel Engine
 Fluid
MOBIL DELVAC 1300 SUPER 10W30 (10 GAL)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. 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		WC0947769	WC0918971	WC0902929
Sample Date		Client Info		12 Jun 2024	01 May 2024	08 Mar 2024
Machine Age	hrs	Client Info		14403	14161	13830
Oil Age	hrs	Client Info		573	331	311
Filter Age	hrs	Client Info		573	331	311
Oil Changed		Client Info		Changed	Not Changd	Changed
Filter Changed		Client Info		Changed	Not Changd	Changed
Sample Status				ATTENTION	ABNORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	6	4	12
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>4	0	<1	0
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m	>3	0	<1	0
Aluminum	ppm	ASTM D5185m	>20	3	3	10
Lead	ppm	ASTM D5185m	>40	<1	2	<1
Copper	ppm	ASTM D5185m	>330	1	1	6
Tin	ppm	ASTM D5185m	>15	<1	2	<1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

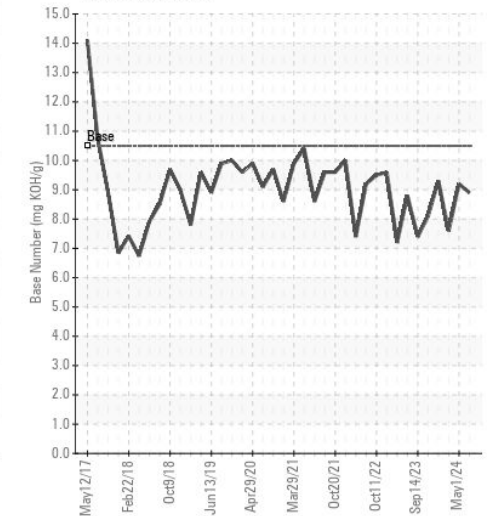
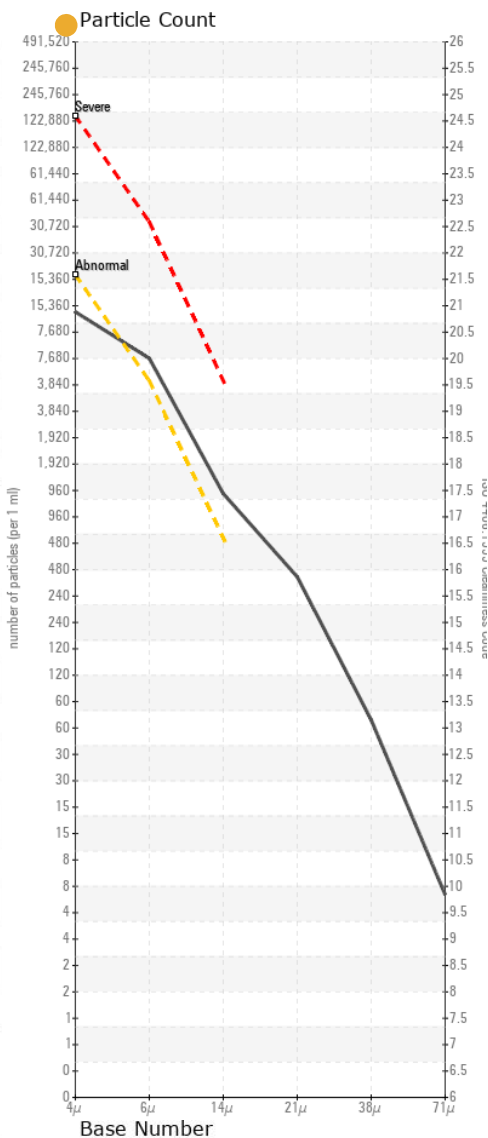
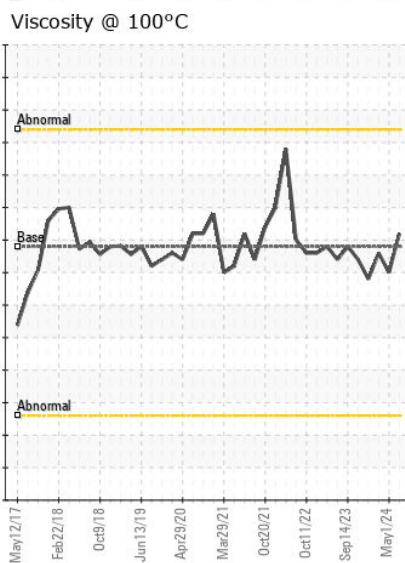
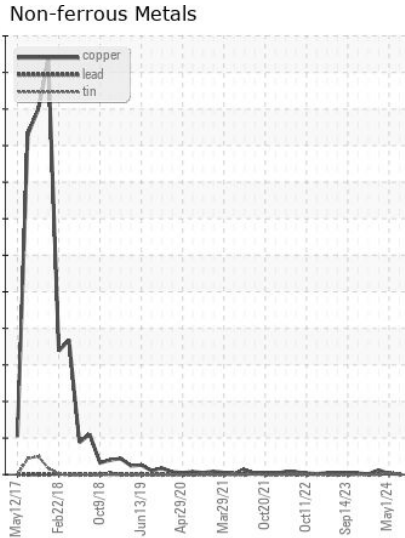
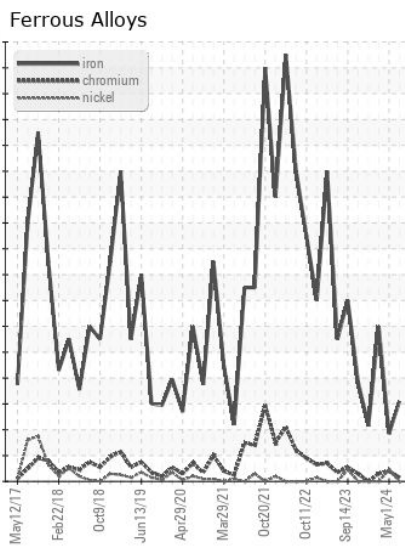
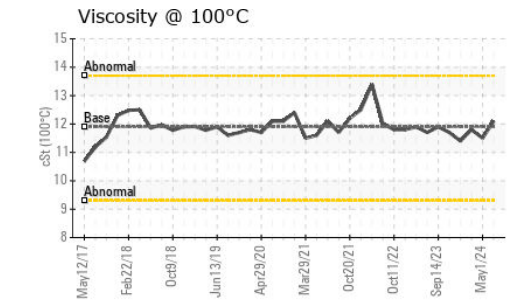
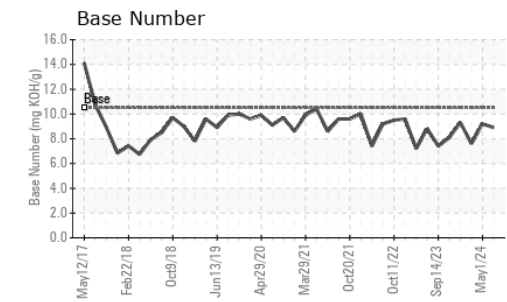
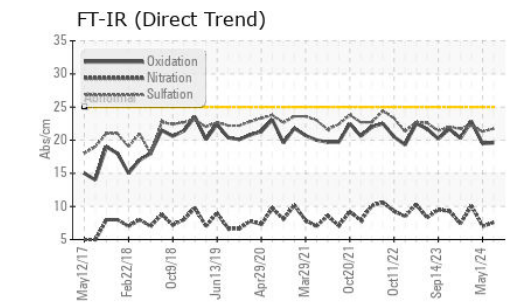
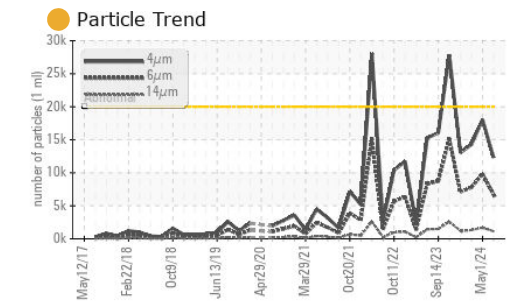
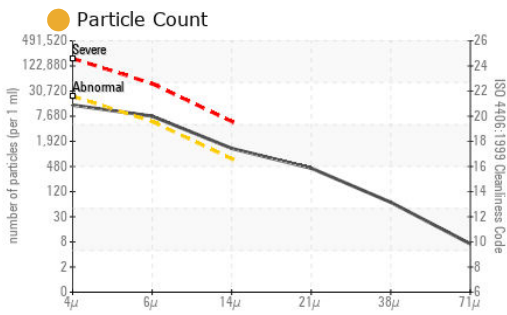
There is a moderate amount of particulates present in the oil.

Silicon	ppm	ASTM D5185m	>25	6	5	11
Potassium	ppm	ASTM D5185m	>20	3	3	6
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	0.5
Nitration	Abs/cm	*ASTM D7624	>20	7.6	7.0	10.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.7	21.3	22.2
Particles >4µm		ASTM D7647	>20000	12301	18034	14294
Particles >6µm		ASTM D7647	>5000	6701	9824	7787
Particles >14µm		ASTM D7647	>640	1140	1672	1325
Particles >21µm		ASTM D7647	>160	384	563	446
Particles >38µm		ASTM D7647	>40	59	87	69
Particles >71µm		ASTM D7647	>10	6	9	7
Oil Cleanliness		ISO 4406 (c)	>21/19/16	21/20/17	21/20/18	21/20/18
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. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<1	2	<1
Boron	ppm	ASTM D5185m		32	34	27
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		49	42	52
Manganese	ppm	ASTM D5185m		<1	1	0
Magnesium	ppm	ASTM D5185m		494	527	508
Calcium	ppm	ASTM D5185m		1568	1720	1694
Phosphorus	ppm	ASTM D5185m		687	824	748
Zinc	ppm	ASTM D5185m		909	958	950
Sulfur	ppm	ASTM D5185m		2670	3119	2577
Oxidation	Abs/.1mm	*ASTM D7414	>25	19.6	19.5	22.8
Base Number (BN)	mg KOH/g	ASTM D2896	10.5	8.9	9.2	7.6
Visc @ 100°C	cSt	ASTM D445	11.9	12.1	11.5	11.8



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0947769
Lab Number : 06209926
Unique Number : 11082790
Test Package : CONST (Additional Tests: PrtCount, TBN)

Received : 14 Jun 2024
Tested : 19 Jun 2024
Diagnosed : 19 Jun 2024 - Don Baldrige

CAROLINA SUNROCK
 PO BOX 25
 BUTNER, NC
 US 27509

Contact: Leigh Dennis
 rdennis@thesunrockgroup.com
 T: (919)575-4505
 F: (919)575-0162

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)