CONST

WEAR CHECK

OIL ANALYSIS REPORT

WEAR	ATTENTION
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Area
Mobile Fleet
Machine Id
6403 6403
Component
Diesel Engine
Fluid
MOBIL DELVAC 1300 SUPER 10W30 (10 GAL)

RECOMMENDATION

We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

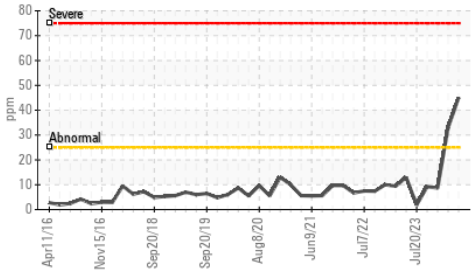
There is a moderate amount of particulates present in the oil. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

FLUID CONDITION

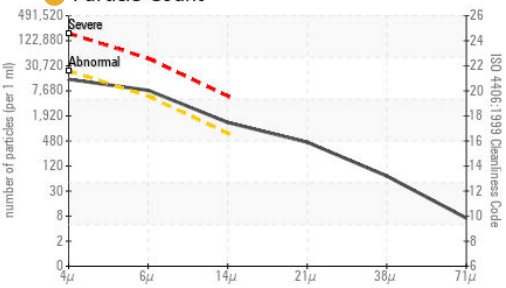
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0947845	WC0937797	WC0902851
Sample Date		Client Info		21 Jun 2024	20 May 2024	27 Feb 2024
Machine Age	hrs	Client Info		10959	10727	10476
Oil Age	hrs	Client Info		256	251	242
Filter Age	hrs	Client Info		256	251	242
Oil Changed		Client Info		Changed	Not Changd	Changed
Filter Changed		Client Info		Changed	Not Changd	Changed
Sample Status				ABNORMAL	ABNORMAL	ATTENTION
Iron	ppm	ASTM D5185m	>100	81	71	18
Chromium	ppm	ASTM D5185m	>20	5	3	<1
Nickel	ppm	ASTM D5185m	>4	2	<1	<1
Titanium	ppm	ASTM D5185m		1	<1	0
Silver	ppm	ASTM D5185m	>3	<1	<1	0
Aluminum	ppm	ASTM D5185m	>20	● 23	● 16	7
Lead	ppm	ASTM D5185m	>40	21	<1	<1
Copper	ppm	ASTM D5185m	>330	30	6	7
Tin	ppm	ASTM D5185m	>15	4	<1	<1
Vanadium	ppm	ASTM D5185m		<1	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>25	▲ 45	▲ 33	9
Potassium	ppm	ASTM D5185m	>20	30	23	● 62
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	0.9	0.5	0.1
Nitration	Abs/cm	*ASTM D7624	>20	8.4	6.8	5.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.2	21.9	21.4
Particles >4µm		ASTM D7647	>20000	12623	2210	7447
Particles >6µm		ASTM D7647	>5000	● 6877	1204	4057
Particles >14µm		ASTM D7647	>640	● 1170	205	● 690
Particles >21µm		ASTM D7647	>160	● 394	69	● 233
Particles >38µm		ASTM D7647	>40	● 61	11	36
Particles >71µm		ASTM D7647	>10	6	1	4
Oil Cleanliness		ISO 4406 (c)	>21/19/16	● 21/20/17	18/17/15	● 20/19/17
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
Sodium	ppm	ASTM D5185m		22	23	45
Boron	ppm	ASTM D5185m		32	45	38
Barium	ppm	ASTM D5185m		1	0	0
Molybdenum	ppm	ASTM D5185m		52	51	55
Manganese	ppm	ASTM D5185m		2	<1	<1
Magnesium	ppm	ASTM D5185m		466	552	590
Calcium	ppm	ASTM D5185m		1615	1882	1937
Phosphorus	ppm	ASTM D5185m		629	815	773
Zinc	ppm	ASTM D5185m		869	1017	1122
Sulfur	ppm	ASTM D5185m		2099	3087	2893
Oxidation	Abs/.1mm	*ASTM D7414	>25	20.4	19.2	18.9
Base Number (BN)	mg KOH/g	ASTM D2896	10.5	9.4	9.8	10.3
Visc @ 100°C	cSt	ASTM D445	11.9	11.7	11.4	11.3

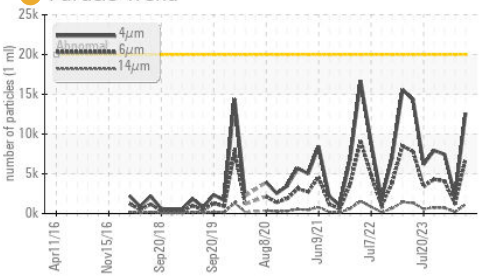
Silicon (ppm)



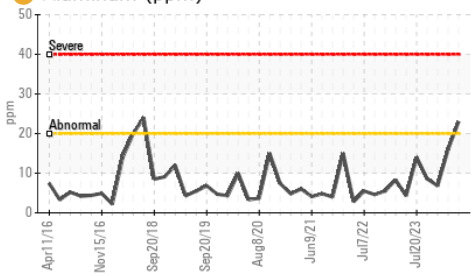
Particle Count



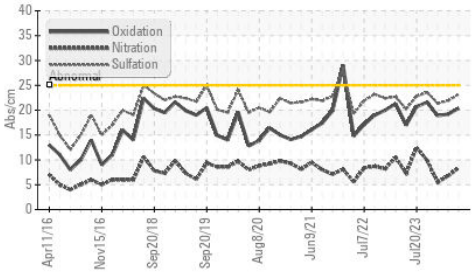
Particle Trend



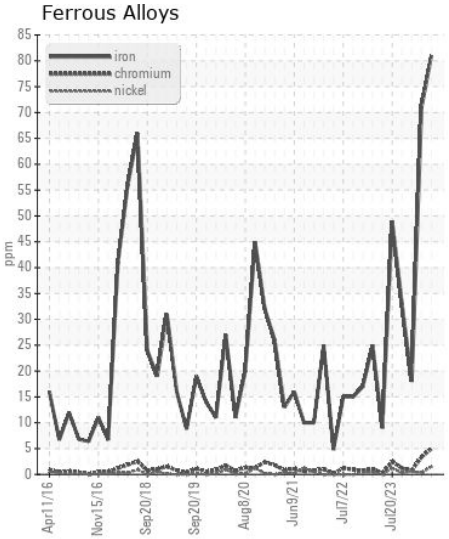
Aluminum (ppm)



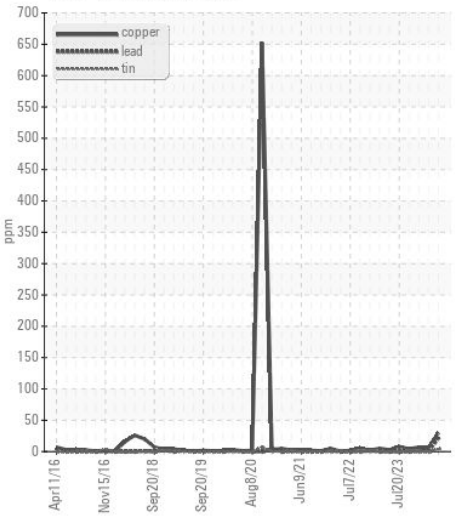
FT-IR (Direct Trend)



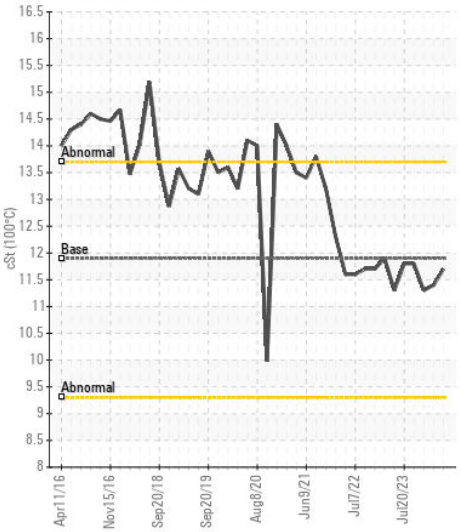
Ferrous Alloys



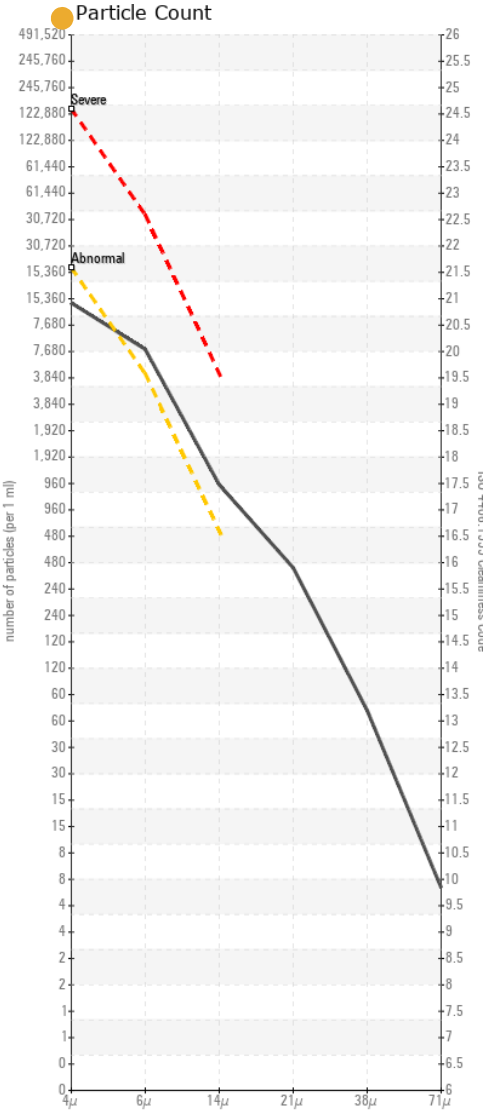
Non-ferrous Metals



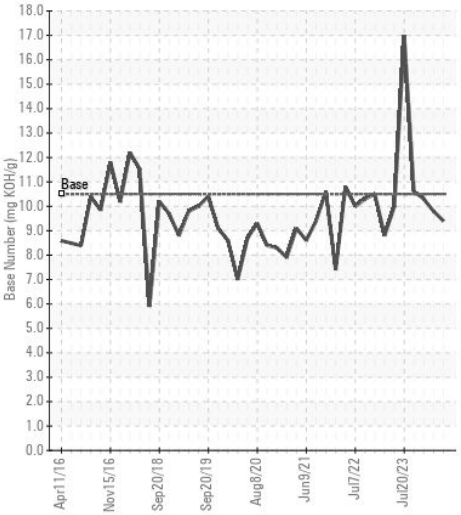
Viscosity @ 100°C



Particle Count



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0947845 **Received** : 25 Jun 2024
Lab Number : 06219559 **Tested** : 26 Jun 2024
Unique Number : 11097756 **Diagnosed** : 26 Jun 2024 - Don Baldridge
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)

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