



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
BIG EASY
Component
3 Main Engine
Fluid
DIESEL ENGINE OIL SAE 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		MW0064869	MW0064925	MW0057159
Sample Date		Client Info		04 Jun 2024	24 Jan 2024	16 Aug 2023
Machine Age	hrs	Client Info		19895	18993	16938
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	Not Changd	N/A
Filter Changed		Client Info		N/A	Not Changd	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>75	16	0	6
Chromium	ppm	ASTM D5185m	>8	<1	0	<1
Nickel	ppm	ASTM D5185m	>2	0	0	0
Titanium	ppm	ASTM D5185m	>3	14	13	15
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>15	2	<1	<1
Lead	ppm	ASTM D5185m	>18	0	3	<1
Copper	ppm	ASTM D5185m	>80	<1	<1	<1
Tin	ppm	ASTM D5185m	>14	0	<1	<1
Vanadium	ppm	ASTM D5185m		0	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

There is no indication of any contamination in the oil.

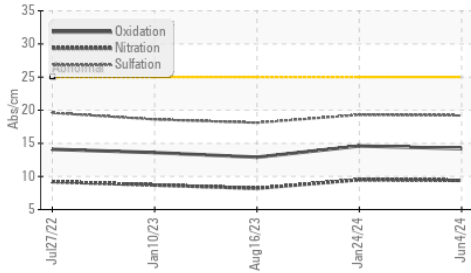
Silicon	ppm	ASTM D5185m	>20	4	0	4
Potassium	ppm	ASTM D5185m	>20	4	3	4
Fuel	%	ASTM D3524	>4.0	<1.0	<1.0	<1.0
Water		WC Method	>0.1	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844		0.4	0.4	0.2
Nitration	Abs/cm	*ASTM D7624	>20	9.4	9.5	8.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.2	19.3	18.1
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	>0.1	NEG	NEG	NEG

FLUID CONDITION

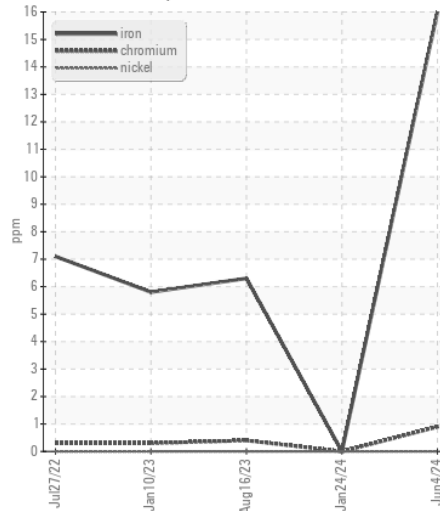
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>158	3	4	3
Boron	ppm	ASTM D5185m	250	70	74	90
Barium	ppm	ASTM D5185m	10	0	0	0
Molybdenum	ppm	ASTM D5185m	100	29	26	32
Manganese	ppm	ASTM D5185m		0	1	<1
Magnesium	ppm	ASTM D5185m	450	680	655	700
Calcium	ppm	ASTM D5185m	3000	1593	1475	1596
Phosphorus	ppm	ASTM D5185m	1150	767	668	739
Zinc	ppm	ASTM D5185m	1350	865	797	853
Sulfur	ppm	ASTM D5185m	4250	2927	2874	3092
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.2	14.6	12.9
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	7.9	7.9	8.0
Visc @ 100°C	cSt	ASTM D445	14.4	12.3	12.6	12.7

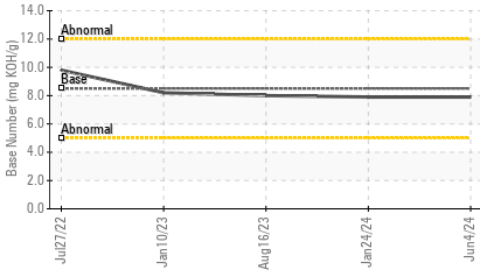
FT-IR (Direct Trend)



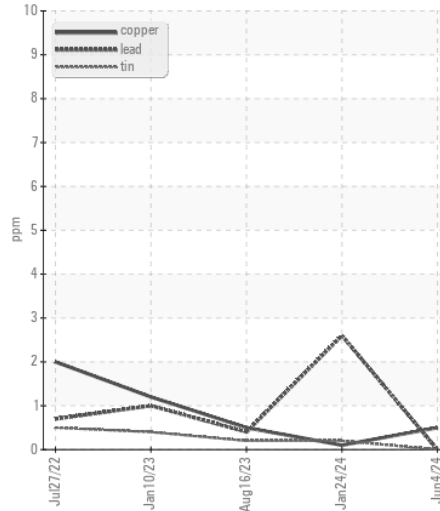
Ferrous Alloys



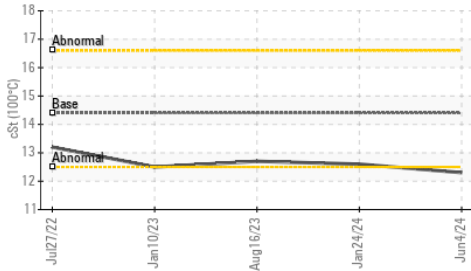
Base Number



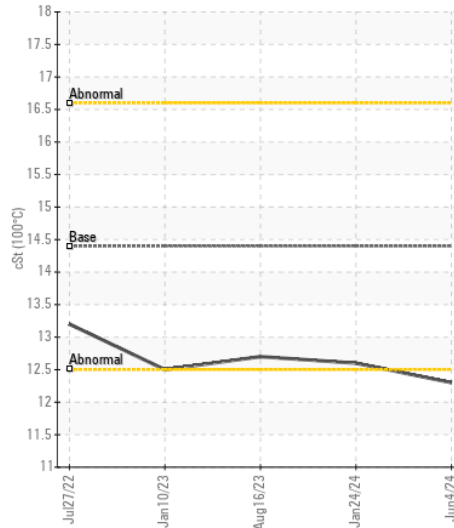
Non-ferrous Metals



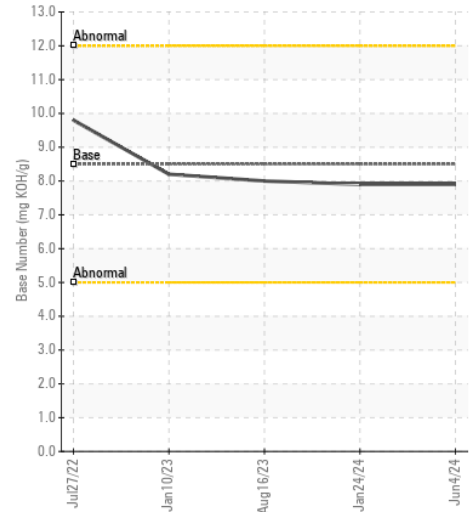
Viscosity @ 100°C



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : MW0064869 **Received** : 19 Jun 2024
Lab Number : 06214210 **Tested** : 20 Jun 2024
Unique Number : 11087074 **Diagnosed** : 20 Jun 2024 - Sean Felton
Test Package : MAR 2 (Additional Tests: FuelDilution)

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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)