



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
1DW410PAVPFB06791

Component
Diesel Engine

Fluid
{not provided} (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor. Please specify the component make and model with your next sample. Please specify the brand, type, and viscosity of the oil on your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0220441	JR0206048	JR0192925
Sample Date		Client Info		11 Jul 2024	03 Apr 2024	05 Dec 2023
Machine Age	hrs	Client Info		1532	1049	560
Oil Age	hrs	Client Info		483	489	560
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	Changed	Changed
Filter Changed		Client Info		N/A	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	12	16	33
Chromium	ppm	ASTM D5185m	>20	0	0	<1
Nickel	ppm	ASTM D5185m	>4	0	0	0
Titanium	ppm	ASTM D5185m		0	0	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	3	3	3
Lead	ppm	ASTM D5185m	>40	3	6	15
Copper	ppm	ASTM D5185m	>330	24	85	513
Tin	ppm	ASTM D5185m	>15	1	3	10
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.

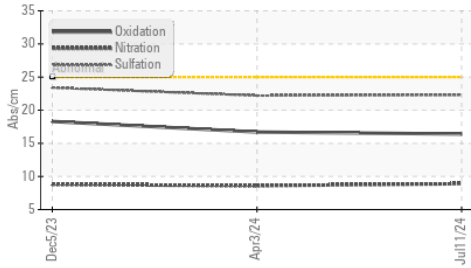
Silicon	ppm	ASTM D5185m	>25	5	5	13
Potassium	ppm	ASTM D5185m	>20	<1	<1	3
Fuel		WC Method	>5	<1.0	<1.0	0.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.3	0.3	0.3
Nitration	Abs/cm	*ASTM D7624	>20	8.9	8.6	8.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.3	22.2	23.4
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

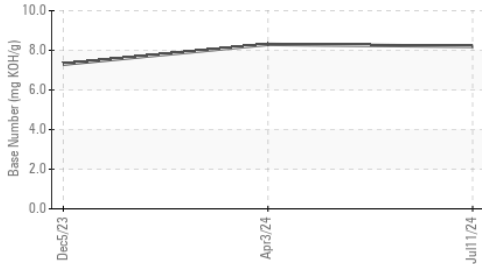
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		5	3	11
Boron	ppm	ASTM D5185m		176	178	163
Barium	ppm	ASTM D5185m		<1	0	0
Molybdenum	ppm	ASTM D5185m		240	239	245
Manganese	ppm	ASTM D5185m		<1	1	11
Magnesium	ppm	ASTM D5185m		789	836	819
Calcium	ppm	ASTM D5185m		1438	1458	1513
Phosphorus	ppm	ASTM D5185m		870	945	967
Zinc	ppm	ASTM D5185m		1013	1097	1162
Sulfur	ppm	ASTM D5185m		3147	3528	2901
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.4	16.7	18.3
Base Number (BN)	mg KOH/g	ASTM D2896		8.2	8.3	7.3
Visc @ 100°C	cSt	ASTM D445		12.6	12.5	10.3

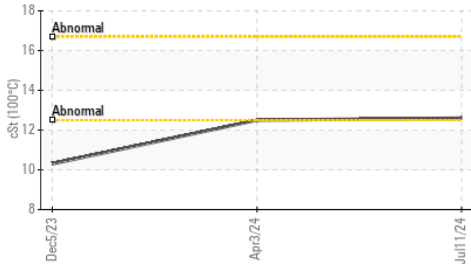
FT-IR (Direct Trend)



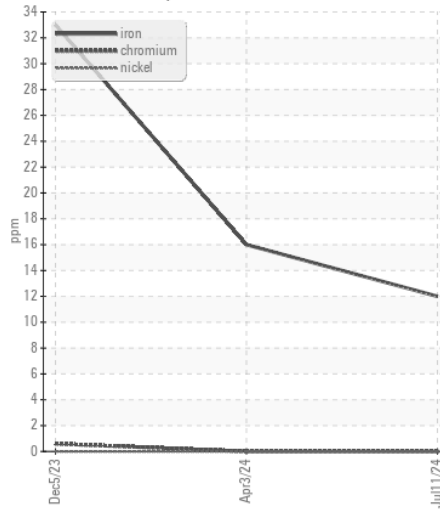
Base Number



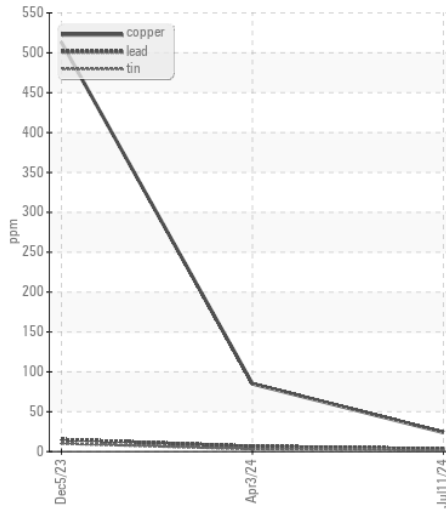
Viscosity @ 100°C



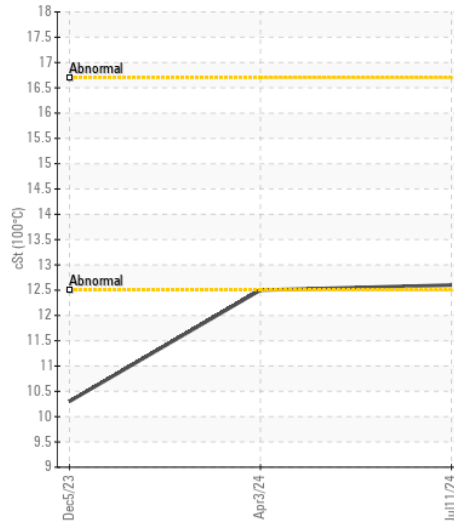
Ferrous Alloys



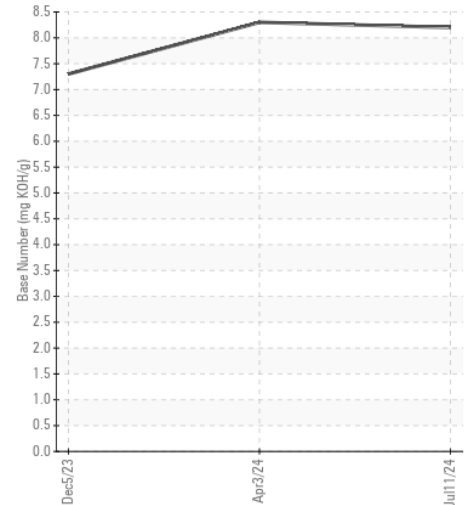
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : JR0220441

Lab Number : 06235663

Unique Number : 11124497

Test Package : CONST (Additional Tests: TBN)

Received : 15 Jul 2024

Tested : 16 Jul 2024

Diagnosed : 16 Jul 2024 - Wes Davis

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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