



# OIL ANALYSIS REPORT

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Machine Id  
**DODGE M31712**  
 Component  
**Diesel Engine**  
 Fluid  
**DIESEL ENGINE OIL SAE 15W40 (12 QTS)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>DC0034169</b>	DC0034084	DC0032038
Sample Date		Client Info		<b>28 Jun 2024</b>	26 Apr 2024	06 Dec 2023
Machine Age	mls	Client Info		<b>176486</b>	169980	156317
Oil Age	mls	Client Info		<b>6005</b>	5627	5942
Filter Age	mls	Client Info		<b>6005</b>	5627	5942
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	ATTENTION

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>120	<b>26</b>	62	41
Chromium	ppm	ASTM D5185m	>10	<b>1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>5	<b>&lt;1</b>	0	<1
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Silver	ppm	ASTM D5185m	>5	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>4</b>	7	7
Lead	ppm	ASTM D5185m	>40	<b>&lt;1</b>	<1	0
Copper	ppm	ASTM D5185m	>300	<b>4</b>	2	2
Tin	ppm	ASTM D5185m	>10	<b>&lt;1</b>	1	0
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

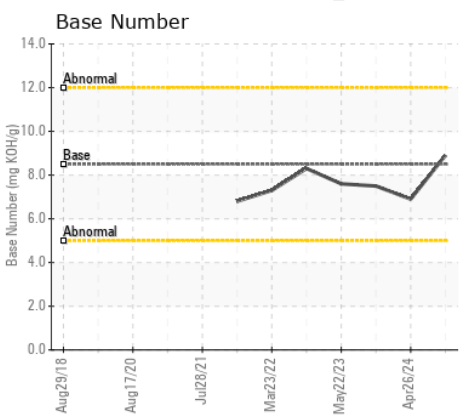
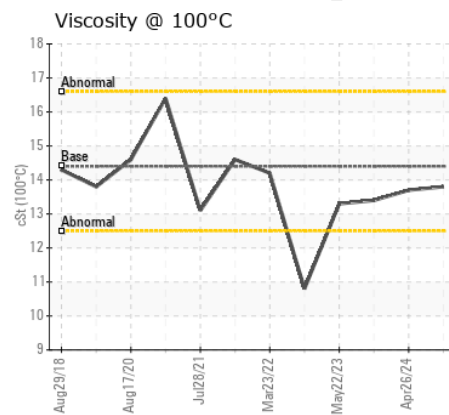
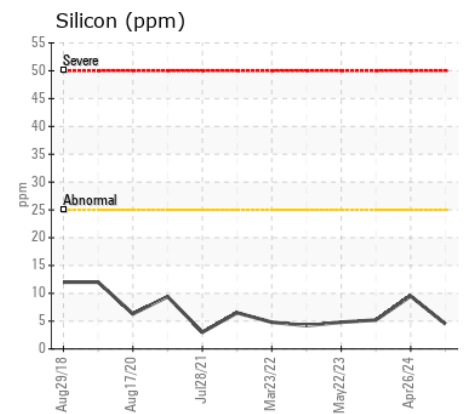
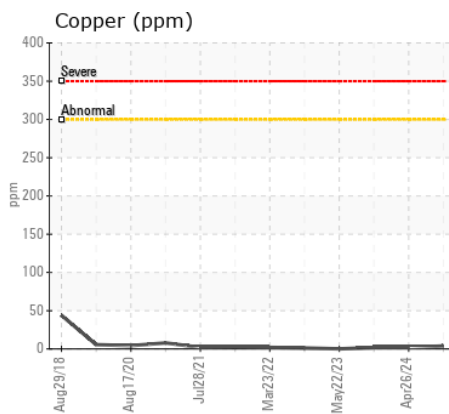
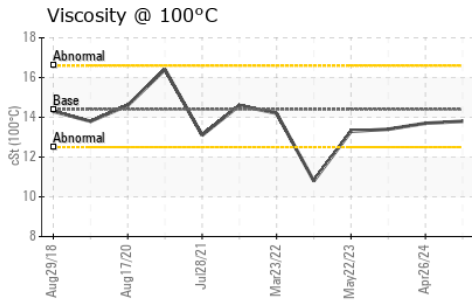
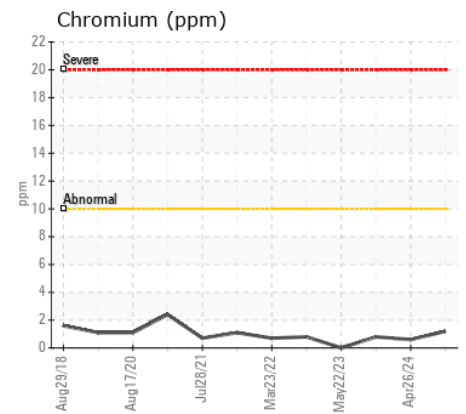
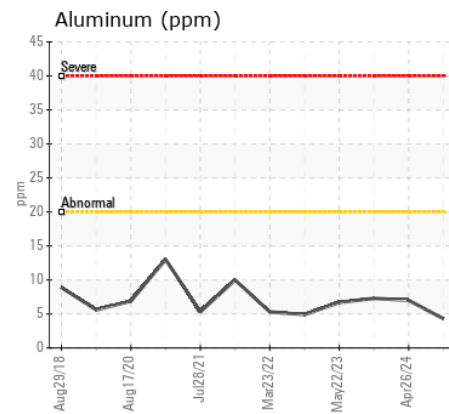
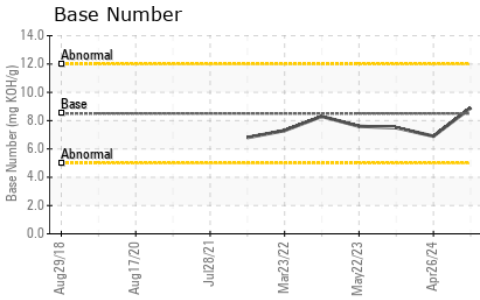
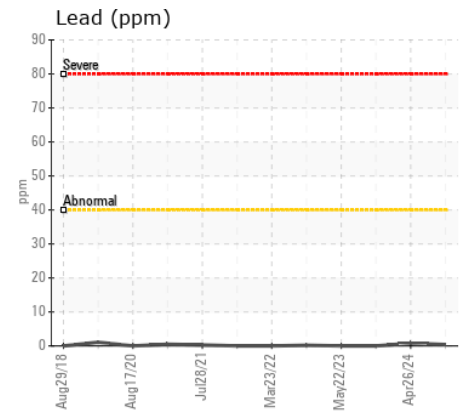
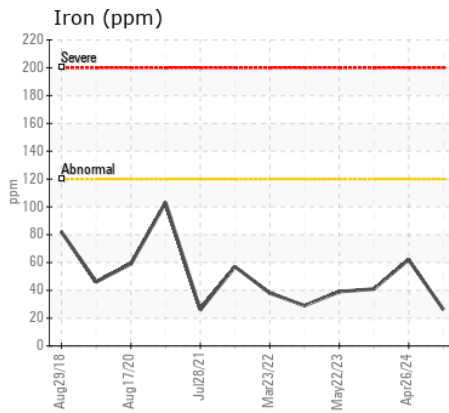
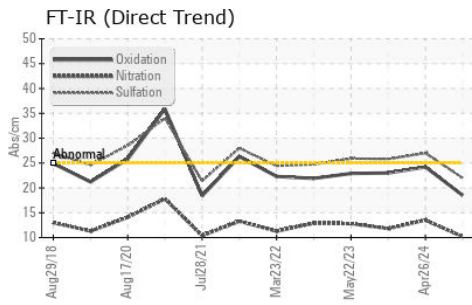
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>4</b>	10	5
Potassium	ppm	ASTM D5185m	>20	<b>10</b>	4	92
Fuel		WC Method	>4.0	<b>&lt;1.0</b>	<1.0	3.1
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	0.0
Soot %	%	*ASTM D7844		<b>0.8</b>	1.8	1.4
Nitration	Abs/cm	*ASTM D7624	>20	<b>10.2</b>	13.5	11.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>22.0</b>	27.0	25.8
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	<b>NEG</b>	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	<b>10</b>	5	92
Boron	ppm	ASTM D5185m	250	<b>2</b>	3	1
Barium	ppm	ASTM D5185m	10	<b>0</b>	0	<1
Molybdenum	ppm	ASTM D5185m	100	<b>63</b>	70	66
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	1	1
Magnesium	ppm	ASTM D5185m	450	<b>972</b>	1070	972
Calcium	ppm	ASTM D5185m	3000	<b>1126</b>	1147	1040
Phosphorus	ppm	ASTM D5185m	1150	<b>1018</b>	1166	1100
Zinc	ppm	ASTM D5185m	1350	<b>1303</b>	1352	1310
Sulfur	ppm	ASTM D5185m	4250	<b>2918</b>	3346	2890
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>18.5</b>	24.2	23.0
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	<b>8.9</b>	6.9	7.5
Visc @ 100°C	cSt	ASTM D445	14.4	<b>13.8</b>	13.7	13.4



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : DC0034169  
**Lab Number** : 06232112  
**Unique Number** : 11115605  
**Test Package** : MOB 1 ( Additional Tests: TBN )

**Received** : 10 Jul 2024  
**Tested** : 11 Jul 2024  
**Diagnosed** : 11 Jul 2024 - Wes Davis

**M&M FLEET**  
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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)