



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	SEVERE
FLUID CONDITION	ABNORMAL

Machine Id
DODGE M31503
 Component
Diesel Engine
 Fluid
DIESEL ENGINE OIL SAE 15W40 (12 QTS)

RECOMMENDATION

We advise that you check the fuel injection system. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		DC0034077	DC0032043	DC0026264
Sample Date		Client Info		08 May 2024	29 Nov 2023	10 Apr 2023
Machine Age	mls	Client Info		202802	193345	178150
Oil Age	mls	Client Info		11469	10753	9825
Filter Age	mls	Client Info		11469	10753	9825
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				SEVERE	SEVERE	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>120	66	88	47
Chromium	ppm	ASTM D5185m	>10	6	3	2
Nickel	ppm	ASTM D5185m	>5	0	<1	0
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m	>5	<1	0	0
Aluminum	ppm	ASTM D5185m	>20	5	8	5
Lead	ppm	ASTM D5185m	>40	<1	0	0
Copper	ppm	ASTM D5185m	>300	2	3	2
Tin	ppm	ASTM D5185m	>10	<1	<1	0
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

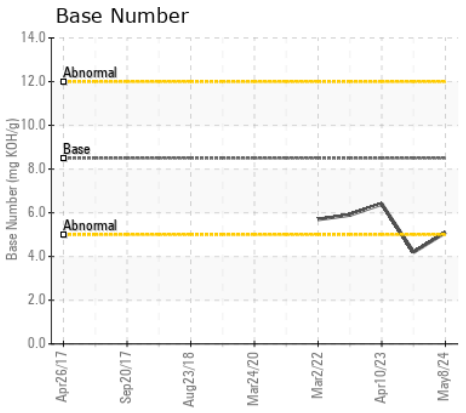
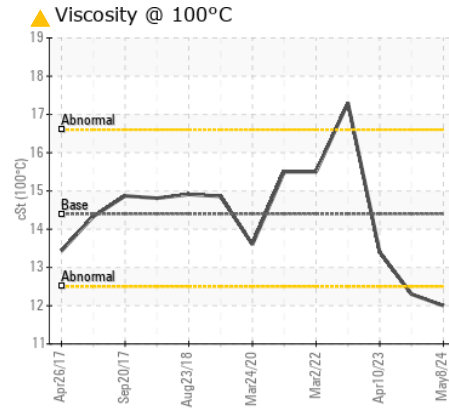
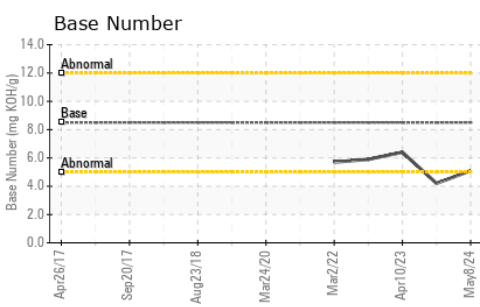
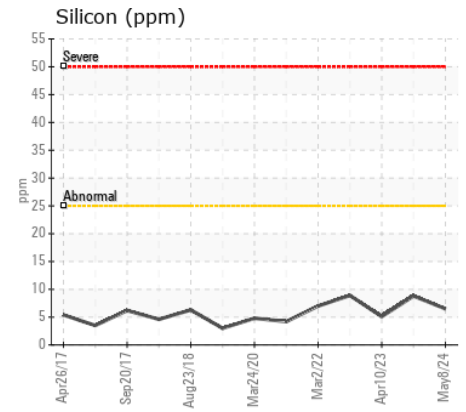
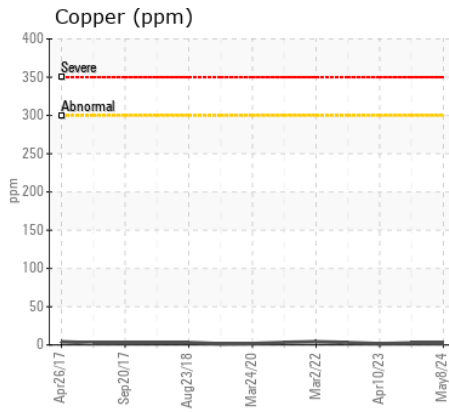
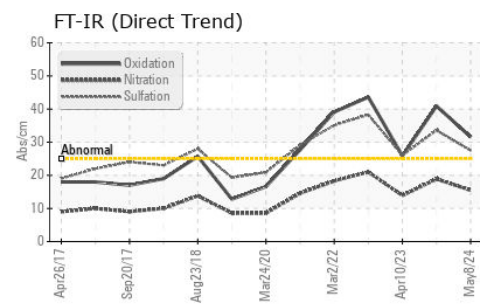
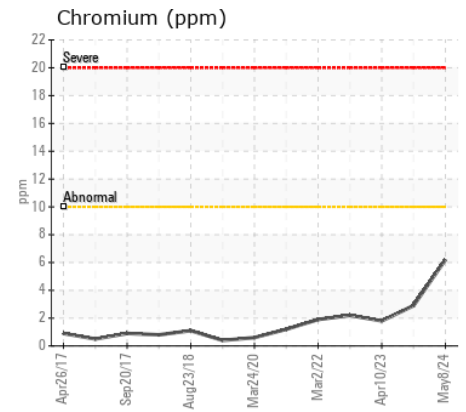
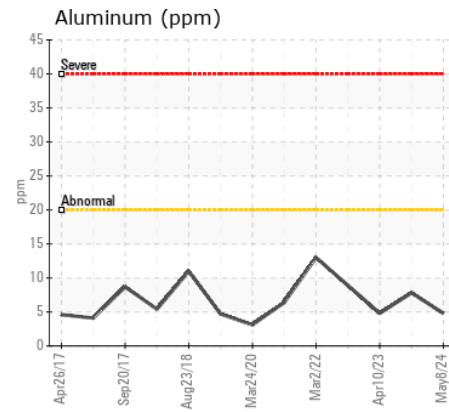
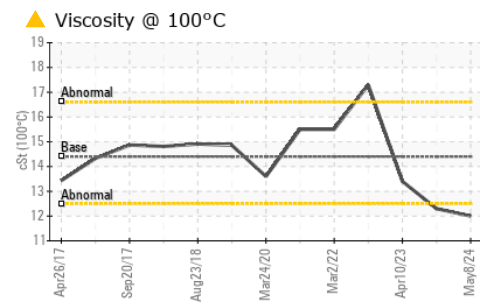
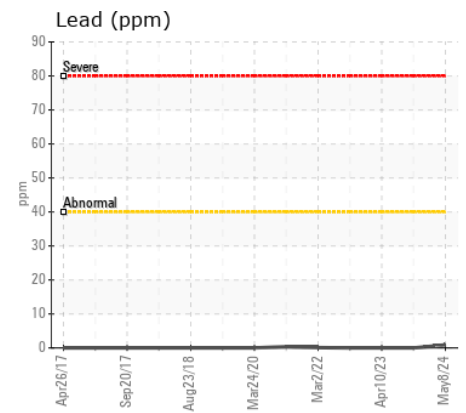
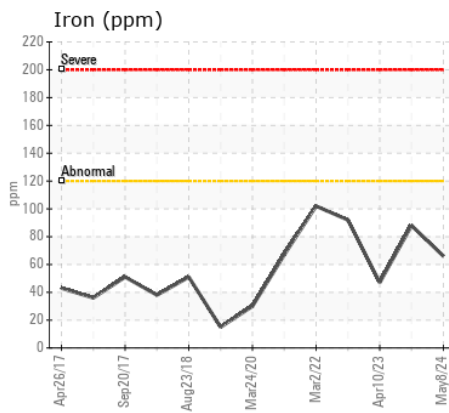
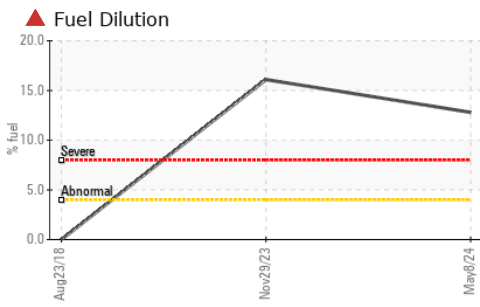
There is a high amount of fuel present in the oil.

Silicon	ppm	ASTM D5185m	>25	6	9	5
Potassium	ppm	ASTM D5185m	>20	3	6	10
Fuel	%	ASTM D3524	>4.0	▲ 12.8	▲ 16.1	<1.0
Water		WC Method	>0.1	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844		0.9	1.6	0.9
Nitration	Abs/cm	*ASTM D7624	>20	15.5	18.9	13.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	27.5	33.6	26.0
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

Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185m	>158	5	6	7
Boron	ppm	ASTM D5185m	250	1	3	12
Barium	ppm	ASTM D5185m	10	0	<1	0
Molybdenum	ppm	ASTM D5185m	100	53	60	66
Manganese	ppm	ASTM D5185m		2	1	1
Magnesium	ppm	ASTM D5185m	450	820	886	987
Calcium	ppm	ASTM D5185m	3000	1028	1010	1095
Phosphorus	ppm	ASTM D5185m	1150	943	978	1037
Zinc	ppm	ASTM D5185m	1350	1077	1180	1277
Sulfur	ppm	ASTM D5185m	4250	2686	2292	3352
Oxidation	Abs/.1mm	*ASTM D7414	>25	31.6	40.9	25.9
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	5.1	4.2	6.4
Visc @ 100°C	cSt	ASTM D445	14.4	▲ 12.0	▲ 12.3	13.4



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : DC0034077 **Received** : 29 May 2024
Lab Number : 06194837 **Tested** : 03 Jun 2024
Unique Number : 11056960 **Diagnosed** : 03 Jun 2024 - Don Baldrige
Test Package : MOB 1 (Additional Tests: PercentFuel, TBN)

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Certificate L2367
 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)