

WEAR	
CONTAMINATION	
FLUID CONDITION	NORMAL

## Machine Id M00710 Component Diesel Engine Fluid DIESEL ENGINE OIL SAE 15W40 (--- GAL)

222222					~~~~~		
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor. Please specify the	Sample Number		Client Info		DC0034093	DC0026294	DC0022317
	Sample Date		Client Info		21 Mar 2024	27 Apr 2023	19 Oct 2022
component make and model with your next sample.	Machine Age	mls	Client Info		7485	0	5246
	Oil Age	mls	Client Info		0	0	0
	Filter Age	mls	Client Info		0	0	0
	Oil Changed		Client Info		Changed	Changed	Changed
	Filter Changed		Client Info		Changed	Changed	Changed
	Sample Status				NORMAL	NORMAL	NORMAL
WEAR Metal levels are typical for a new component breaking in.	Iron	ppm	ASTM D5185m	>100	34	21	13
	Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
	Nickel	ppm	ASTM D5185m	>4	0	0	0
	Titanium	ppm	ASTM D5185m		0	<1	0
	Silver	ppm	ASTM D5185m	>3	0	0	0
	Aluminum	ppm	ASTM D5185m	>20	1	2	2
	Lead	ppm	ASTM D5185m	>40	<1	<1	<1
	Copper	ppm	ASTM D5185m	>330	4	<1	<1
	Tin	ppm	ASTM D5185m	>15	<1	<1	<1
	Vanadium	ppm	ASTM D5185m		0	0	0
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	4	4	4
	Potassium	ppm	ASTM D5185m	>20	1	2	0
There is no indication of any contamination in the oil.	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	1.2	0.5	0.6
	Nitration	Abs/cm	*ASTM D7624	>20	7.6	6.0	7.3
	Sulfation	Abs/.1mm	*ASTM D7415	>30	19.9	15.6	18.6
	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	Sodium	ppm	ASTM D5185m	>158	4	<1	<1
	Boron	ppm	ASTM D5185m	250	0	2	0
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.	Barium	ppm	ASTM D5185m	10	1	0	0
	Molybdenum	ppm	ASTM D5185m	100	4	3	3
	Manganese	ppm	ASTM D5185m		1	<1	<1
	Magnesium	ppm	ASTM D5185m	450	62	49	46
	Calcium	ppm	ASTM D5185m	3000	2430	2447	2480
	Phosphorus	ppm	ASTM D5185m	1150	920	945	889
	Zinc	ppm	ASTM D5185m	1350	1085	1119	1043
	Sulfur	ppm	ASTM D5185m	4250	4216	4479	4415
	Oxidation	Abs/.1mm	*ASTM D7414	>25	10.4	8.8	10.2
	Base Number (BN)			8.5	7.0	6.6	8.8
	Vian @ 100%C	~C+		- 4 4	407	10.0	10.0

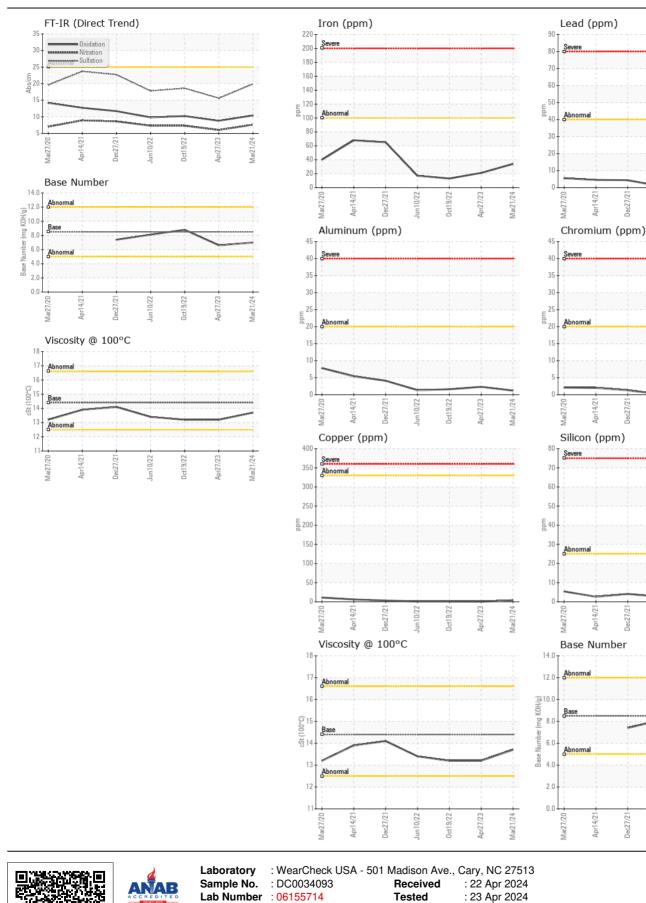
Visc @ 100°C cSt

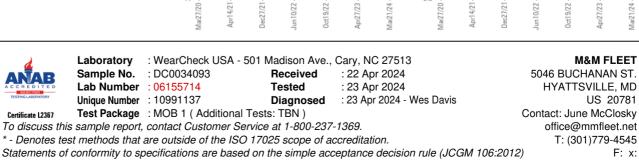
ASTM D445 14.4

13.2

13.2

13.7





0ct19/22

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0ct19/22

Apr27/23

vor27/23

Apr27/23

lar21/24

Mar21/24

/lar21/24

Certificate L2367

Unique Number : 10991137

Test Package : MOB 1 (Additional Tests: TBN)

\* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

To discuss this sample report, contact Customer Service at 1-800-237-1369.

Contact/Location: June McClosky - MMFHYA Page 2 of 2

: 23 Apr 2024 - Wes Davis

Diagnosed