



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id

22

Component

Diesel Engine

Fluid

UNITED OIL DURALENE (--- QTS)

RECOMMENDATION

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		DC0032285	DC0032052	DC0028350
Sample Date		Client Info		15 Feb 2024	29 Nov 2023	20 Jul 2023
Machine Age	hrs	Client Info		250	250	250
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	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	4	8	5
Chromium	ppm	ASTM D5185m	>20	0	<1	<1
Nickel	ppm	ASTM D5185m	>4	0	<1	0
Titanium	ppm	ASTM D5185m		0	<1	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	1	2	1
Lead	ppm	ASTM D5185m	>40	0	<1	0
Copper	ppm	ASTM D5185m	>330	<1	1	0
Tin	ppm	ASTM D5185m	>15	0	<1	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

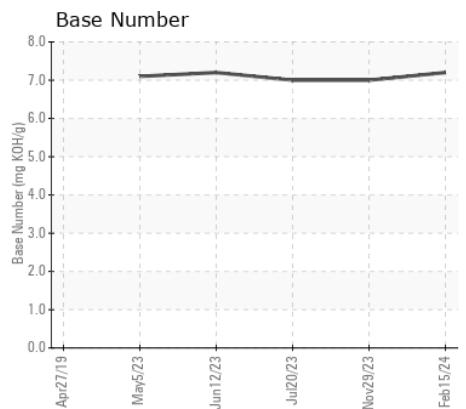
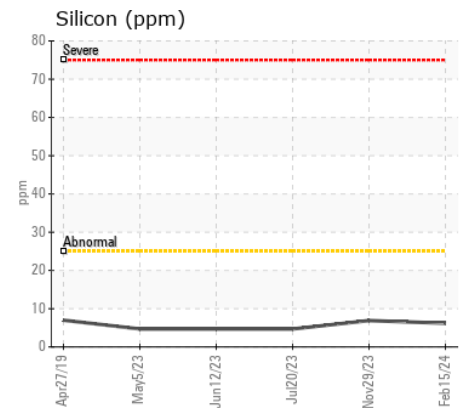
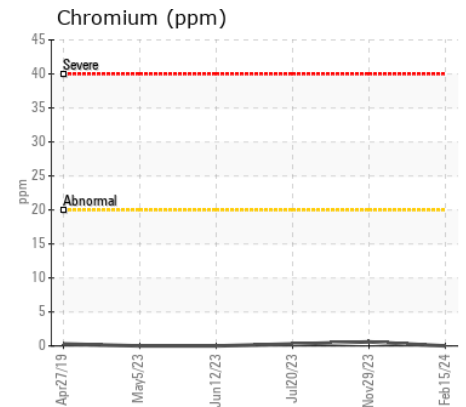
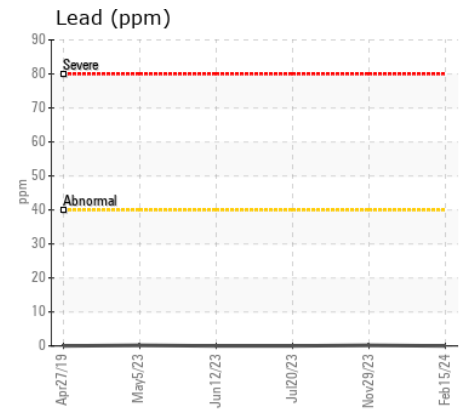
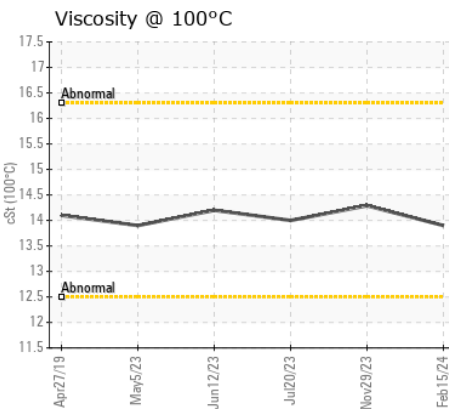
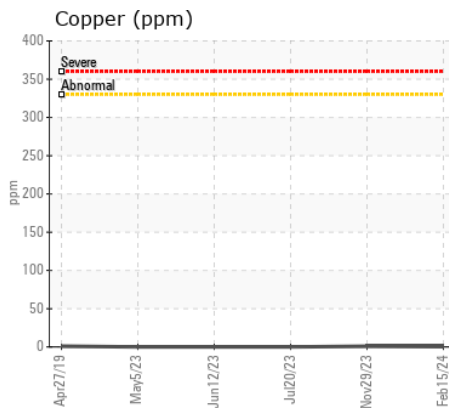
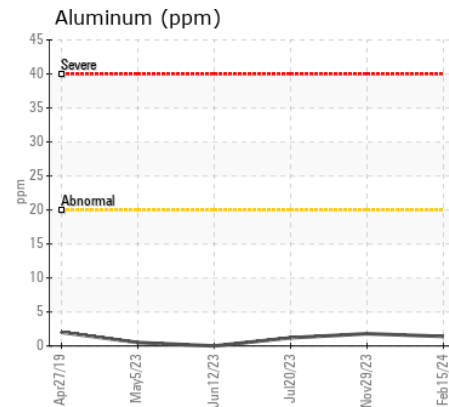
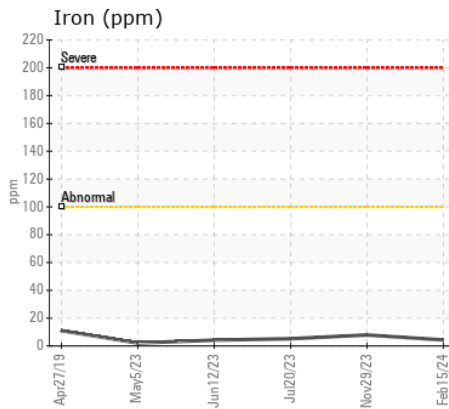
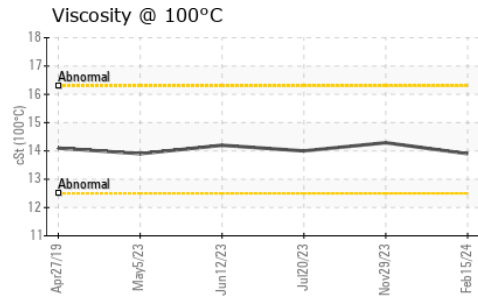
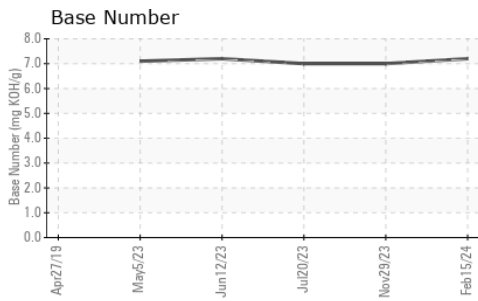
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	6	7	5
Potassium	ppm	ASTM D5185m	>20	1	3	1
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	0.5	0.9	0.7
Nitration	Abs/cm	*ASTM D7624	>20	7.1	7.6	7.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	17.4	18.7	18.0
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	>0.2	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		1	0	<1
Boron	ppm	ASTM D5185m		4	2	<1
Barium	ppm	ASTM D5185m		0	12	0
Molybdenum	ppm	ASTM D5185m		4	4	3
Manganese	ppm	ASTM D5185m		<1	<1	0
Magnesium	ppm	ASTM D5185m		85	50	47
Calcium	ppm	ASTM D5185m		2299	2275	2306
Phosphorus	ppm	ASTM D5185m		960	900	823
Zinc	ppm	ASTM D5185m		1099	1041	989
Sulfur	ppm	ASTM D5185m		3803	4082	4076
Oxidation	Abs/.1mm	*ASTM D7414	>25	9.8	10.3	10.3
Base Number (BN)	mg KOH/g	ASTM D2896		7.2	7.0	7.0
Visc @ 100°C	cSt	ASTM D445		13.9	14.29	14.0



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : DC0032285 **Received** : 28 Feb 2024
Lab Number : 06103480 **Tested** : 01 Mar 2024
Unique Number : 10901710 **Diagnosed** : 01 Mar 2024 - Wes Davis
Test Package : MOB 1 (Additional Tests: TBN)

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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)