



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
12923
Component
2 Diesel Engine
Fluid
DURAMAX 15W40 (--- GAL)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		DC0036050	DC0026997	DC0022055
Sample Date		Client Info		21 Feb 2024	30 Jan 2023	27 May 2022
Machine Age	hrs	Client Info		6479	0	6021
Oil Age	hrs	Client Info		250	0	250
Filter Age	hrs	Client Info		0	0	250
Oil Changed		Client Info		Changed	N/A	Changed
Filter Changed		Client Info		Changed	N/A	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All other component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	114	20	18
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>4	0	0	0
Titanium	ppm	ASTM D5185m		0	0	<1
Silver	ppm	ASTM D5185m	>3	0	0	<1
Aluminum	ppm	ASTM D5185m	>20	10	6	6
Lead	ppm	ASTM D5185m	>40	0	0	<1
Copper	ppm	ASTM D5185m	>330	3	<1	2
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

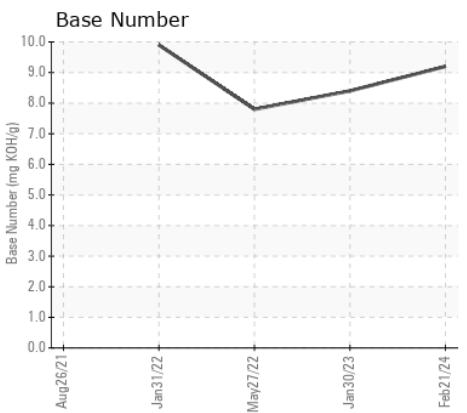
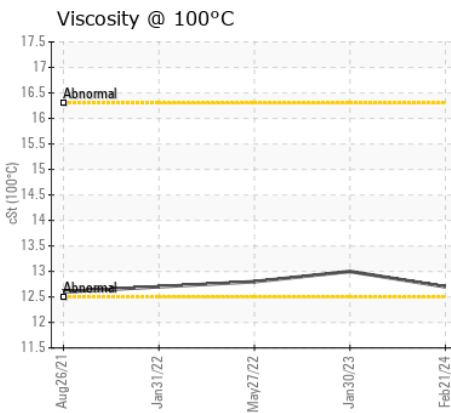
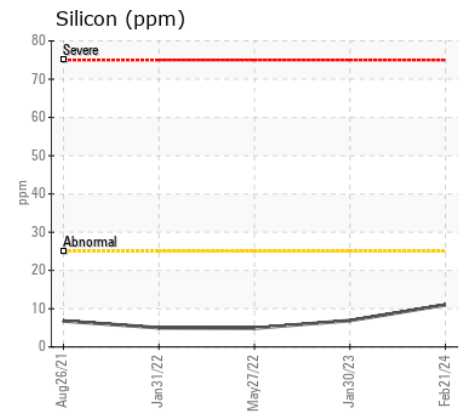
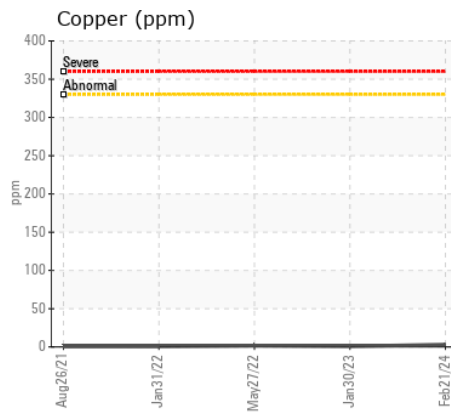
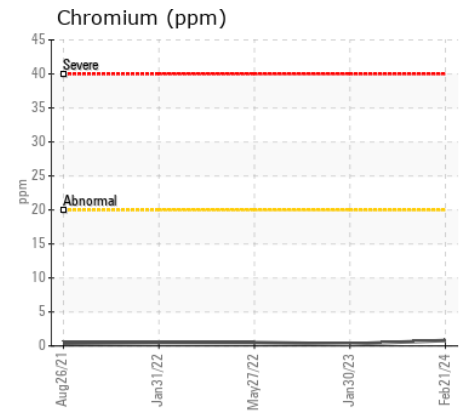
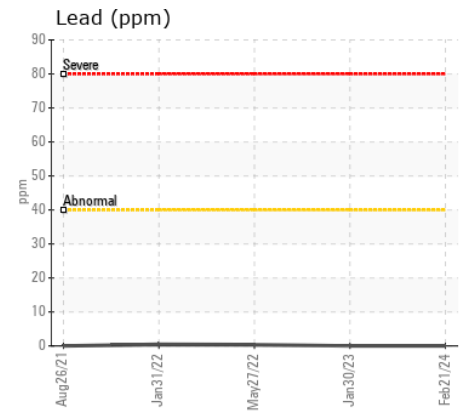
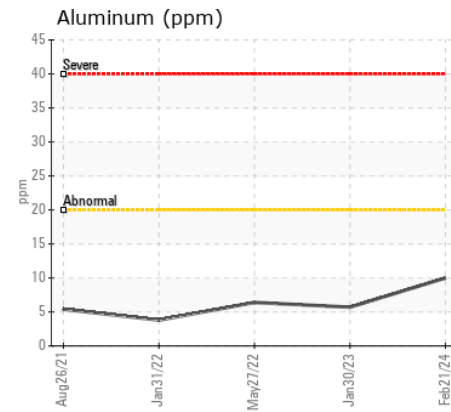
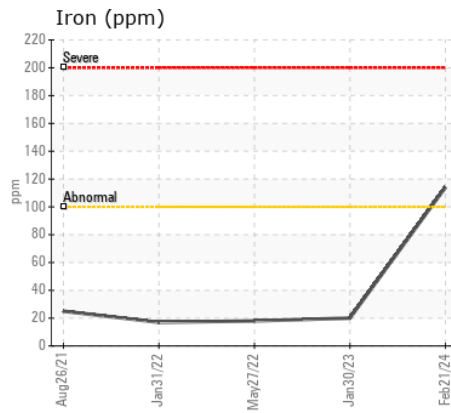
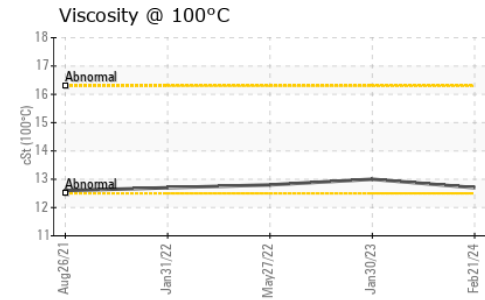
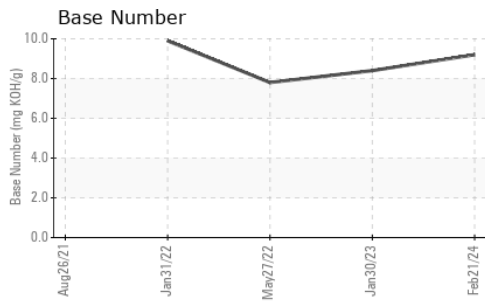
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	11	7	5
Potassium	ppm	ASTM D5185m	>20	3	4	2
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	0.4	0.4	0.5
Nitration	Abs/cm	*ASTM D7624	>20	7.3	7.9	8.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.1	17.1	18.3
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 acceptable for the time in service.

Sodium	ppm	ASTM D5185m		3	<1	1
Boron	ppm	ASTM D5185m		31	5	12
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		26	5	9
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		345	69	113
Calcium	ppm	ASTM D5185m		1951	2281	2221
Phosphorus	ppm	ASTM D5185m		889	885	866
Zinc	ppm	ASTM D5185m		1015	1056	1039
Sulfur	ppm	ASTM D5185m		3105	3542	3384
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.8	11.0	12.7
Base Number (BN)	mg KOH/g	ASTM D2896		9.2	8.4	7.8
Visc @ 100°C	cSt	ASTM D445		12.7	13.0	12.8



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : DC0036050 **Received** : 28 Feb 2024
Lab Number : 06103477 **Tested** : 02 Mar 2024
Unique Number : 10901707 **Diagnosed** : 02 Mar 2024 - Don Baldrige
Test Package : MOB 1 (Additional Tests: TBN)

FRANCIS O DAY
 14900 SOUTHLAWN LN
 ROCKVILLE, MD
 US 20850
 Contact: JAMIE FORESTER

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)

T:
F: