



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
B21
Component
Diesel Engine
Fluid
10W30 DURON SEMI (--- 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		LP0001568	LP0000587	WC0661690
Sample Date		Client Info		06 Jan 2024	07 Aug 2023	07 Apr 2023
Machine Age	hrs	Client Info		1279	836	448
Oil Age	hrs	Client Info		443	420	448
Filter Age	hrs	Client Info		443	420	448
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	46	41	61
Chromium	ppm	ASTM D5185m	>20	2	2	2
Nickel	ppm	ASTM D5185m	>4	0	<1	<1
Titanium	ppm	ASTM D5185m		<1	1	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	26	12	9
Lead	ppm	ASTM D5185m	>40	0	0	0
Copper	ppm	ASTM D5185m	>330	8	12	39
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

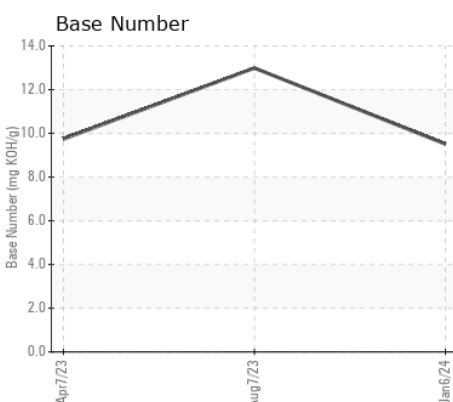
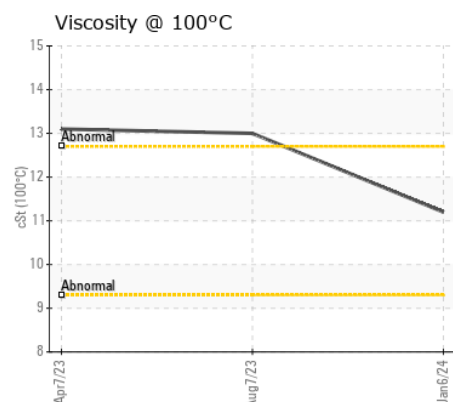
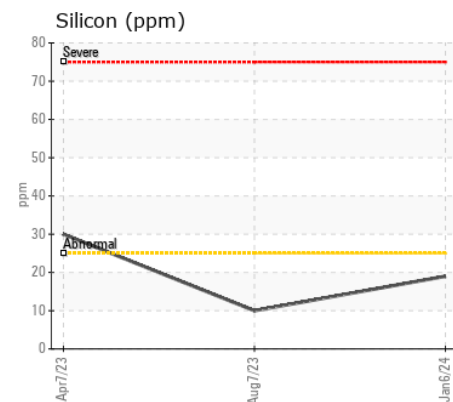
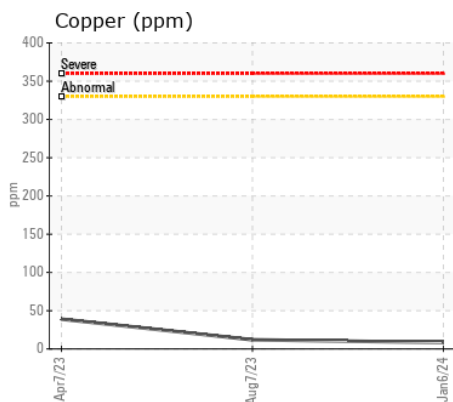
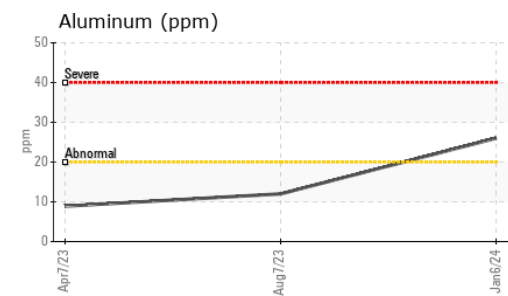
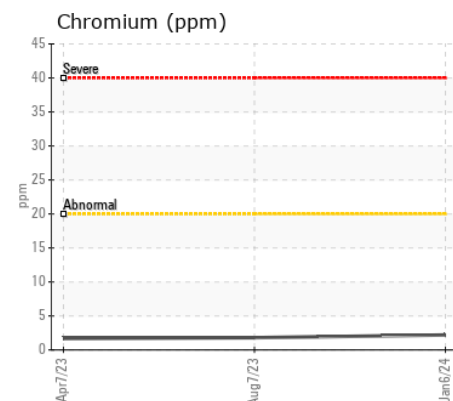
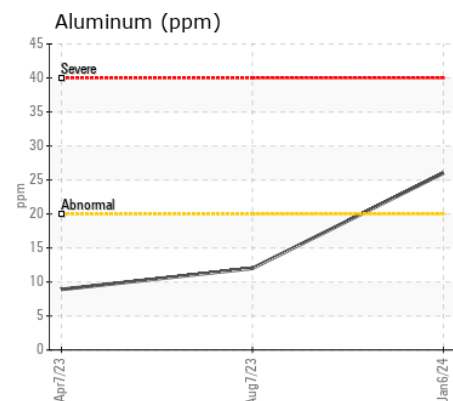
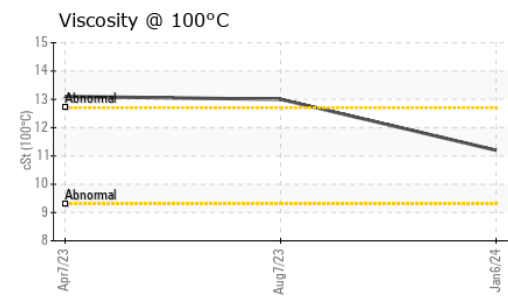
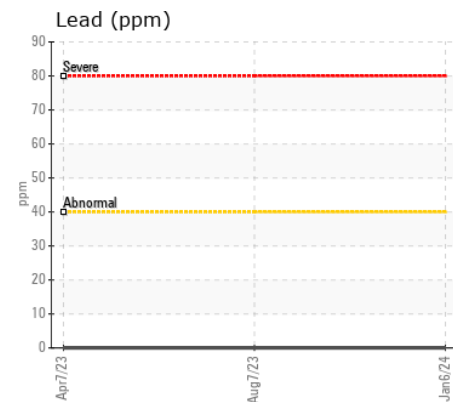
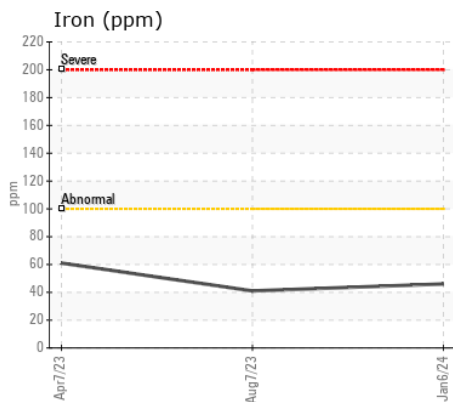
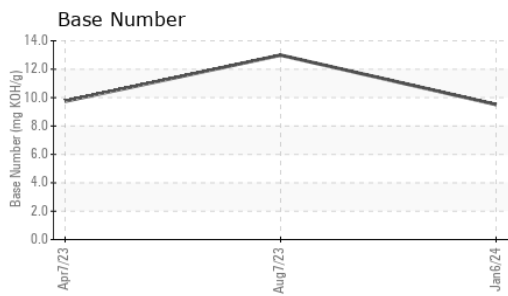
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	19	10	30
Potassium	ppm	ASTM D5185m	>20	91	33	24
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	0.6	0.5	0.5
Nitration	Abs/cm	*ASTM D7624	>20	9.5	8.9	9.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.5	20.1	21.6
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

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		4	2	7
Boron	ppm	ASTM D5185m		4	12	49
Barium	ppm	ASTM D5185m		0	2	5
Molybdenum	ppm	ASTM D5185m		65	61	41
Manganese	ppm	ASTM D5185m		<1	1	6
Magnesium	ppm	ASTM D5185m		965	897	550
Calcium	ppm	ASTM D5185m		1081	1154	1615
Phosphorus	ppm	ASTM D5185m		997	990	723
Zinc	ppm	ASTM D5185m		1235	1221	880
Sulfur	ppm	ASTM D5185m		2809	3175	2639
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.8	16.6	20.7
Base Number (BN)	mg KOH/g	ASTM D2896		9.51	12.99	9.74
Visc @ 100°C	cSt	ASTM D445		11.2	13.0	13.1



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LP0001568 **Received** : 10 Jan 2024
Lab Number : 06057464 **Diagnosed** : 12 Jan 2024
Unique Number : 10823413 **Diagnostician** : Wes Davis
Test Package : MOB 2

SELECT DEMO
 40 LOWELL RD
 SALEM, NH
 US 03079
 Contact: STAN DOGIL
 SDOGIL@SELECTDEMOSERVICES.COM
 T: (603)401-0147
 F: (603)458-7389

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)