

Area
TRACTORS
Machine Id
[TRACTORS] TR376
Component
Diesel Engine
Fluid
KENDALL 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PCA0098491	LP0001121	LP0000438
Sample Date		Client Info		08 Apr 2024	22 Nov 2023	20 Sep 2023
Machine Age	hrs	Client Info		4564	3880	3342
Oil Age	hrs	Client Info		600	600	600
Filter Age	hrs	Client Info		600	600	600
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	ATTENTION

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>110	30	34	10
Chromium	ppm	ASTM D5185m	>4	<1	<1	<1
Nickel	ppm	ASTM D5185m	>2	<1	<1	0
Titanium	ppm	ASTM D5185m		2	1	<1
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>25	20	21	11
Lead	ppm	ASTM D5185m	>45	<1	<1	<1
Copper	ppm	ASTM D5185m	>85	2	5	1
Tin	ppm	ASTM D5185m	>4	<1	<1	<1
Vanadium	ppm	ASTM D5185m		<1	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

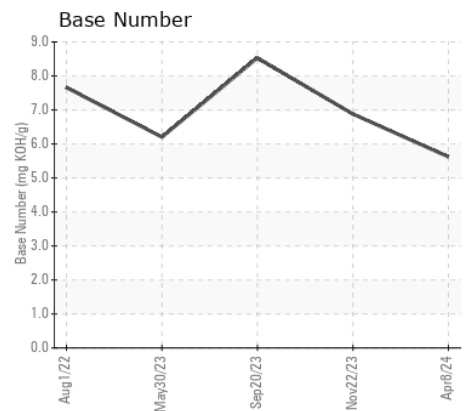
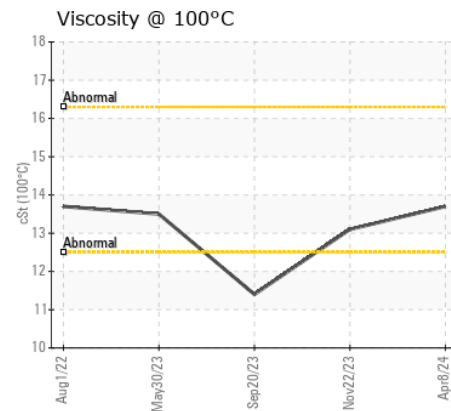
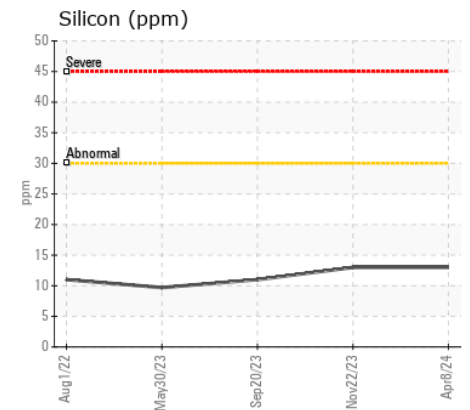
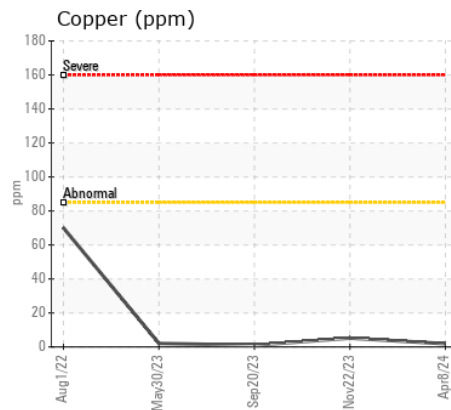
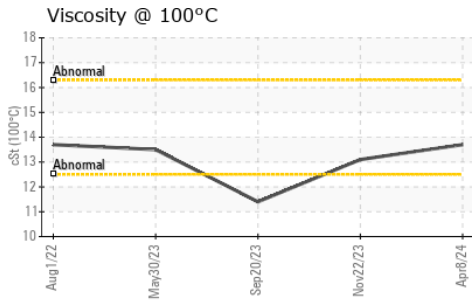
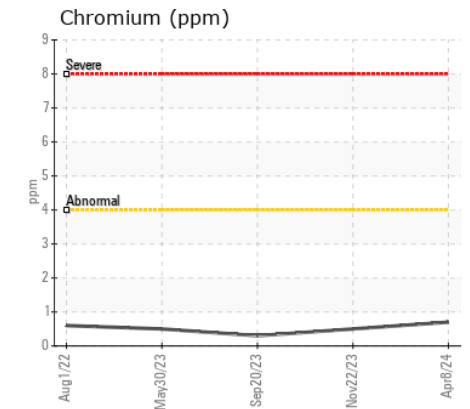
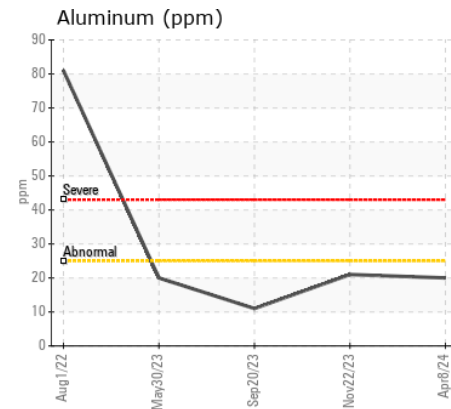
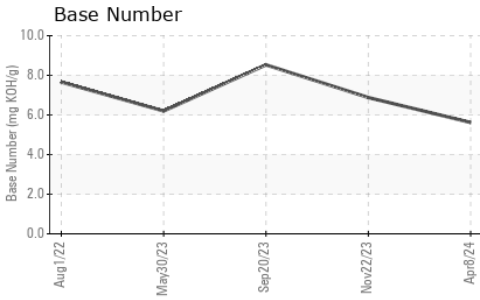
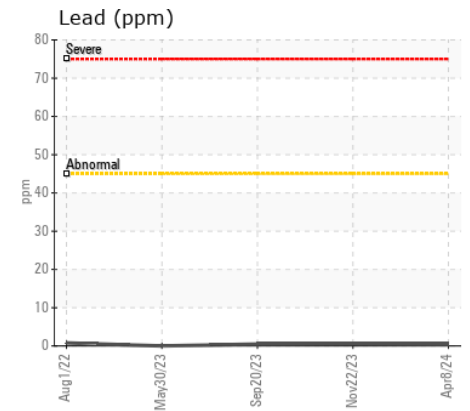
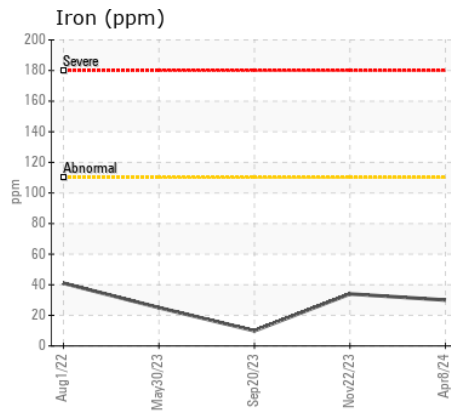
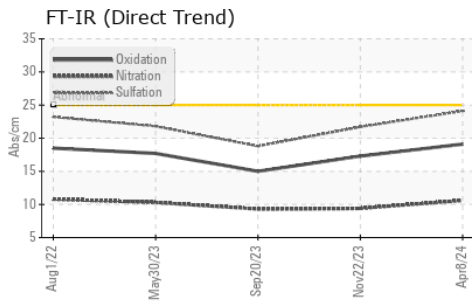
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>30	13	13	11
Potassium	ppm	ASTM D5185m	>20	33	37	20
Fuel		WC Method	>5	<1.0	<1.0	0.3
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.4	0.2	0.2
Nitration	Abs/cm	*ASTM D7624	>20	10.6	9.4	9.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	24.1	21.7	18.8
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	3	4
Boron	ppm	ASTM D5185m	6.3	18	24	33
Barium	ppm	ASTM D5185m	0.6	0	0	<1
Molybdenum	ppm	ASTM D5185m	0.4	102	78	85
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m	277	127	110	61
Calcium	ppm	ASTM D5185m	1514	2523	2003	2054
Phosphorus	ppm	ASTM D5185m	634	1203	847	955
Zinc	ppm	ASTM D5185m	743	1395	1142	1125
Sulfur	ppm	ASTM D5185m	2592	4381	4114	3624
Oxidation	Abs/.1mm	*ASTM D7414	>25	19.1	17.3	15.0
Base Number (BN)	mg KOH/g	ASTM D2896		5.62	6.88	8.53
Visc @ 100°C	cSt	ASTM D445		13.7	13.1	11.4



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0098491 **Received** : 12 Apr 2024
Lab Number : 06148175 **Tested** : 15 Apr 2024
Unique Number : 10978253 **Diagnosed** : 16 Apr 2024 - Sean Felton
Test Package : MOB 2

CONSTRUCTION SERVICES
 2420 BOSTON RD
 WILBRAHAM, MA
 US 01095
 Contact: Michael Dupuis
 mdupuis@cs-ma.us
 T: (413)733-6331
 F:

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)