

Area
TRACTORS
Machine Id
[TRACTORS] TR374
Component
Diesel Engine
Fluid
KENDALL 15W40 (--- GAL)

RECOMMENDATION

The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PCA0109797	LP0001231	LP0000433
Sample Date		Client Info		08 Apr 2024	20 Dec 2023	15 Aug 2023
Machine Age	hrs	Client Info		12602	11990	11347
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				ABNORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	26	31	31
Chromium	ppm	ASTM D5185m	>20	1	<1	1
Nickel	ppm	ASTM D5185m	>4	<1	0	<1
Titanium	ppm	ASTM D5185m		2	<1	1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	4	3	4
Lead	ppm	ASTM D5185m	>40	2	3	2
Copper	ppm	ASTM D5185m	>330	1	<1	<1
Tin	ppm	ASTM D5185m	>15	<1	0	<1
Vanadium	ppm	ASTM D5185m		<1	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

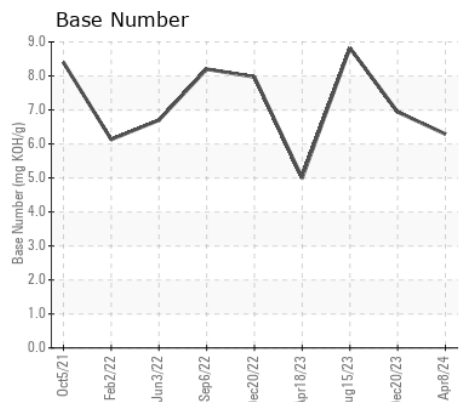
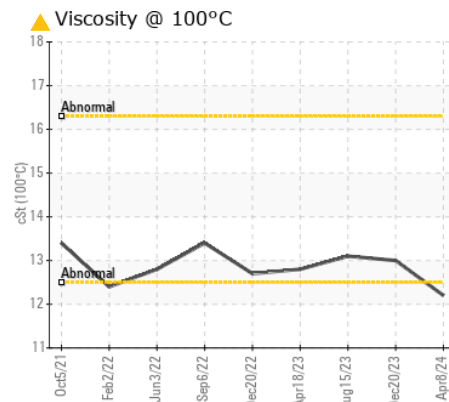
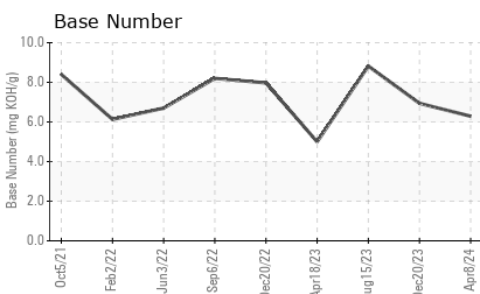
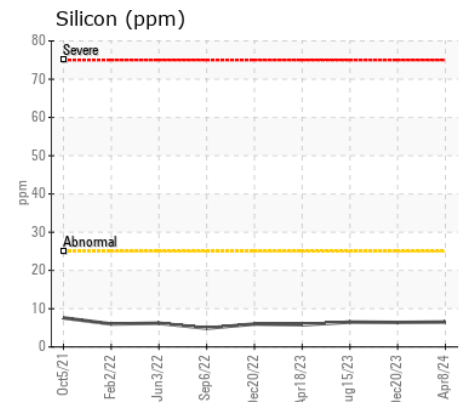
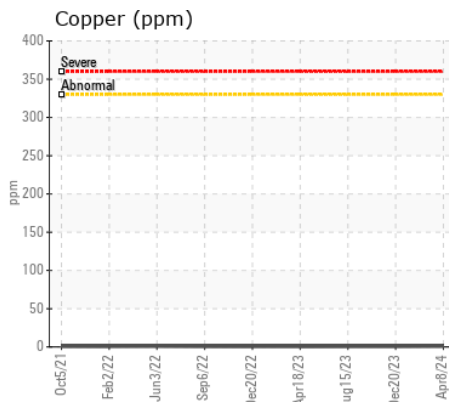
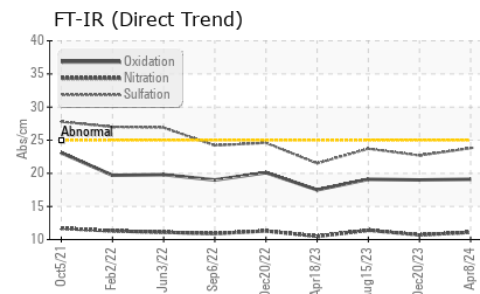
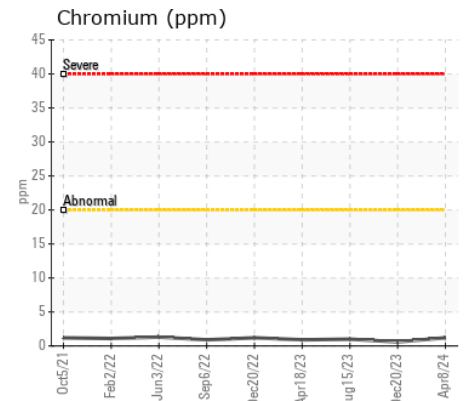
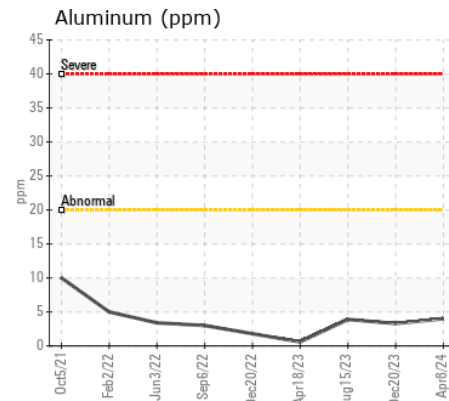
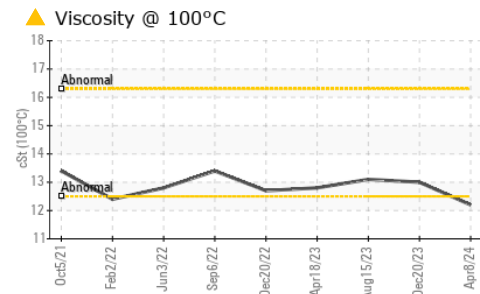
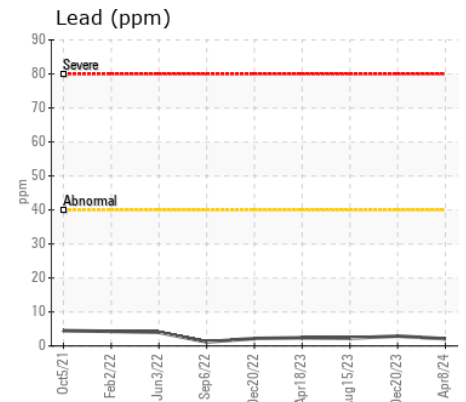
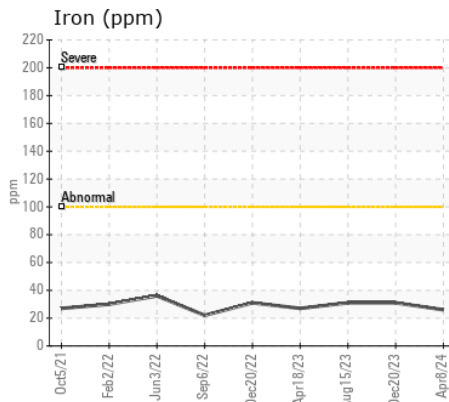
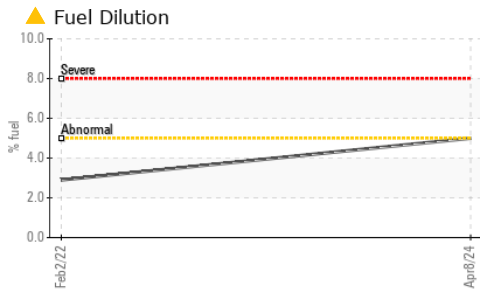
There is a moderate amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

Silicon	ppm	ASTM D5185m	>25	6	6	6
Potassium	ppm	ASTM D5185m	>20	2	2	3
Fuel	%	ASTM D3524	>5	▲ 5.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	1.1	0.9	0.9
Nitration	Abs/cm	*ASTM D7624	>20	11.1	10.7	11.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.8	22.7	23.7
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. Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185m		2	4	6
Boron	ppm	ASTM D5185m	6.3	30	18	20
Barium	ppm	ASTM D5185m	0.6	0	0	2
Molybdenum	ppm	ASTM D5185m	0.4	95	80	86
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m	277	117	145	258
Calcium	ppm	ASTM D5185m	1514	2339	2084	2069
Phosphorus	ppm	ASTM D5185m	634	1113	930	1037
Zinc	ppm	ASTM D5185m	743	1297	1208	1247
Sulfur	ppm	ASTM D5185m	2592	3974	3240	3532
Oxidation	Abs/.1mm	*ASTM D7414	>25	19.1	19.0	19.1
Base Number (BN)	mg KOH/g	ASTM D2896		6.29	6.94	8.82
Visc @ 100°C	cSt	ASTM D445		▲ 12.2	13.0	13.1



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0109797 **Received** : 12 Apr 2024
Lab Number : 06148172 **Tested** : 17 Apr 2024
Unique Number : 10978250 **Diagnosed** : 17 Apr 2024 - Wes Davis
Test Package : MOB 2 (Additional Tests: FuelDilution, PercentFuel)

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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)