

Area
TRACTORS
Machine Id
[TRACTORS] TR373
Component
Diesel Engine
Fluid
KENDALL 15W40 (--- GAL)

RECOMMENDATION

The oil change at the time of sampling has been noted. Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor. No other corrective action is recommended at this time. The fluid was specified as KENDALL 15W40, however, a fluid match indicates that this fluid is SAE 30 Diesel Engine Oil. Please confirm the oil type and grade on your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PCA0098500	PCA0110026	LP0000441
Sample Date		Client Info		24 Jun 2024	14 Feb 2024	13 Oct 2023
Machine Age	hrs	Client Info		8653	7856	7218
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				ATTENTION	MARGINAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	27	27	32
Chromium	ppm	ASTM D5185m	>20	<1	1	2
Nickel	ppm	ASTM D5185m	>4	0	<1	0
Titanium	ppm	ASTM D5185m		<1	1	1
Silver	ppm	ASTM D5185m	>3	0	<1	0
Aluminum	ppm	ASTM D5185m	>20	4	2	4
Lead	ppm	ASTM D5185m	>40	4	6	7
Copper	ppm	ASTM D5185m	>330	<1	1	<1
Tin	ppm	ASTM D5185m	>15	<1	<1	<1
Vanadium	ppm	ASTM D5185m		0	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

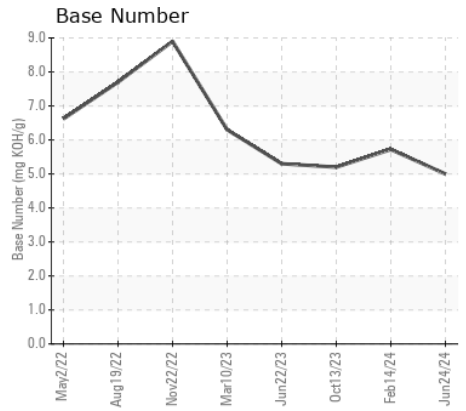
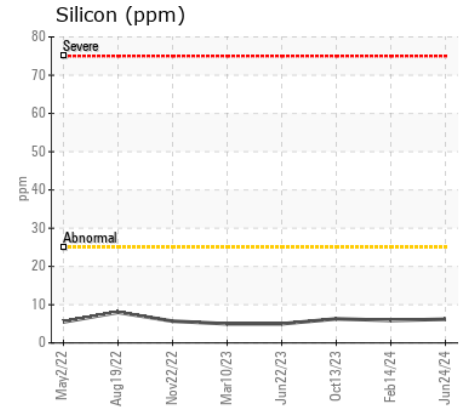
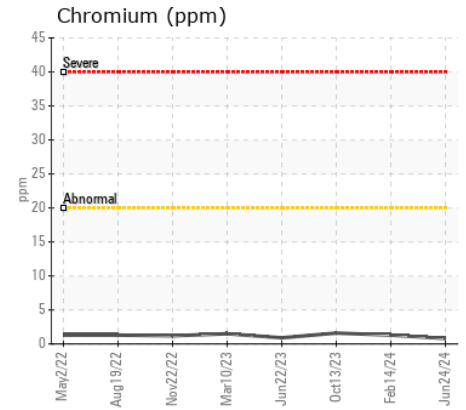
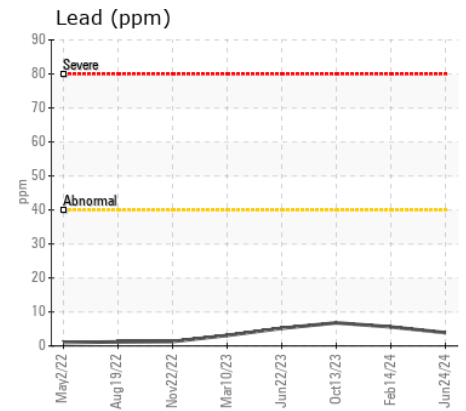
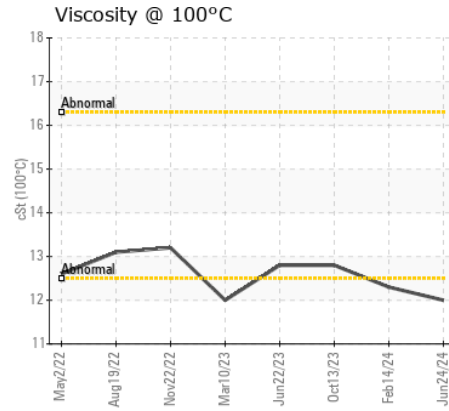
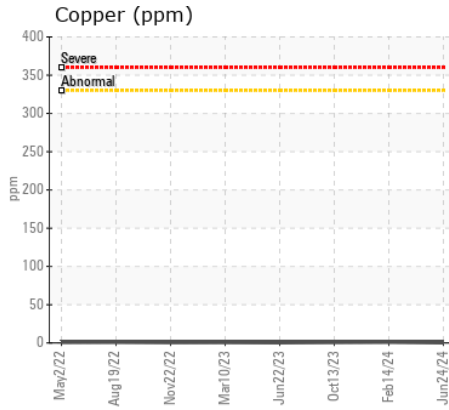
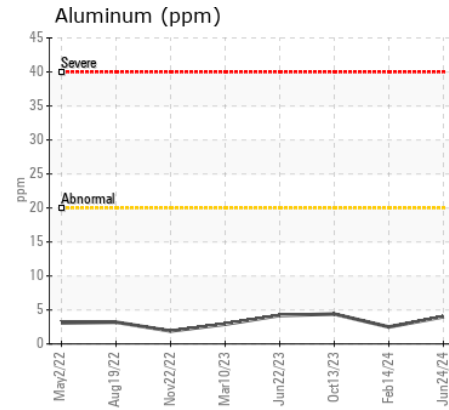
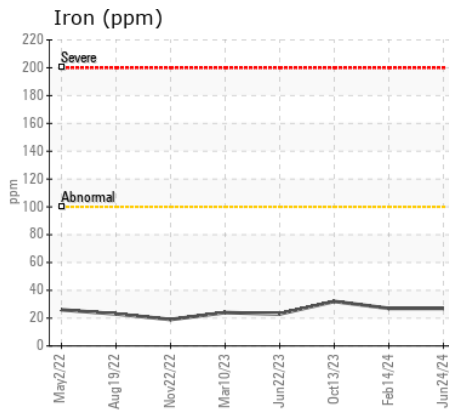
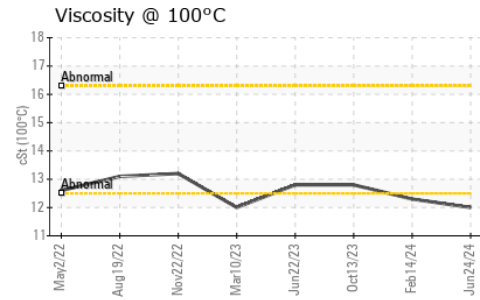
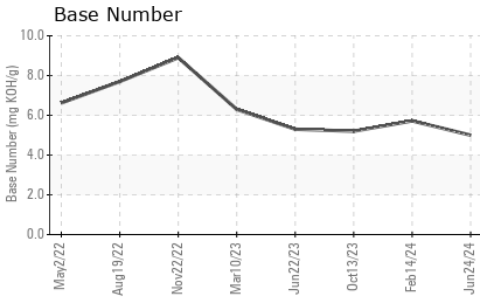
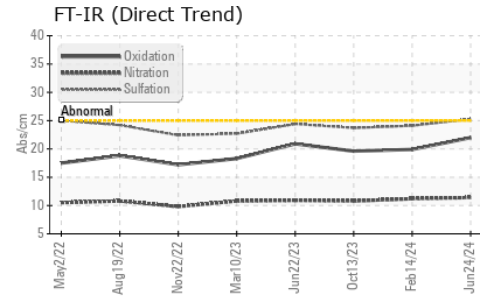
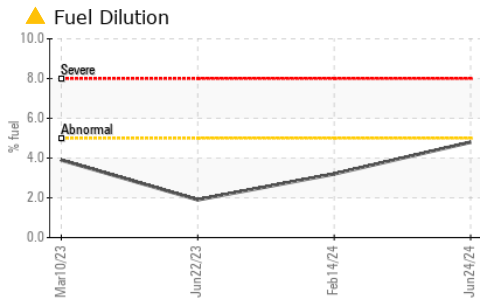
Light fuel dilution occurring. No other contaminants were detected in the oil.

Silicon	ppm	ASTM D5185m	>25	6	6	6
Potassium	ppm	ASTM D5185m	>20	1	5	8
Fuel	%	ASTM D3524	>5	▲ 4.8	▲ 3.2	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.9	0.7	0.8
Nitration	Abs/cm	*ASTM D7624	>20	11.4	11.2	10.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	25.3	24.1	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

Additive levels indicate the addition of a different brand, or type of oil. 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		2	0	8
Boron	ppm	ASTM D5185m	6.3	● 26	28	20
Barium	ppm	ASTM D5185m	0.6	0	<1	0
Molybdenum	ppm	ASTM D5185m	0.4	82	82	88
Manganese	ppm	ASTM D5185m		<1	<1	0
Magnesium	ppm	ASTM D5185m	277	● 53	100	184
Calcium	ppm	ASTM D5185m	1514	2163	1893	2074
Phosphorus	ppm	ASTM D5185m	634	972	939	975
Zinc	ppm	ASTM D5185m	743	1187	1089	1243
Sulfur	ppm	ASTM D5185m	2592	3664	3459	3637
Oxidation	Abs/.1mm	*ASTM D7414	>25	22.0	19.9	19.6
Base Number (BN)	mg KOH/g	ASTM D2896		5.0	5.72	5.2
Visc @ 100°C	cSt	ASTM D445		12.0	12.3	12.8



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0098500 **Received** : 01 Jul 2024
Lab Number : 06225573 **Tested** : 03 Jul 2024
Unique Number : 11103770 **Diagnosed** : 03 Jul 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)