



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
KENWORTH T270 2NKHHM6X7HM144553
 Component
Diesel Engine
 Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (--- QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0212182	JR0179387	JRMC424528
Sample Date		Client Info		08 May 2024	10 Oct 2023	18 Apr 2017
Machine Age	mls	Client Info		225215	209362	24255
Oil Age	mls	Client Info		0	0	0
Filter Age	mls	Client Info		0	0	0
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	74	16	69
Chromium	ppm	ASTM D5185m	>20	4	9	1
Nickel	ppm	ASTM D5185m	>4	<1	<1	<1
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	18	15	39
Lead	ppm	ASTM D5185m	>40	0	0	0
Copper	ppm	ASTM D5185m	>330	2	<1	64
Tin	ppm	ASTM D5185m	>15	<1	0	11
Vanadium	ppm	ASTM D5185m		<1	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

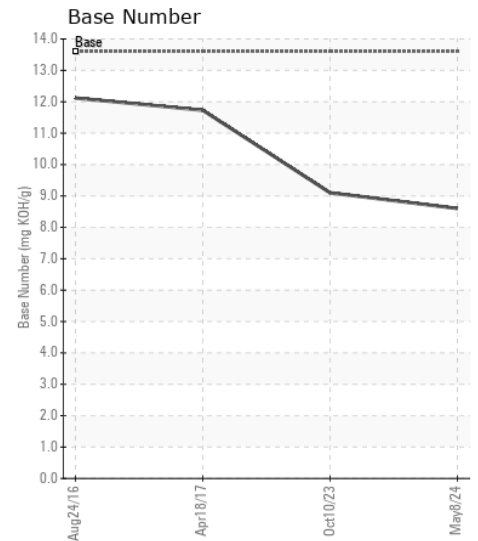
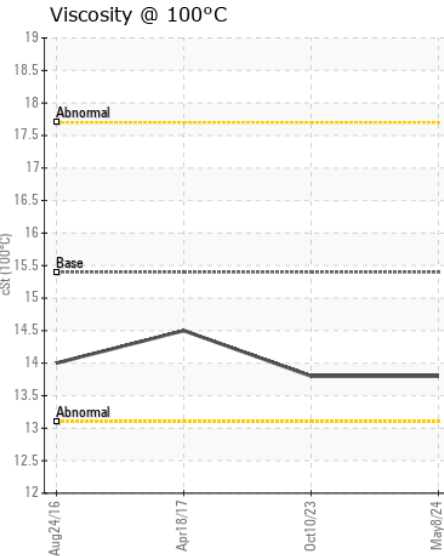
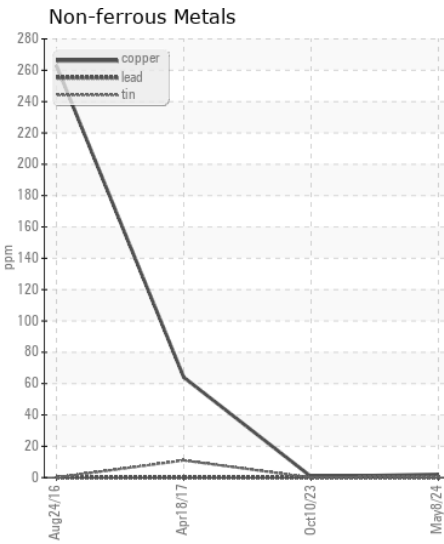
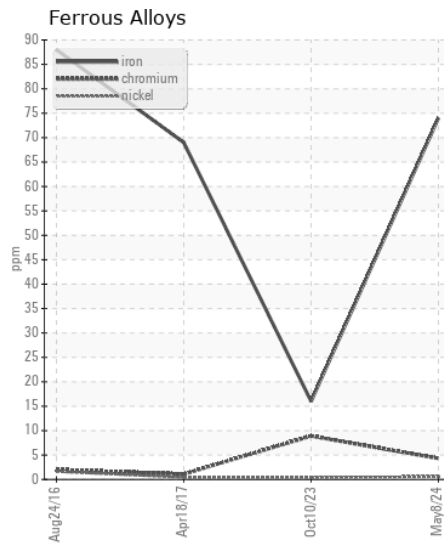
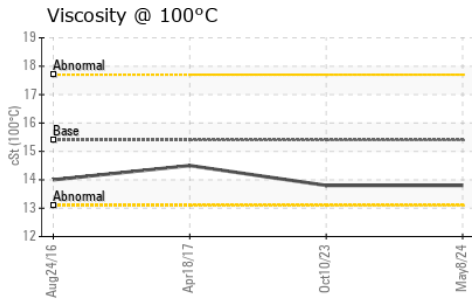
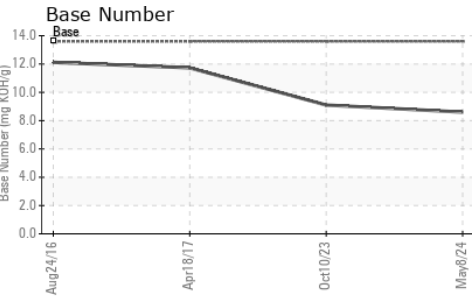
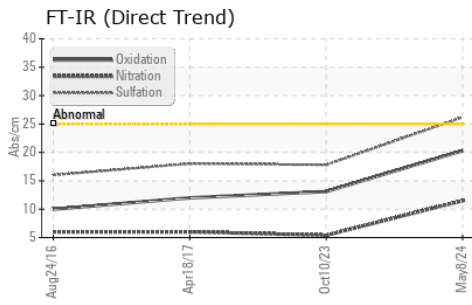
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	11	6	15
Potassium	ppm	ASTM D5185m	>20	11	4	134
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	0.0
Soot %	%	*ASTM D7844	>3	1.6	0.3	0.5
Nitration	Abs/cm	*ASTM D7624	>20	11.5	5.4	6.
Sulfation	Abs/.1mm	*ASTM D7415	>30	26.2	17.8	18.
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		2	3	5
Boron	ppm	ASTM D5185m		119	24	122
Barium	ppm	ASTM D5185m		1	2	1
Molybdenum	ppm	ASTM D5185m		226	65	231
Manganese	ppm	ASTM D5185m		<1	<1	2
Magnesium	ppm	ASTM D5185m		767	756	741
Calcium	ppm	ASTM D5185m		1318	1143	1334
Phosphorus	ppm	ASTM D5185m		907	981	756
Zinc	ppm	ASTM D5185m		1090	1193	939
Sulfur	ppm	ASTM D5185m		3083	3386	2534
Oxidation	Abs/.1mm	*ASTM D7414	>25	20.3	13.1	12.
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	8.6	9.1	11.73
Visc @ 100°C	cSt	ASTM D445	15.4	13.8	13.8	14.5



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0212182 **Received** : 14 May 2024
Lab Number : 06178523 **Tested** : 15 May 2024
Unique Number : 11029849 **Diagnosed** : 16 May 2024 - Wes Davis
Test Package : CONST (Additional Tests: TBN)

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)

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