CONST

James River Equipment

OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION

Area
[W52556]
Machine Id
JOHN DEERE 824K 1DW824KXCDE653624
Component
Diesel Engine
Fluid
DEERE BREAK IN PLUS (--- GAL)

RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

WEAR

The copper level is abnormal. All other component wear rates are normal.

CONTAMINATION

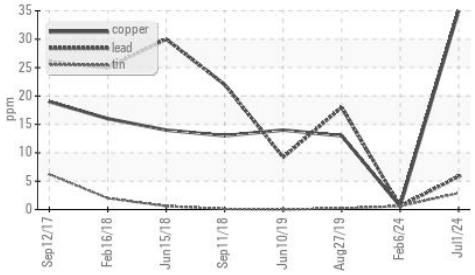
Fuel content negligible. There is no indication of any contamination in the oil.

FLUID CONDITION

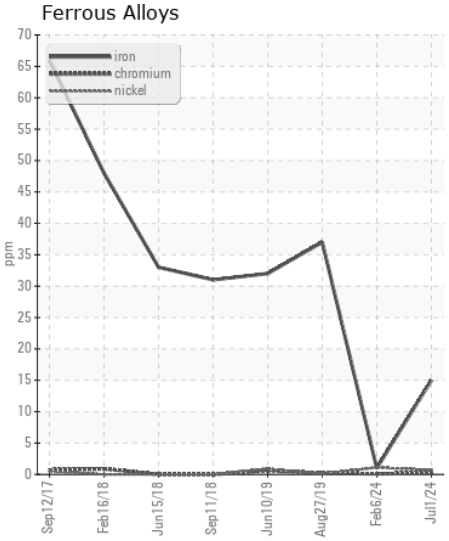
The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0211841	JR0199740	JR0019474
Sample Date		Client Info		01 Jul 2024	06 Feb 2024	27 Aug 2019
Machine Age	hrs	Client Info		14636	14580	7561
Oil Age	hrs	Client Info		59	0	500
Filter Age	hrs	Client Info		59	0	500
Oil Changed		Client Info		Not Changd	N/A	Changed
Filter Changed		Client Info		Not Changd	N/A	Changed
Sample Status				ABNORMAL	NORMAL	SEVERE
Iron	ppm	ASTM D5185m	>51	15	1	37
Chromium	ppm	ASTM D5185m	>11	<1	<1	<1
Nickel	ppm	ASTM D5185m	>5	<1	1	<1
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m	>3	<1	0	0
Aluminum	ppm	ASTM D5185m	>31	4	2	14
Lead	ppm	ASTM D5185m	>26	6	<1	18
Copper	ppm	ASTM D5185m	>26	▲ 35	<1	13
Tin	ppm	ASTM D5185m	>4	3	<1	<1
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>22	14	2	9
Potassium	ppm	ASTM D5185m	>20	11	<1	21
Fuel	%	ASTM D3524	>2.1	0.2	2.1	▲ 8.9
Water		WC Method	>0.21	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.1	0.1	0.9
Nitration	Abs/cm	*ASTM D7624	>20	6.4	5.2	10.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.8	17.5	24.8
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	>0.21	NEG	NEG	NEG
Sodium	ppm	ASTM D5185m	>31	13	2	7
Boron	ppm	ASTM D5185m		283	6	27
Barium	ppm	ASTM D5185m		2	0	0
Molybdenum	ppm	ASTM D5185m		251	59	198
Manganese	ppm	ASTM D5185m		7	0	2
Magnesium	ppm	ASTM D5185m		793	924	704
Calcium	ppm	ASTM D5185m		1455	894	1295
Phosphorus	ppm	ASTM D5185m		920	1031	682
Zinc	ppm	ASTM D5185m		1009	1219	856
Sulfur	ppm	ASTM D5185m		3286	3009	2540
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.3	13.4	19.1
Base Number (BN)	mg KOH/g	ASTM D2896		10.0	9.7	7.1
Visc @ 100°C	cSt	ASTM D445		● 9.9	12.8	▲ 11.2

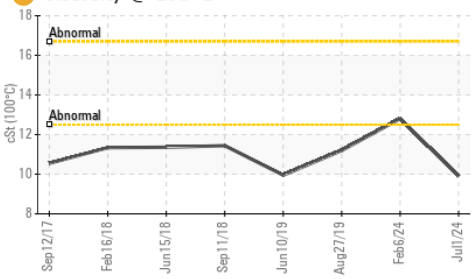
Non-ferrous Metals



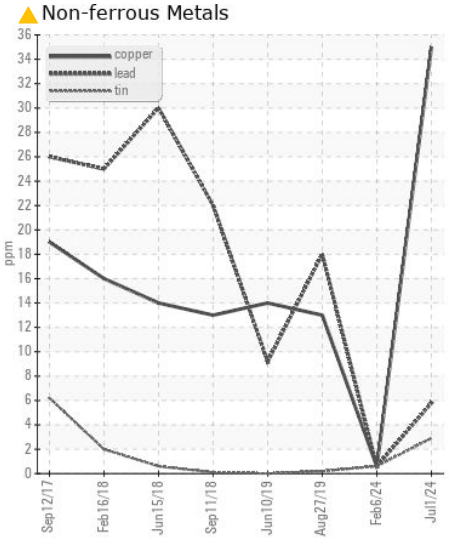
Ferrous Alloys



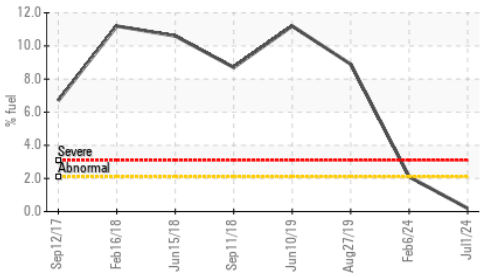
Viscosity @ 100°C



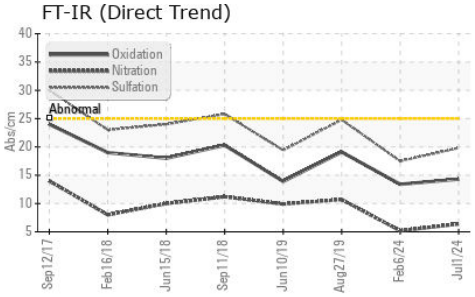
Non-ferrous Metals



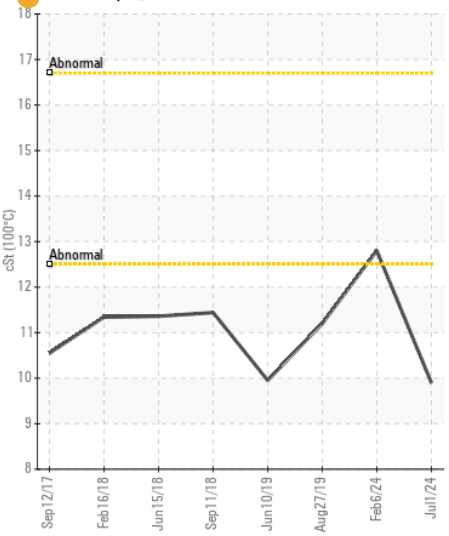
Fuel Dilution



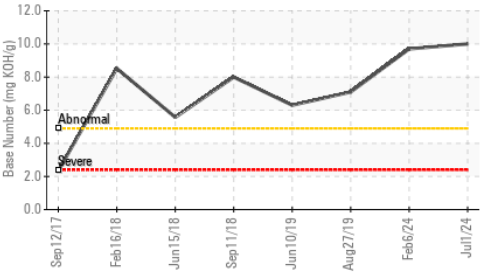
FT-IR (Direct Trend)



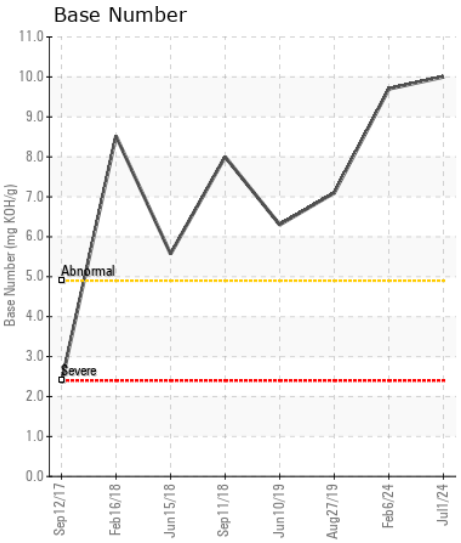
Viscosity @ 100°C



Base Number



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0211841
Lab Number : 06225826
Unique Number : 11109319
Test Package : CONST (Additional Tests: FuelDilution, PercentFuel, TBN)

Received : 02 Jul 2024
Tested : 09 Jul 2024
Diagnosed : 09 Jul 2024 - Jonathan Hester

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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