CONST

James River Equipment

OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area

[W68059]

Machine Id

JOHN DEERE 470 P 1FF470PAJNF000028

Component

Diesel Engine

Fluid

JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (8 GAL)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor. (Customer Sample Comment: W68059)

WEAR

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

CONTAMINATION

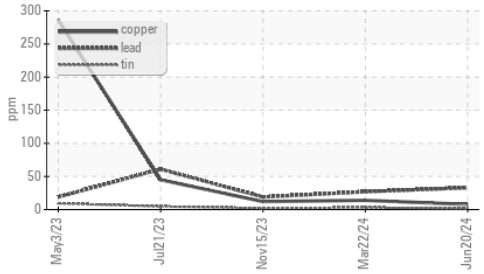
There is no indication of any contamination in the oil.

FLUID CONDITION

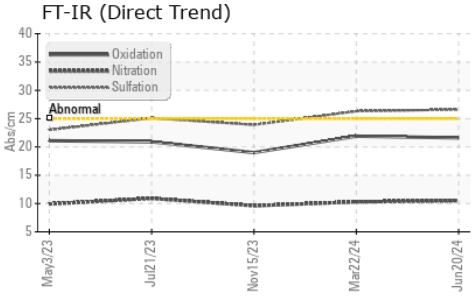
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		**JR0219725**	JR0205421	JR0192599
Sample Date		Client Info		**20 Jun 2024**	22 Mar 2024	15 Nov 2023
Machine Age	hrs	Client Info		**2539**	2048	1582
Oil Age	hrs	Client Info		**491**	466	644
Filter Age	hrs	Client Info		**0**	0	0
Oil Changed		Client Info		**Changed**	Changed	Changed
Filter Changed		Client Info		**Changed**	Changed	Changed
Sample Status				**ABNORMAL**	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>51	**34**	36	21
Chromium	ppm	ASTM D5185m	>11	**<1**	<1	<1
Nickel	ppm	ASTM D5185m	>5	**0**	<1	0
Titanium	ppm	ASTM D5185m		**<1**	0	<1
Silver	ppm	ASTM D5185m	>3	**0**	0	0
Aluminum	ppm	ASTM D5185m	>31	**4**	6	5
Lead	ppm	ASTM D5185m	>26	▲ **33**	27	19
Copper	ppm	ASTM D5185m	>26	**8**	14	12
Tin	ppm	ASTM D5185m	>4	**1**	3	2
Vanadium	ppm	ASTM D5185m		**0**	<1	<1
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silicon	ppm	ASTM D5185m	>22	**10**	13	11
Potassium	ppm	ASTM D5185m	>20	**5**	8	7
Fuel		WC Method	>2.1	**<1.0**	<1.0	<1.0
Water		WC Method	>0.21	**NEG**	NEG	NEG
Glycol		WC Method		**NEG**	NEG	NEG
Soot %	%	*ASTM D7844	>3	**0.6**	0.6	0.5
Nitration	Abs/cm	*ASTM D7624	>20	**10.5**	10.3	9.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	**26.6**	26.3	23.9
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	**11**	20	26
Boron	ppm	ASTM D5185m		**36**	75	100
Barium	ppm	ASTM D5185m		**<1**	0	<1
Molybdenum	ppm	ASTM D5185m		**224**	245	247
Manganese	ppm	ASTM D5185m		**<1**	1	<1
Magnesium	ppm	ASTM D5185m		**806**	811	828
Calcium	ppm	ASTM D5185m		**1622**	1460	1497
Phosphorus	ppm	ASTM D5185m		**990**	961	914
Zinc	ppm	ASTM D5185m		**1240**	1154	1173
Sulfur	ppm	ASTM D5185m		**3450**	3295	2887
Oxidation	Abs/.1mm	*ASTM D7414	>25	**21.6**	21.9	19.0
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	**7.2**	7.0	6.4
Visc @ 100°C	cSt	ASTM D445	15.4	**13.1**	12.8	13.1

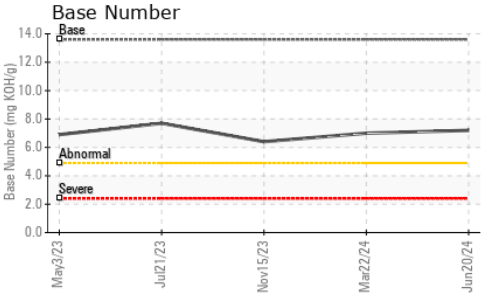
Non-ferrous Metals



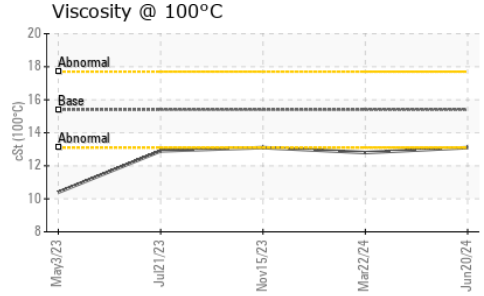
FT-IR (Direct Trend)



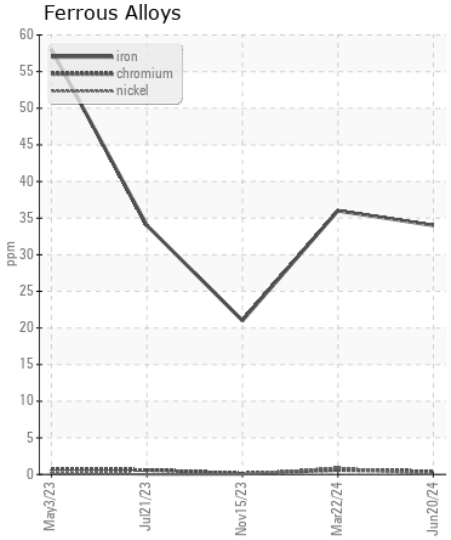
Base Number



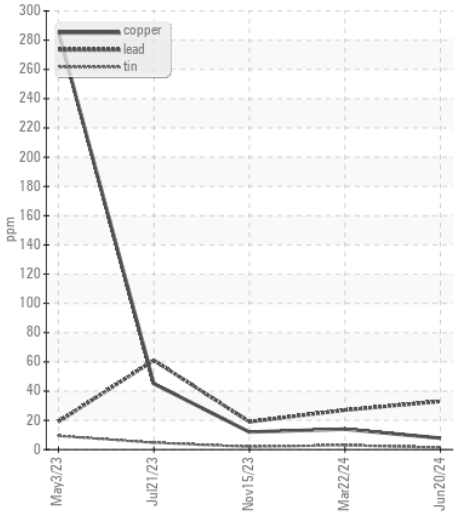
Viscosity @ 100°C



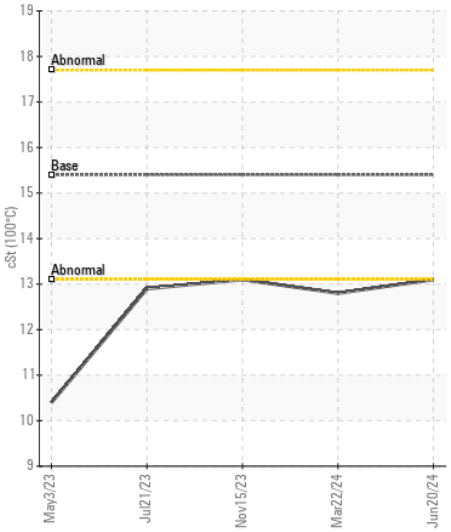
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



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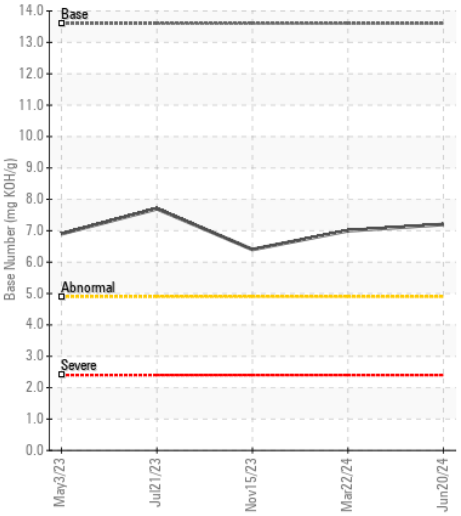

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0219725 **Received** : 24 Jun 2024
Lab Number : 06218022 **Tested** : 25 Jun 2024
Unique Number : 11096219 **Diagnosed** : 25 Jun 2024 - Don Baldridge
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)

CARLTON`S BACKHOE
9550 STATESVILLE ROAD
CHARLOTTE, NC
US 28269
Contact: LEO

T: (704)547-0211
F: