James River Equipment

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ABNORMAL

Machine Id
JOHN DEERE 844K 1DW844KAJJF693325
Component
Diesel Engine
Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (--- GAL)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

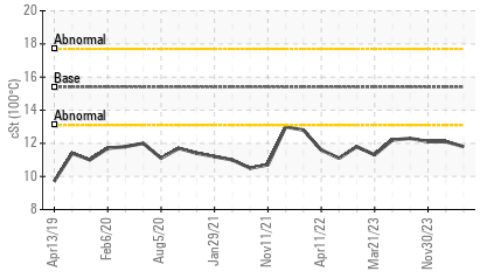
There is no indication of any contamination in the oil.

FLUID CONDITION

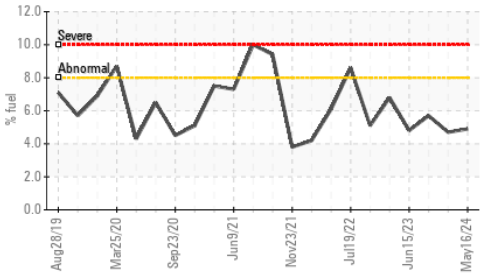
The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0179769	JR0200459	JR0179514
Sample Date		Client Info		16 May 2024	20 Feb 2024	30 Nov 2023
Machine Age	hrs	Client Info		14002	13465	12982
Oil Age	hrs	Client Info		0	0	0
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	ABNORMAL	ABNORMAL
Iron	ppm	ASTM D5185m	>51	16	13	8
Chromium	ppm	ASTM D5185m	>11	1	1	0
Nickel	ppm	ASTM D5185m	>5	1	2	<1
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m	>3	<1	0	0
Aluminum	ppm	ASTM D5185m	>31	9	8	6
Lead	ppm	ASTM D5185m	>26	4	2	<1
Copper	ppm	ASTM D5185m	>26	9	3	4
Tin	ppm	ASTM D5185m	>4	2	1	<1
Vanadium	ppm	ASTM D5185m		<1	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>22	9	10	6
Potassium	ppm	ASTM D5185m	>20	4	4	3
Fuel	%	ASTM D3524	>8.0	4.9	<1.0	4.7
Water		WC Method	>0.21	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.3	0.3	0.3
Nitration	Abs/cm	*ASTM D7624	>20	8.7	8.3	8.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.4	21.5	21.6
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	5	4	<1
Boron	ppm	ASTM D5185m		178	218	189
Barium	ppm	ASTM D5185m		0	2	0
Molybdenum	ppm	ASTM D5185m		236	264	231
Manganese	ppm	ASTM D5185m		<1	<1	0
Magnesium	ppm	ASTM D5185m		783	766	684
Calcium	ppm	ASTM D5185m		1380	1289	1231
Phosphorus	ppm	ASTM D5185m		900	833	772
Zinc	ppm	ASTM D5185m		1015	1042	949
Sulfur	ppm	ASTM D5185m		3464	3120	2912
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.5	15.6	15.8
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	7.6	7.8	8.3
Visc @ 100°C	cSt	ASTM D445	15.4	▲ 11.8	▲ 12.1	▲ 12.1

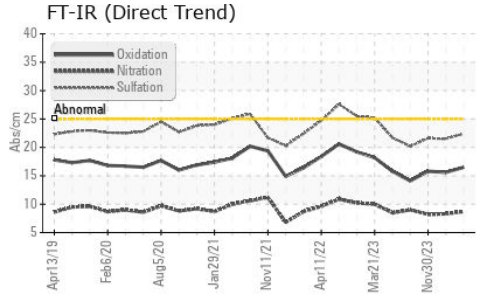
Viscosity @ 100°C



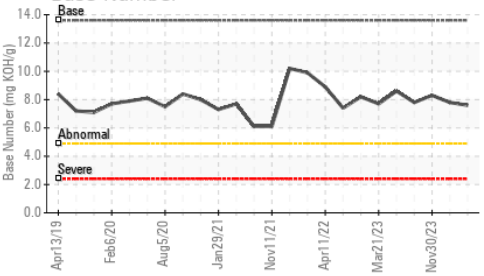
Fuel Dilution



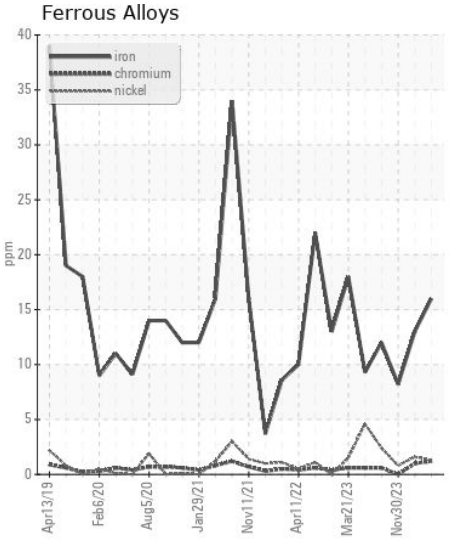
FT-IR (Direct Trend)



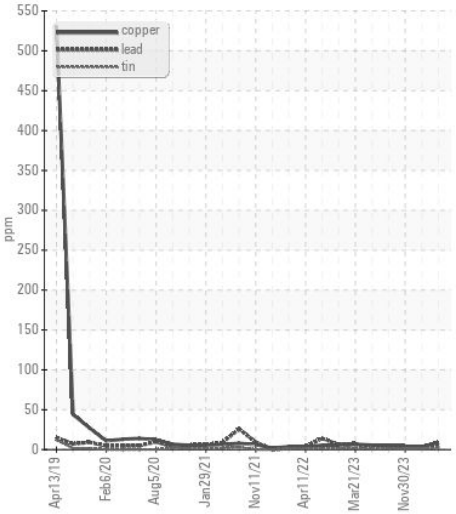
Base Number



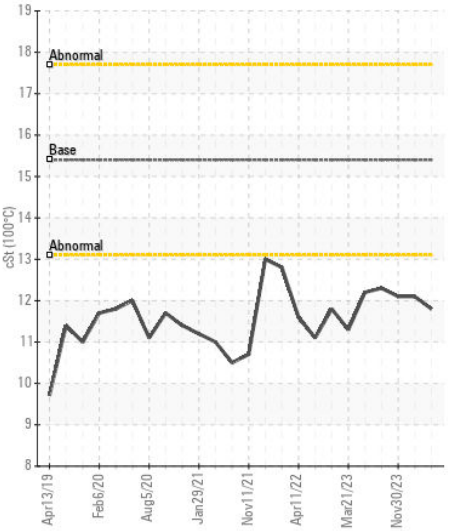
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



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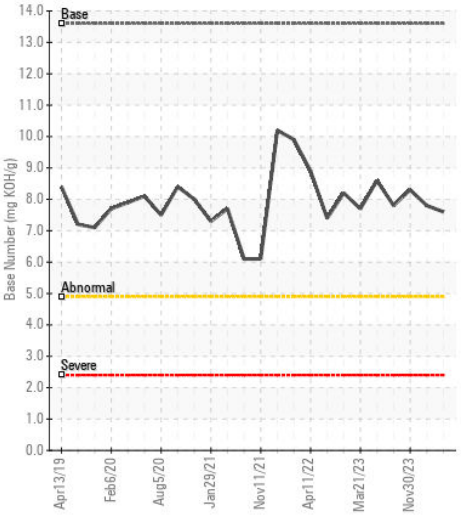

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0179769 **Received** : 21 May 2024
Lab Number : 06185974 **Tested** : 24 May 2024
Unique Number : 11042726 **Diagnosed** : 24 May 2024 - Don Baldridge
Test Package : CONST (Additional Tests: FuelDilution, PercentFuel, 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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