



WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION



Machine Id
JOHN DEERE 755K 1T0755KXHNF421851

Component
Diesel Engine

Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (30 QTS)

RECOMMENDATION

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

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0208249	JR0187620	JR0174701
Sample Date		Client Info		18 Mar 2024	18 Sep 2023	30 May 2023
Machine Age	hrs	Client Info		2474	1936	1451
Oil Age	hrs	Client Info		538	485	0
Filter Age	hrs	Client Info		538	485	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	NORMAL	NORMAL

WEAR

Valve wear is indicated.

Iron	ppm	ASTM D5185m	>51	27	14	2
Chromium	ppm	ASTM D5185m	>11	1	<1	0
Nickel	ppm	ASTM D5185m	>5	▲ 13	7	0
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>31	4	4	5
Lead	ppm	ASTM D5185m	>26	<1	<1	0
Copper	ppm	ASTM D5185m	>26	8	5	2
Tin	ppm	ASTM D5185m	>4	<1	<1	0
Vanadium	ppm	ASTM D5185m		<1	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

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

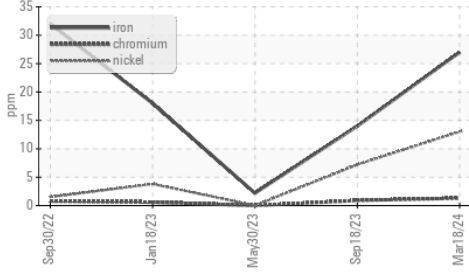
Silicon	ppm	ASTM D5185m	>22	7	8	6
Potassium	ppm	ASTM D5185m	>20	2	2	<1
Fuel	%	ASTM D3524	>2.1	0.2	<1.0	<1.0
Water		WC Method	>0.21	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.3	0	0.1
Nitration	Abs/cm	*ASTM D7624	>20	8.4	9.6	5.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.7	26.4	20.0
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

FLUID CONDITION

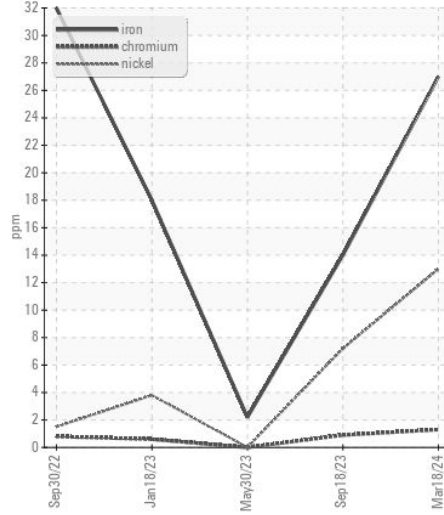
The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Sodium	ppm	ASTM D5185m	>31	2	3	<1
Boron	ppm	ASTM D5185m		124	191	258
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		161	263	244
Manganese	ppm	ASTM D5185m		1	<1	0
Magnesium	ppm	ASTM D5185m		535	782	792
Calcium	ppm	ASTM D5185m		2364	1595	1434
Phosphorus	ppm	ASTM D5185m		1008	944	894
Zinc	ppm	ASTM D5185m		1195	1205	1071
Sulfur	ppm	ASTM D5185m		3563	3490	3747
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.1	19.3	14.6
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	8.3	8.7	10.0
Visc @ 100°C	cSt	ASTM D445	15.4	● 11.8	14.2	14.5

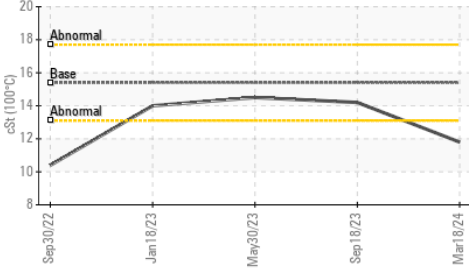
▲ Ferrous Alloys



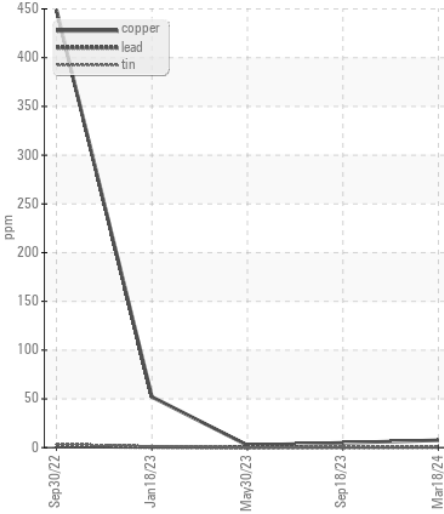
▲ Ferrous Alloys



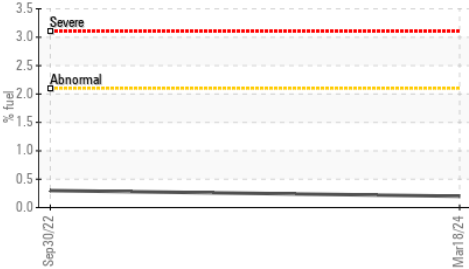
● Viscosity @ 100°C



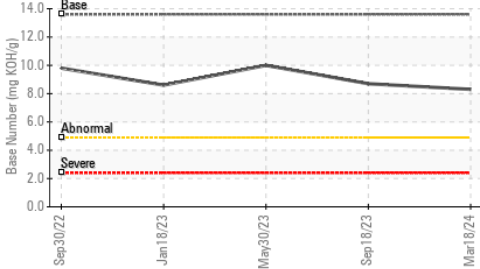
Non-ferrous Metals



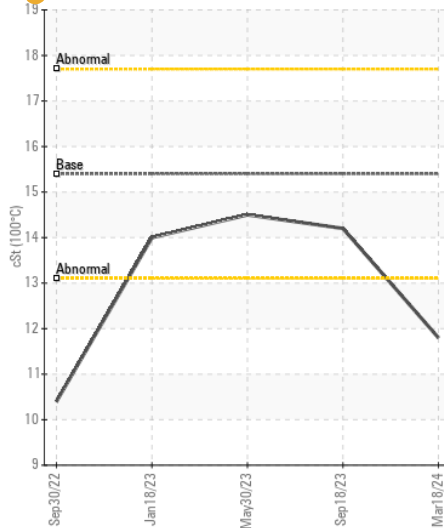
Fuel Dilution



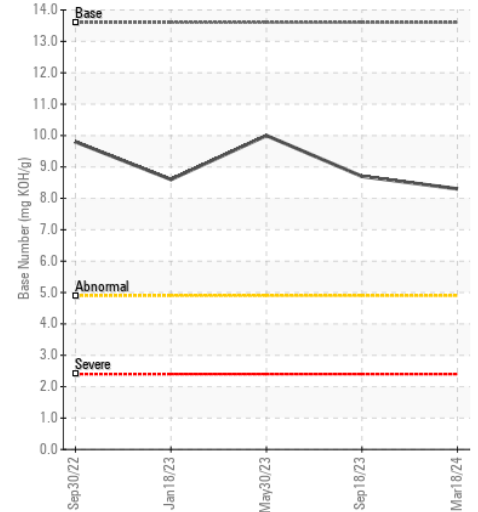
Base Number



● Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0208249 **Received** : 20 Mar 2024
Lab Number : 06123513 **Tested** : 25 Mar 2024
Unique Number : 10937664 **Diagnosed** : 25 Mar 2024 - Jonathan Hester
Test Package : CONST (Additional Tests: FuelDilution, PercentFuel, TBN)

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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)