



WEAR	NORMAL
CONTAMINATION	SEVERE
FLUID CONDITION	ABNORMAL



Machine Id
JOHN DEERE 410E 1DW410ETALF707597
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

RECOMMENDATION

We advise that you check the fuel injection system. We recommend that you drain the oil and perform a filter service on this component if not already done. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0193302	JR0193306	JR0161270
Sample Date		Client Info		19 Jun 2024	06 Jun 2024	04 May 2023
Machine Age	hrs	Client Info		4545	4477	3452
Oil Age	hrs	Client Info		68	513	0
Filter Age	hrs	Client Info		68	513	0
Oil Changed		Client Info		Not Chngd	Changed	N/A
Filter Changed		Client Info		Not Chngd	Changed	N/A
Sample Status				SEVERE	SEVERE	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	4	17	11
Chromium	ppm	ASTM D5185m	>11	<1	<1	<1
Nickel	ppm	ASTM D5185m	>5	<1	2	1
Titanium	ppm	ASTM D5185m		1	3	0
Silver	ppm	ASTM D5185m	>3	<1	<1	0
Aluminum	ppm	ASTM D5185m	>31	3	5	6
Lead	ppm	ASTM D5185m	>26	2	5	3
Copper	ppm	ASTM D5185m	>26	6	8	6
Tin	ppm	ASTM D5185m	>4	1	2	2
Vanadium	ppm	ASTM D5185m		<1	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

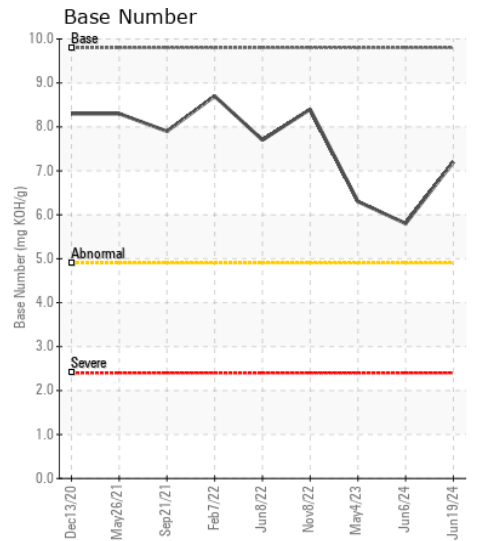
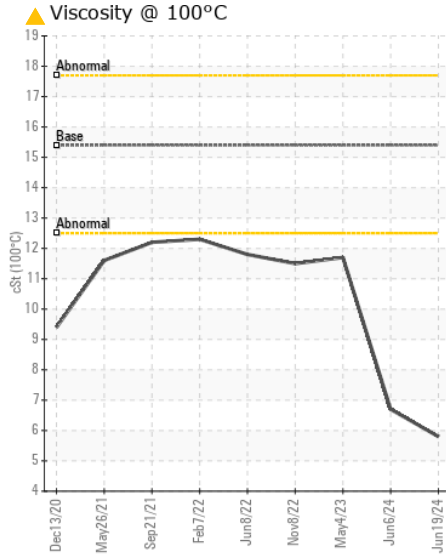
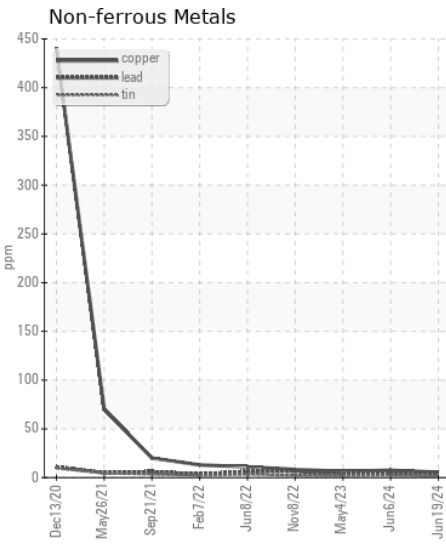
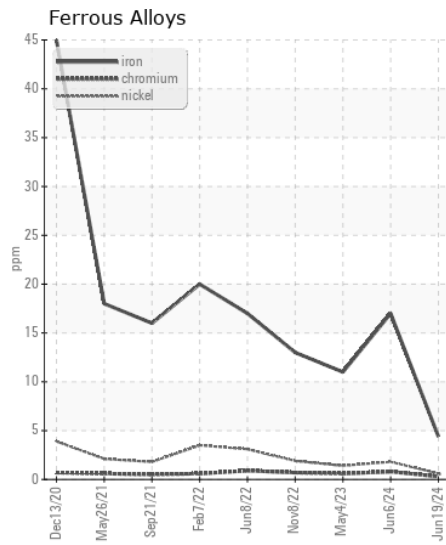
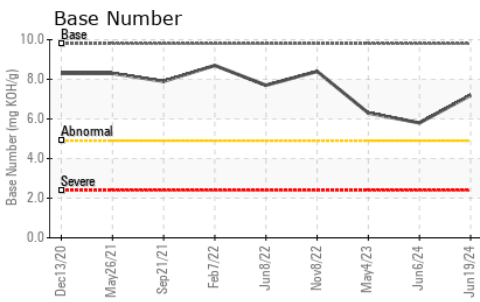
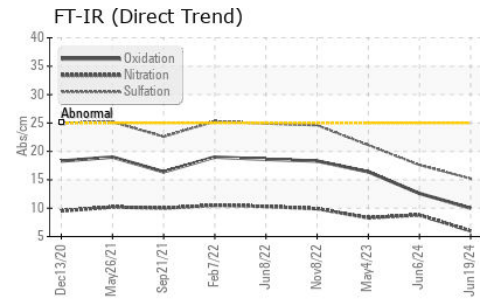
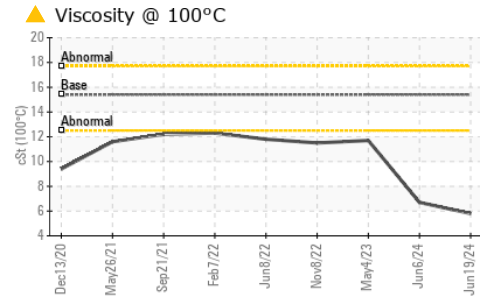
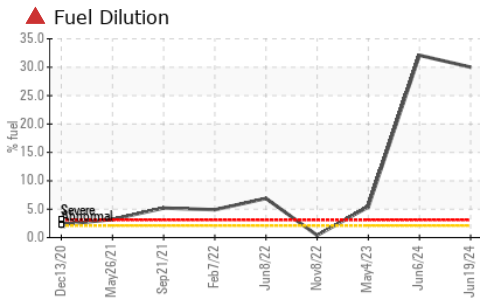
There is a high amount of fuel present in the oil.

Silicon	ppm	ASTM D5185m	>22	4	5	8
Potassium	ppm	ASTM D5185m	>20	2	3	1
Fuel	%	ASTM D3524	>2.1	▲ 30.0	▲ 32.1	▲ 5.4
Water		WC Method	>0.21	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.1	0.3	0.3
Nitration	Abs/cm	*ASTM D7624	>20	6.0	8.8	8.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	15.2	17.6	21.1
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 BN result indicates that there is suitable alkalinity remaining in the oil. Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185m	>31	0	4	5
Boron	ppm	ASTM D5185m	0	3	4	149
Barium	ppm	ASTM D5185m	0	1	1	0
Molybdenum	ppm	ASTM D5185m	60	36	48	226
Manganese	ppm	ASTM D5185m	0	<1	<1	<1
Magnesium	ppm	ASTM D5185m	1010	545	592	775
Calcium	ppm	ASTM D5185m	1070	682	893	1372
Phosphorus	ppm	ASTM D5185m	1150	683	703	807
Zinc	ppm	ASTM D5185m	1270	751	877	962
Sulfur	ppm	ASTM D5185m	2060	1934	2214	3359
Oxidation	Abs/.1mm	*ASTM D7414	>25	10.0	12.6	16.4
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	7.2	5.8	6.3
Visc @ 100°C	cSt	ASTM D445	15.4	▲ 5.8	▲ 6.7	▲ 11.7



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0193302 **Received** : 24 Jun 2024
Lab Number : 06219200 **Tested** : 27 Jun 2024
Unique Number : 11097397 **Diagnosed** : 27 Jun 2024 - Jonathan Hester
Test Package : CONST (Additional Tests: 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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