



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
EGEN (S/N PE4045T805666)
 Component
Diesel Engine
 Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (15 LTR)

RECOMMENDATION

Confirm the source of the lubricant being utilized for top-up/fill.
 Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0711977	WC62007928	WC62006820
Sample Date		Client Info		12 Jun 2024	22 Mar 2020	17 Jan 2019
Machine Age	hrs	Client Info		374	325	316
Oil Age	hrs	Client Info		25	9	20
Filter Age	hrs	Client Info		24	9	20
Oil Changed		Client Info		Changed	Not Changd	Changed
Filter Changed		Client Info		Changed	Not Changd	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185(m)	>100	2	3	2
Chromium	ppm	ASTM D5185(m)	>20	0	<1	0
Nickel	ppm	ASTM D5185(m)	>4	<1	0	0
Titanium	ppm	ASTM D5185(m)		0	<1	0
Silver	ppm	ASTM D5185(m)	>3	<1	0	0
Aluminum	ppm	ASTM D5185(m)	>20	<1	4	2
Lead	ppm	ASTM D5185(m)	>40	0	0	<1
Copper	ppm	ASTM D5185(m)	>330	<1	1	<1
Tin	ppm	ASTM D5185(m)	>15	0	0	0
Vanadium	ppm	ASTM D5185(m)		0	<1	0

CONTAMINATION

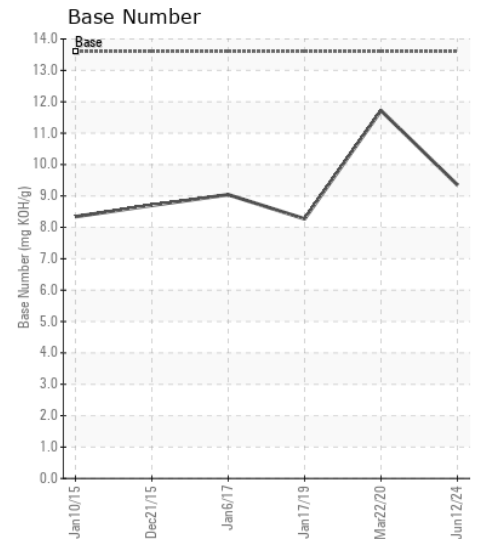
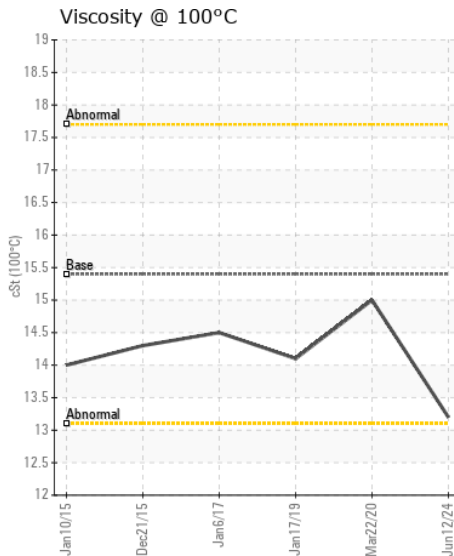
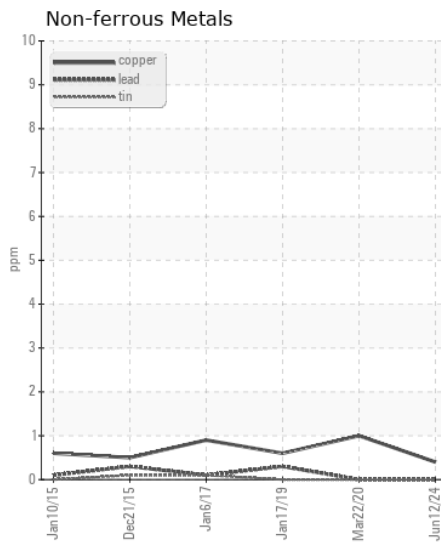
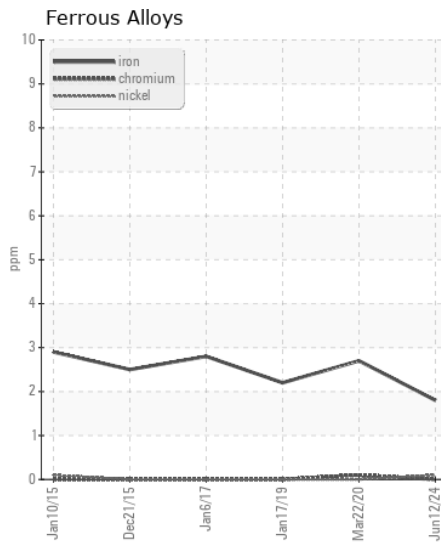
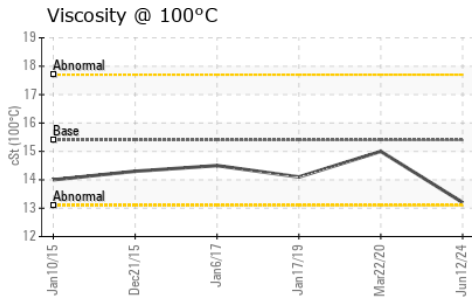
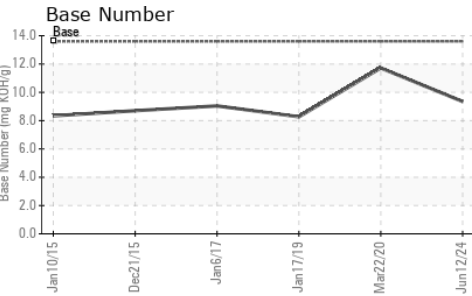
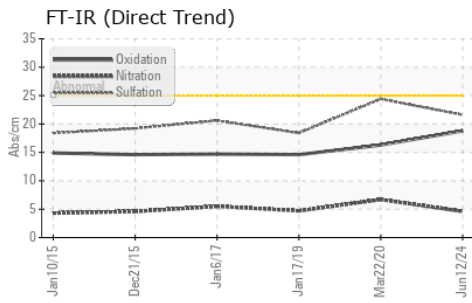
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	7	9	5
Potassium	ppm	ASTM D5185(m)	>20	0	2	0
Fuel		WC Method	>5	<1.0	0.7	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>3	0	0	0
Nitration	Abs/cm	ASTM D7624*	>20	4.6	6.7	4.7
Sulfation	Abs/.1mm	ASTM D7415*	>30	21.6	24.4	18.4
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG

FLUID CONDITION

Additive levels indicate the addition of a different brand, or type of oil.
 The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185(m)		2	<1	<1
Boron	ppm	ASTM D5185(m)		60	268	1
Barium	ppm	ASTM D5185(m)		0	<1	0
Molybdenum	ppm	ASTM D5185(m)		36	261	<1
Manganese	ppm	ASTM D5185(m)		<1	<1	<1
Magnesium	ppm	ASTM D5185(m)		498	831	9
Calcium	ppm	ASTM D5185(m)		1493	1555	2211
Phosphorus	ppm	ASTM D5185(m)		699	981	1006
Zinc	ppm	ASTM D5185(m)		814	1109	1099
Sulfur	ppm	ASTM D5185(m)		2036	2906	3398
Oxidation	Abs/.1mm	ASTM D7414*	>25	18.8	16.3	14.6
Base Number (BN)	mg KOH/g	ASTM D2896*	13.6	9.35	11.72	8.27
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	13.2	15.0	14.1



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0711977
Lab Number : 02643314
Unique Number : 5800853
Test Package : MAR 2
Received : 21 Jun 2024
Tested : 21 Jun 2024
Diagnosed : 21 Jun 2024 - Kevin Marson

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To discuss this sample report, contact Customer Service at 1-800-268-2131.
 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
 Validity of results and interpretation are based on the sample and information as supplied.