



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
Store 9 - Marietta

Machine Id
430286

Component
Diesel Engine

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

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LEC0048955	LEC0040471	LEC0014494
Sample Date		Client Info		23 May 2024	04 Apr 2023	11 Aug 2020
Machine Age	hrs	Client Info		6165	5686	4671
Oil Age	hrs	Client Info		500	500	600
Filter Age	hrs	Client Info		500	500	600
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	ABNORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	22	7	18
Chromium	ppm	ASTM D5185m	>20	<1	1	<1
Nickel	ppm	ASTM D5185m	>4	0	0	<1
Titanium	ppm	ASTM D5185m		<1	0	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	15	1	11
Lead	ppm	ASTM D5185m	>40	5	0	15
Copper	ppm	ASTM D5185m	>330	4	0	2
Tin	ppm	ASTM D5185m	>15	1	0	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

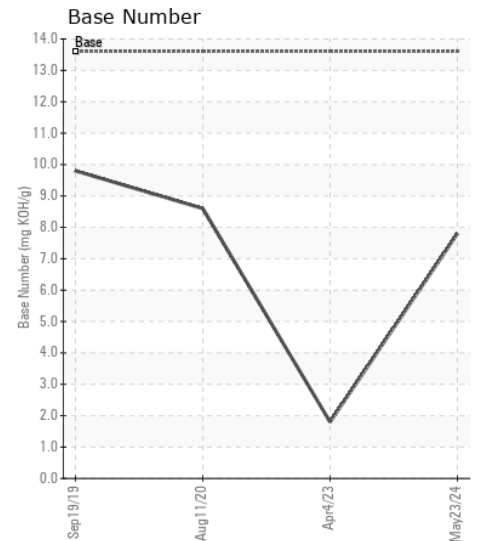
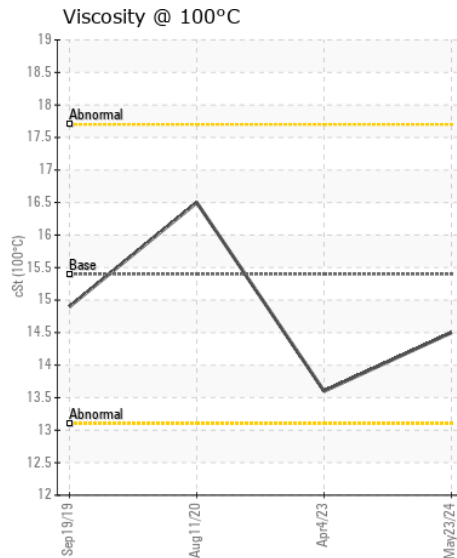
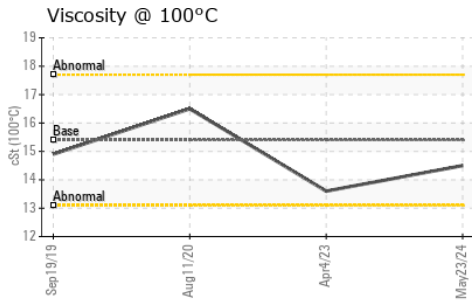
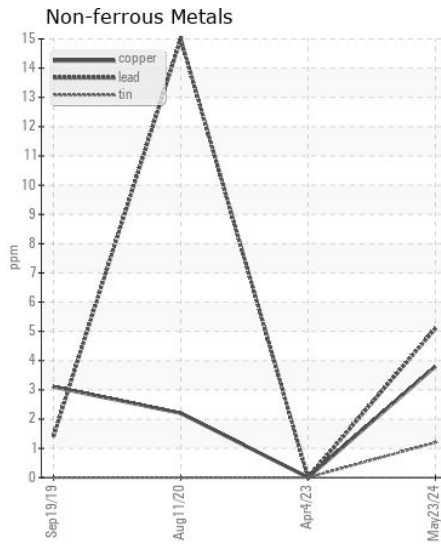
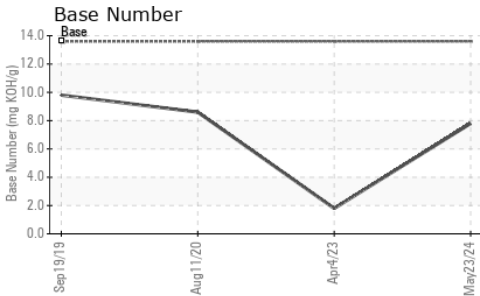
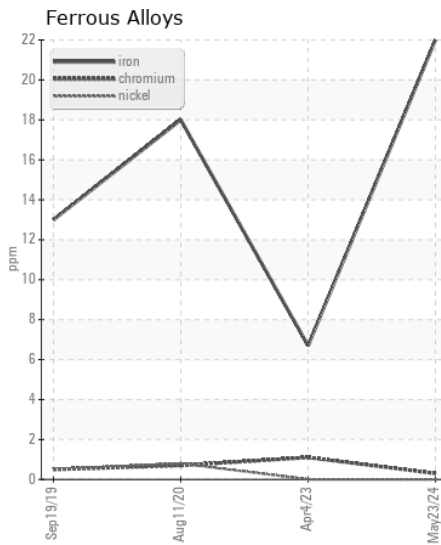
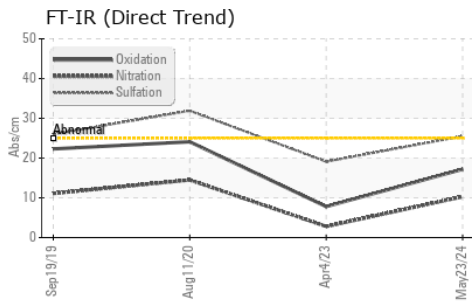
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>120	7	2	7
Potassium	ppm	ASTM D5185m	>20	4	0	8
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	2.4	0.1	▲ 3.8
Nitration	Abs/cm	*ASTM D7624	>20	10.3	2.8	14.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	25.5	19.1	31.9
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	>0.2	NEG	NEG	NEG

FLUID CONDITION

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 D5185m		19	<1	2
Boron	ppm	ASTM D5185m		234	9	144
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		95	59	99
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		468	946	659
Calcium	ppm	ASTM D5185m		1476	1076	1593
Phosphorus	ppm	ASTM D5185m		1016	1004	663
Zinc	ppm	ASTM D5185m		1218	1229	761
Sulfur	ppm	ASTM D5185m		3388	3751	1823
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.2	7.8	24.1
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	7.8	▲ 1.8	8.6
Visc @ 100°C	cSt	ASTM D445	15.4	14.5	13.6	16.5



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LEC0048955 **Received** : 31 May 2024
Lab Number : 06196415 **Tested** : 03 Jun 2024
Unique Number : 11058538 **Diagnosed** : 03 Jun 2024 - Don Baldrige
Test Package : CONST (Additional Tests: TBN)

LANE PIPELINE
 2946 E MAIN ST
 BRIDGEPORT, WV
 US 26330

Contact: JESSE WILBURN
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 T: (740)440-0927

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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