



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
Store 9 - Marietta
Machine Id
JOHN DEERE 850K D-40 (S/N 1T0850KXHJF340561)
Component
Hydraulic System
Fluid
JOHN DEERE HYDRAU (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LEC0049416	LEC0032682	LEC0000329
Sample Date		Client Info		30 Apr 2024	05 Apr 2023	30 May 2019
Machine Age	hrs	Client Info		4086	3369	728
Oil Age	hrs	Client Info		4086	3369	728
Filter Age	hrs	Client Info		300	1000	728
Oil Changed		Client Info		Not Changed	Not Changed	Not Changed
Filter Changed		Client Info		Changed	Changed	Not Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal for time on oil.

PQ		ASTM D8184	>50	20	14	13
Iron	ppm	ASTM D5185m	>23	30	27	7
Chromium	ppm	ASTM D5185m	>9	5	4	<1
Nickel	ppm	ASTM D5185m	>5	0	0	<1
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>9	9	7	2
Lead	ppm	ASTM D5185m	>28	0	<1	<1
Copper	ppm	ASTM D5185m	>51	4	5	<1
Tin	ppm	ASTM D5185m	>5	<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

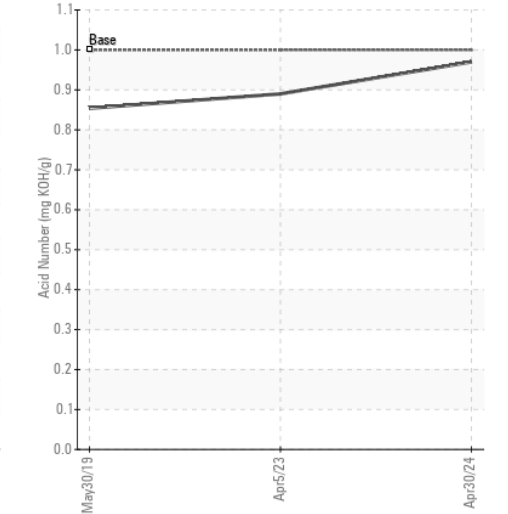
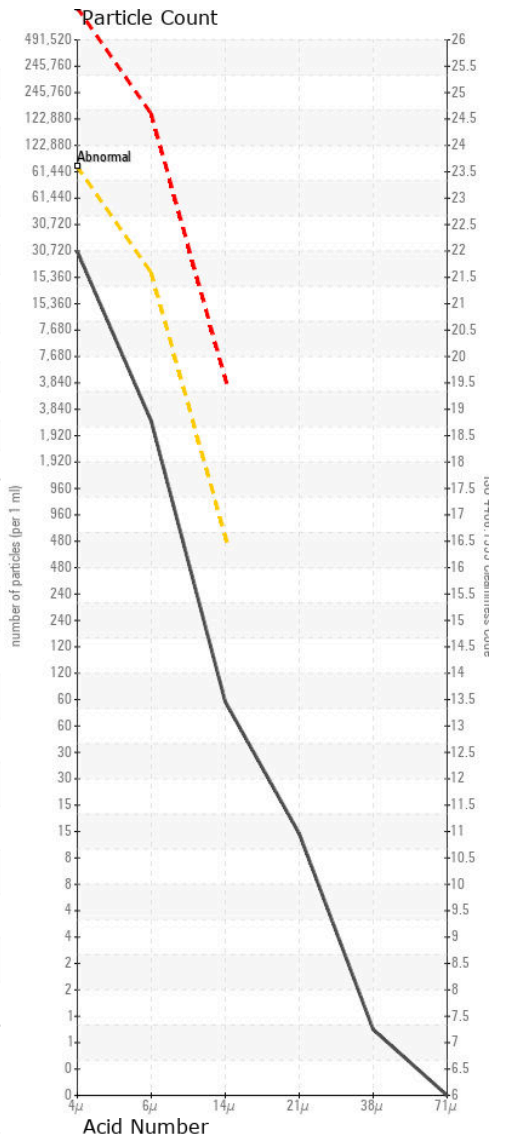
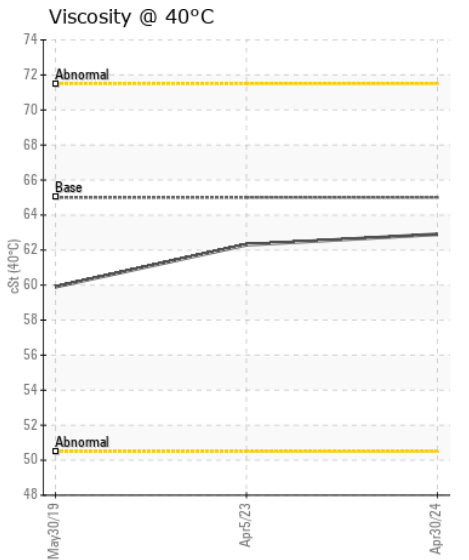
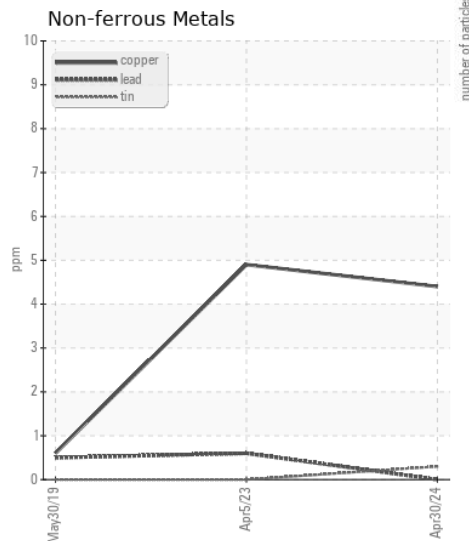
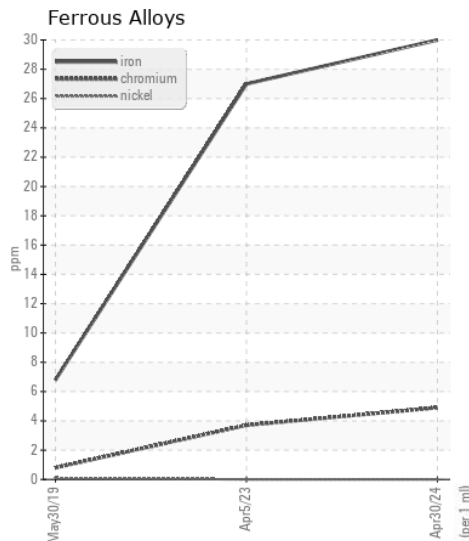
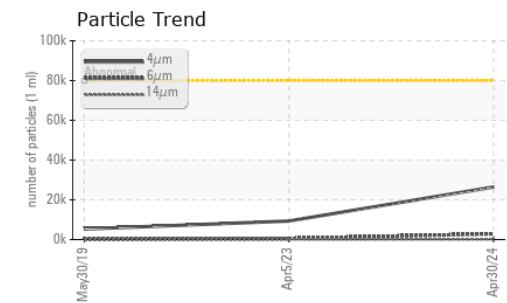
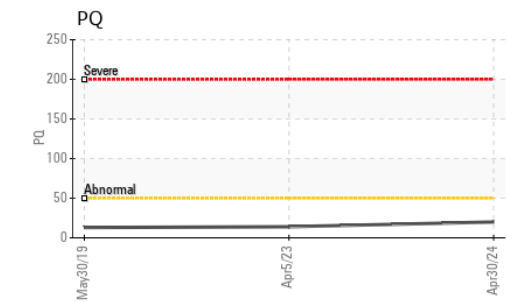
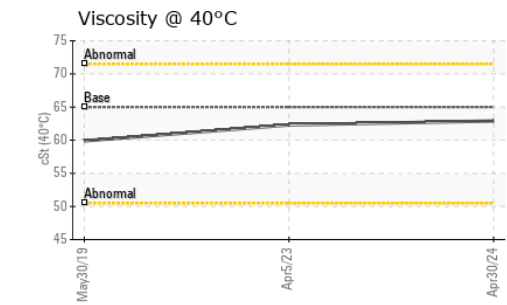
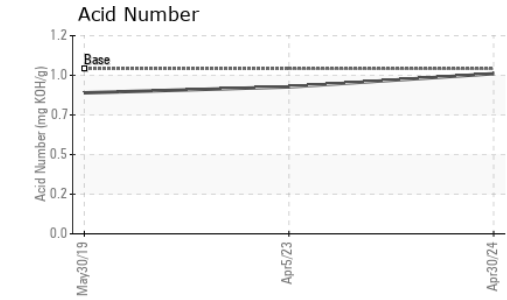
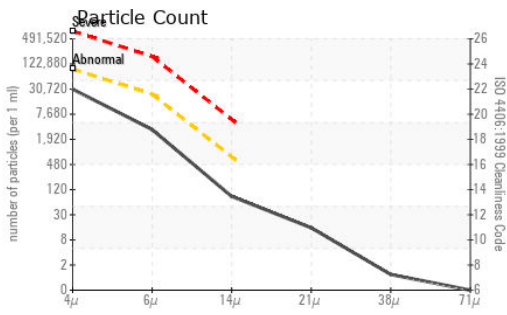
There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

Silicon	ppm	ASTM D5185m	>31	15	11	2
Potassium	ppm	ASTM D5185m	>20	2	3	1
Water		WC Method	>0.075	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>80000	26466	9350	5295
Particles >6µm		ASTM D7647	>20000	2868	518	168
Particles >14µm		ASTM D7647	>640	73	45	14
Particles >21µm		ASTM D7647	>160	13	9	5
Particles >38µm		ASTM D7647	>40	1	0	0
Particles >71µm		ASTM D7647	>10	0	0	0
Oil Cleanliness		ISO 4406 (c)	>23/21/16	22/19/13	20/16/13	20/15/11
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	>0.075	NEG	NEG	NEG

FLUID CONDITION

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>21	<1	<1	<1
Boron	ppm	ASTM D5185m		111	86	<1
Barium	ppm	ASTM D5185m		1	0	0
Molybdenum	ppm	ASTM D5185m		28	25	0
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		129	103	<1
Calcium	ppm	ASTM D5185m	87	406	346	79
Phosphorus	ppm	ASTM D5185m	727	714	610	564
Zinc	ppm	ASTM D5185m	900	881	839	725
Sulfur	ppm	ASTM D5185m	1500	2164	1943	1699
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	0.97	0.89	0.854
Visc @ 40°C	cSt	ASTM D445	65	62.9	62.3	59.9



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LEC0049416 **Received** : 14 May 2024
Lab Number : 06178596 **Tested** : 15 May 2024
Unique Number : 11029922 **Diagnosed** : 16 May 2024 - Don Baldrige
Test Package : CONST (Additional Tests: PQ)

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)

APEX PIPELINE

P.O. BOX 580

NITRO, WV

US 25143

Contact: KELLY TUCKER

T: (304)204-0080

F: (304)204-0083