



WEAR	NORMAL
CONTAMINATION	ATTENTION
FLUID CONDITION	NORMAL

Area
[MILLS BROS LOGGING]
 Machine Id
JOHN DEERE 748L-II 711759
 Component
Hydraulic System
 Fluid
JOHN DEERE HYDRAU (--- GAL)

RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0209678	JR0193581	JR0164576
Sample Date		Client Info		17 Apr 2024	18 Dec 2023	08 Nov 2023
Machine Age	hrs	Client Info		4981	4321	4127
Oil Age	hrs	Client Info		0	4321	4127
Filter Age	hrs	Client Info		0	4321	4127
Oil Changed		Client Info		N/A	Changed	N/A
Filter Changed		Client Info		N/A	Changed	N/A
Sample Status				ATTENTION	ABNORMAL	ABNORMAL

WEAR

All component wear rates are normal.

PQ	UOM	Method	Limit/Abn	Current	History1	History2
Iron	ppm	ASTM D5185m	>20	8	12	13
Chromium	ppm	ASTM D5185m	>10	3	5	6
Nickel	ppm	ASTM D5185m	>10	0	0	0
Titanium	ppm	ASTM D5185m		<1	<1	1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>10	<1	2	3
Lead	ppm	ASTM D5185m	>10	0	0	<1
Copper	ppm	ASTM D5185m	>75	2	3	9
Tin	ppm	ASTM D5185m	>10	<1	0	0
Vanadium	ppm	ASTM D5185m		0	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

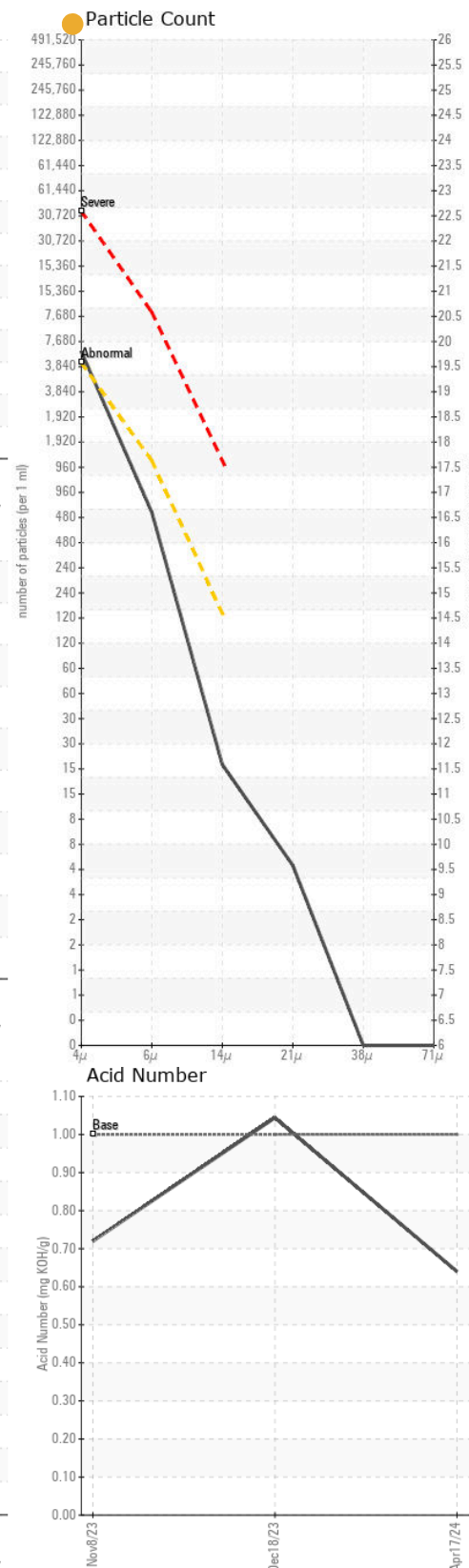
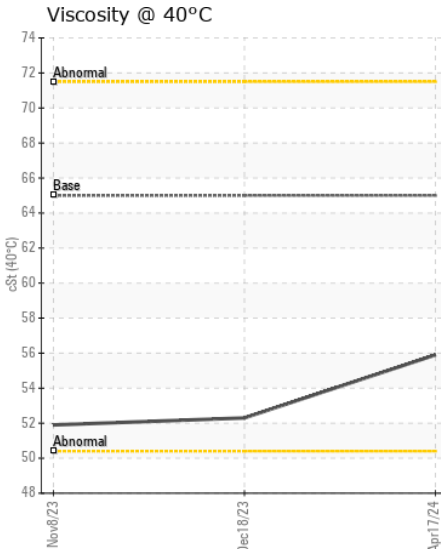
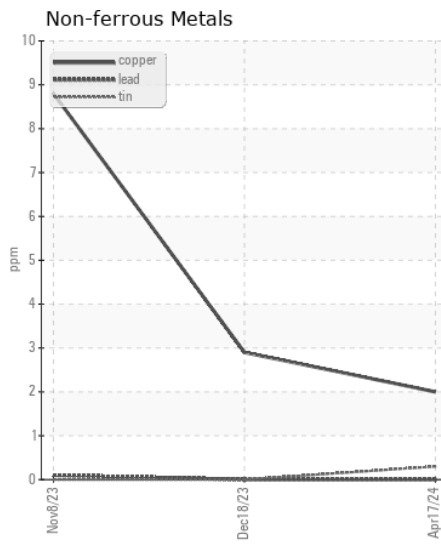
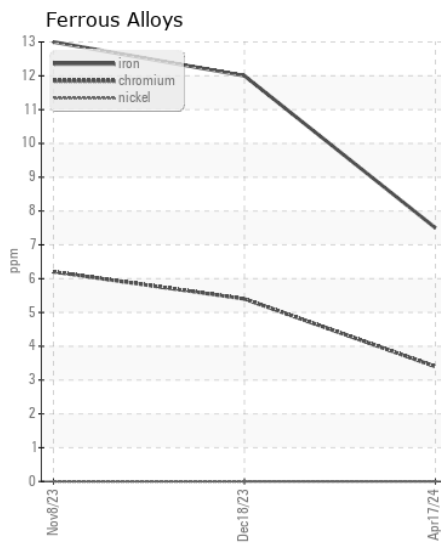
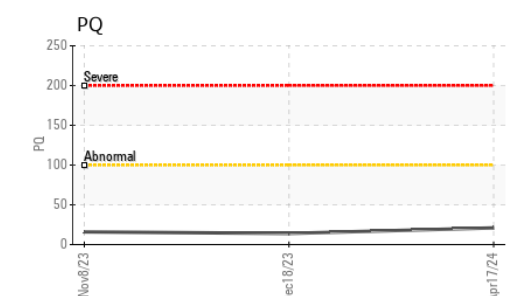
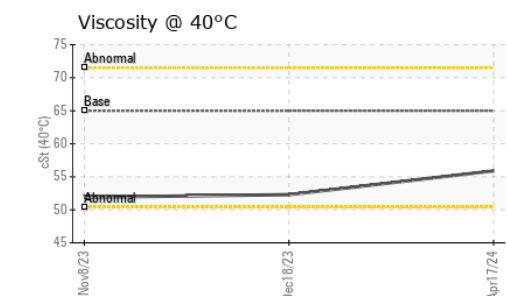
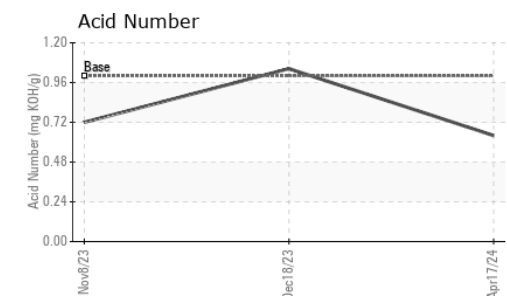
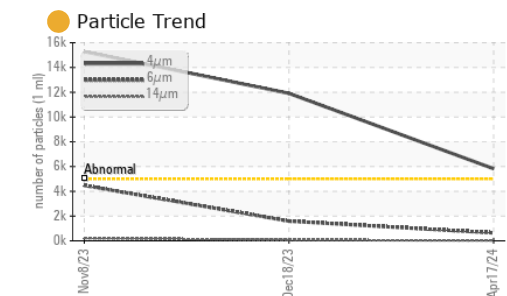
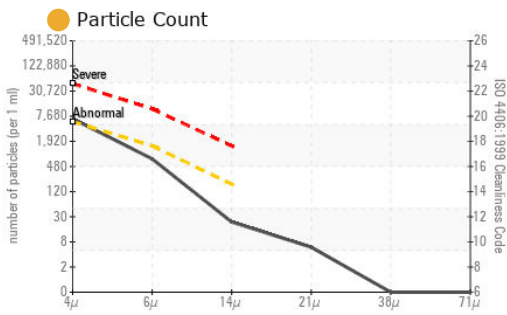
There is a moderate amount of silt (particulates < 14 microns in size) present in the oil.

Silicon	ppm	ASTM D5185m	>20	6	10	12
Potassium	ppm	ASTM D5185m	>20	3	5	8
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>5000	5824	▲ 11909	▲ 15283
Particles >6µm		ASTM D7647	>1300	640	● 1589	▲ 4467
Particles >14µm		ASTM D7647	>160	20	65	▲ 213
Particles >21µm		ASTM D7647	>40	5	19	▲ 48
Particles >38µm		ASTM D7647	>10	0	2	2
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	20/16/11	▲ 21/18/13	▲ 21/19/15
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	>0.1	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		7	5	11
Boron	ppm	ASTM D5185m		4	8	11
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		1	3	4
Manganese	ppm	ASTM D5185m		<1	0	0
Magnesium	ppm	ASTM D5185m		12	22	27
Calcium	ppm	ASTM D5185m	87	336	507	662
Phosphorus	ppm	ASTM D5185m	727	601	488	703
Zinc	ppm	ASTM D5185m	900	722	720	913
Sulfur	ppm	ASTM D5185m	1500	2212	1912	3161
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	0.64	1.044	0.72
Visc @ 40°C	cSt	ASTM D445	65	55.9	52.3	51.9



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0209678 **Received** : 18 Apr 2024
Lab Number : 06152967 **Tested** : 19 Apr 2024
Unique Number : 10983045 **Diagnosed** : 22 Apr 2024 - Don Baldrige
Test Package : CONST (Additional Tests: PQ)

JRE - GARNER
 4161 AUBURN CHURCH RD
 GARNER, NC
 US 27529
 Contact: RALEIGH SHOP
 sean.betts@jamesriverequipment.com; catherine.anastasio@wearcheck.com
 T: (919)614-2260
 F: (919)779-5432

Certificate L2367
 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)