



WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id
JOHN DEERE 290737
 Component
Hydraulic System
 Fluid
JD (--- GAL)

RECOMMENDATION

No corrective action is recommended at this time. The filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0222538	JR0112858	JR0055557
Sample Date		Client Info		26 Jun 2024	06 May 2022	29 Jul 2020
Machine Age	hrs	Client Info		2999	2342	695
Oil Age	hrs	Client Info		2999	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changed	N/A	Not Changed
Filter Changed		Client Info		Changed	N/A	Changed
Sample Status				ABNORMAL	NORMAL	ABNORMAL

WEAR

All component wear rates are normal.

PQ	UOM	Method	Limit/Abn	Current	History1	History2
Iron	ppm	ASTM D5185m	>20	7	7	5
Chromium	ppm	ASTM D5185m	>10	<1	0	<1
Nickel	ppm	ASTM D5185m	>10	<1	0	<1
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m		<1	<1	0
Aluminum	ppm	ASTM D5185m	>10	2	1	<1
Lead	ppm	ASTM D5185m	>10	<1	<1	<1
Copper	ppm	ASTM D5185m	>75	7	7	4
Tin	ppm	ASTM D5185m	>10	<1	<1	<1
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

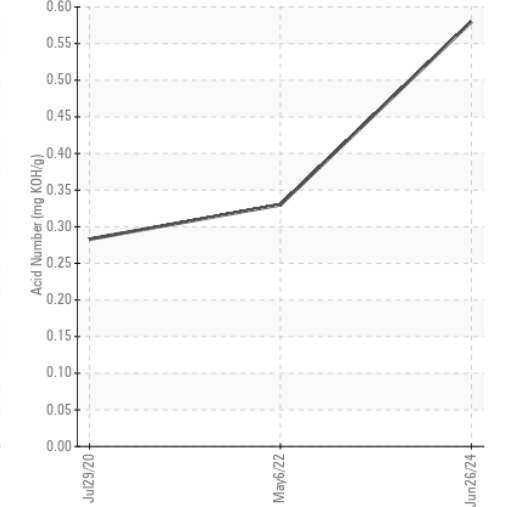
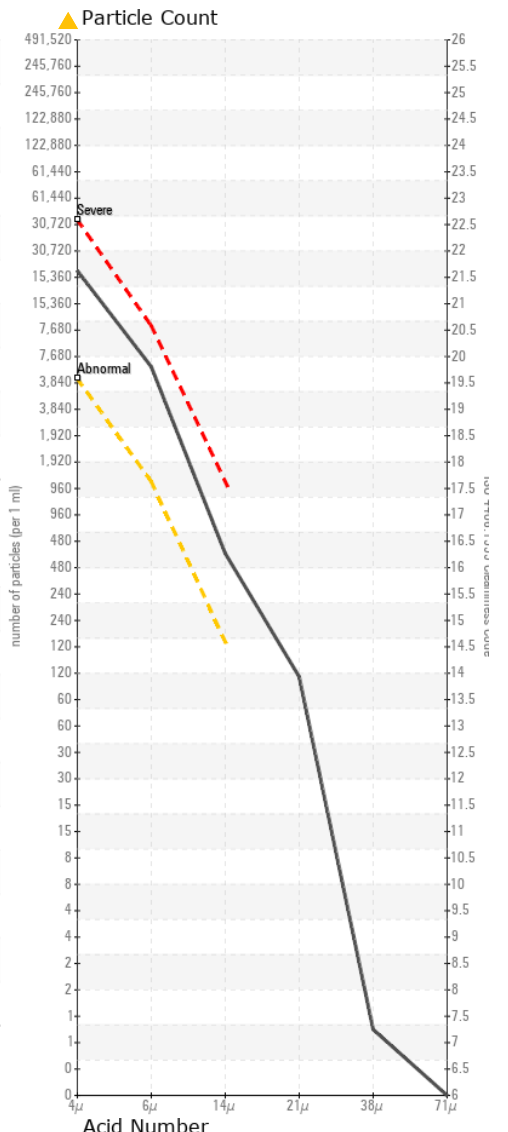
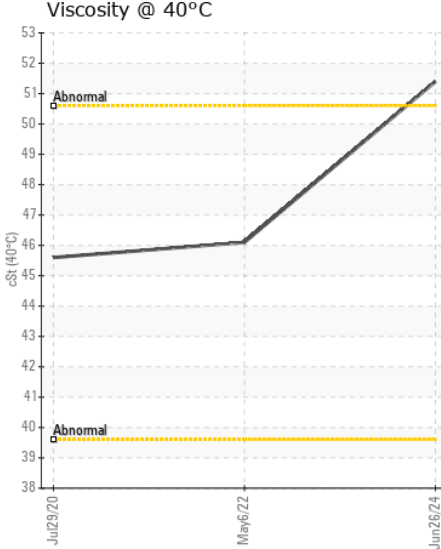
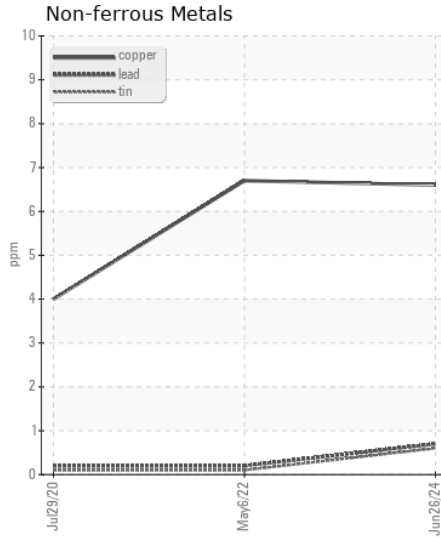
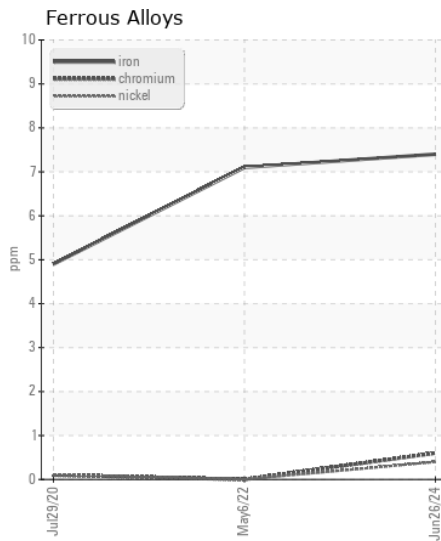
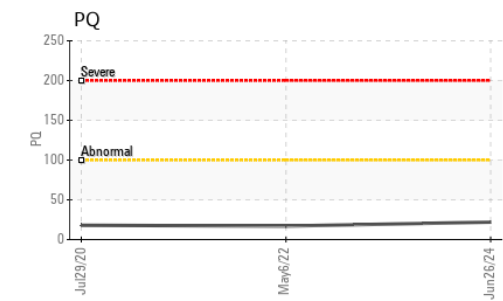
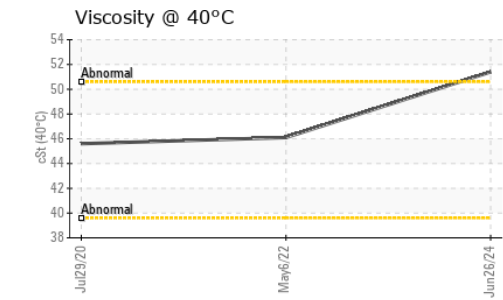
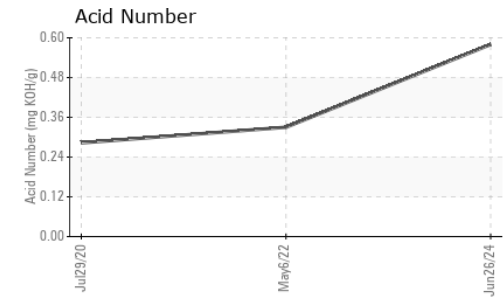
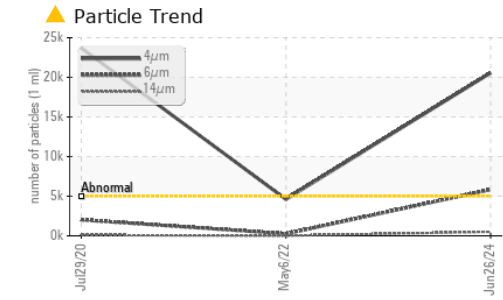
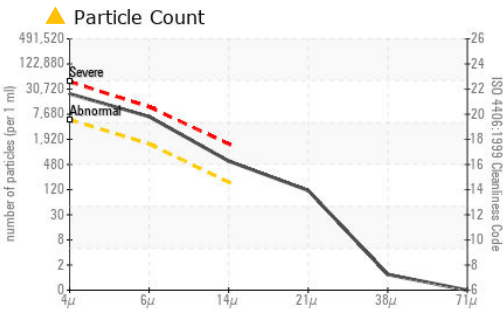
There is a high amount of particulates present in the oil.

Silicon	ppm	ASTM D5185m	>20	5	3	2
Potassium	ppm	ASTM D5185m	>20	2	0	<1
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>5000	▲ 20563	4611	▲ 23694
Particles >6µm		ASTM D7647	>1300	▲ 5843	262	▲ 2019
Particles >14µm		ASTM D7647	>160	▲ 508	13	91
Particles >21µm		ASTM D7647	>40	▲ 101	6	24
Particles >38µm		ASTM D7647	>10	1	0	0
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ 22/20/16	19/15/11	▲ 22/18/14
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	LIGHT	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		0	2	1
Boron	ppm	ASTM D5185m		14	25	8
Barium	ppm	ASTM D5185m		1	0	0
Molybdenum	ppm	ASTM D5185m		1	<1	<1
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		16	20	17
Calcium	ppm	ASTM D5185m		1418	776	304
Phosphorus	ppm	ASTM D5185m		559	564	406
Zinc	ppm	ASTM D5185m		546	371	181
Sulfur	ppm	ASTM D5185m		2508	2267	2156
Acid Number (AN)	mg KOH/g	ASTM D8045		0.58	0.33	0.283
Visc @ 40°C	cSt	ASTM D445		51.4	46.1	45.6



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0222538 **Received** : 28 Jun 2024
Lab Number : 06223435 **Tested** : 01 Jul 2024
Unique Number : 11101632 **Diagnosed** : 01 Jul 2024 - Don Baldrige
Test Package : CONST (Additional Tests: PQ)

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 US 27529
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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)