



OIL ANALYSIS REPORT

WEAR	SEVERE
CONTAMINATION	SEVERE
FLUID CONDITION	NORMAL



Area
Store 5 - Cross Lanes
Machine Id
JOHN DEERE 210G EX46 (S/N 1FF210GXCJF526281)
Component
Pump Drive
Fluid
GEAR OIL SAE 90 (1 QTS)

RECOMMENDATION

We advise that you check all areas where dirt can enter the system. We recommend that you drain the oil from the component if this has not already been done. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LEC0049303	LEC0045444	LEC0042554
Sample Date		Client Info		10 Jun 2024	02 Nov 2023	06 Jul 2023
Machine Age	hrs	Client Info		4122	3570	3090
Oil Age	hrs	Client Info		500	980	3090
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	None
Sample Status				SEVERE	ATTENTION	NORMAL

WEAR

The iron and chrome levels are severe. Gear wear is indicated.

PQ		ASTM D8184		1594	25	35
Iron	ppm	ASTM D5185m	>151	▲ 5795	89	88
Chromium	ppm	ASTM D5185m	>11	▲ 60	<1	1
Nickel	ppm	ASTM D5185m	>10	3	0	0
Titanium	ppm	ASTM D5185m		30	0	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>21	● 567	2	3
Lead	ppm	ASTM D5185m	>51	0	0	0
Copper	ppm	ASTM D5185m	>51	8	<1	0
Tin	ppm	ASTM D5185m	>4	<1	0	0
Vanadium	ppm	ASTM D5185m		1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

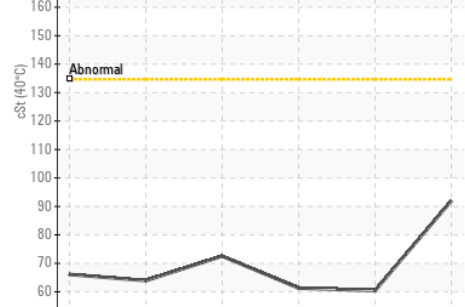
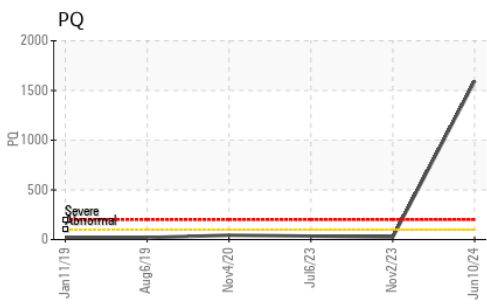
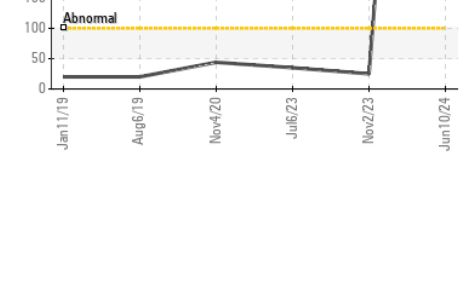
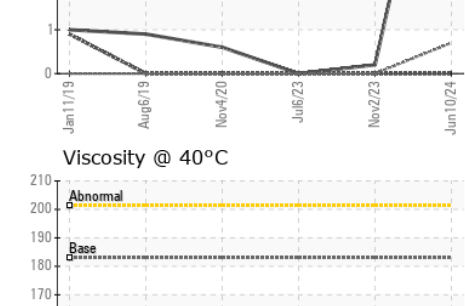
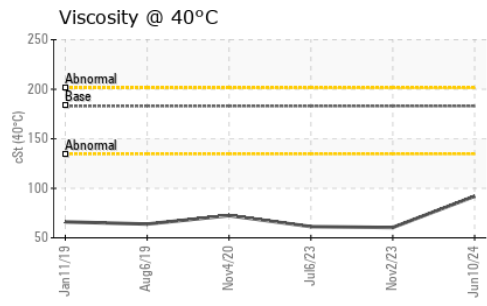
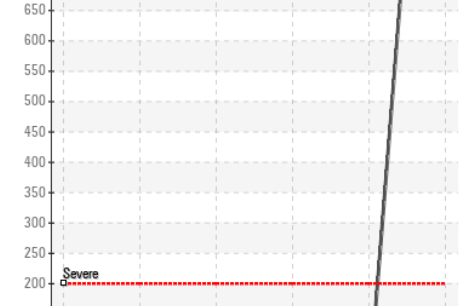
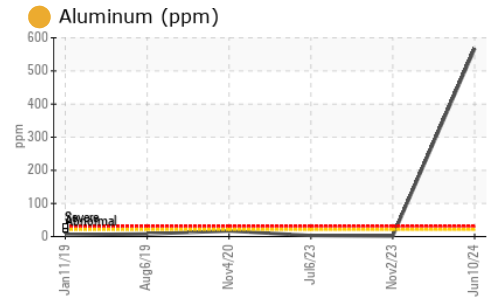
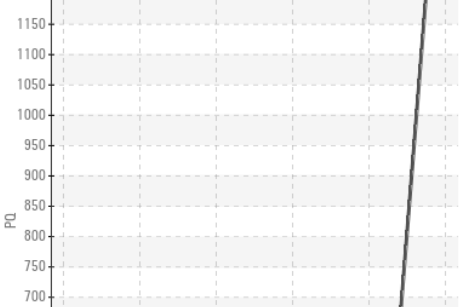
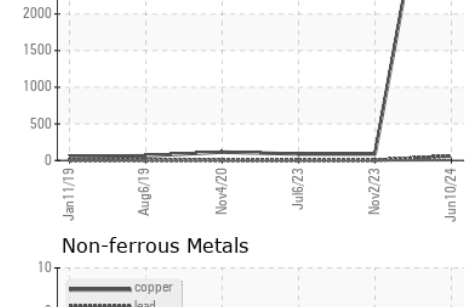
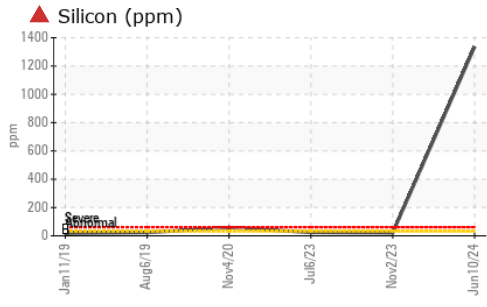
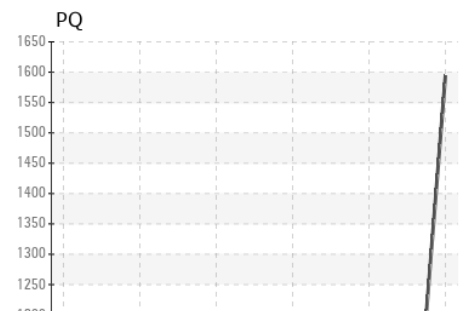
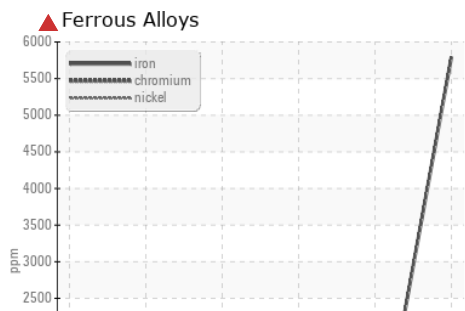
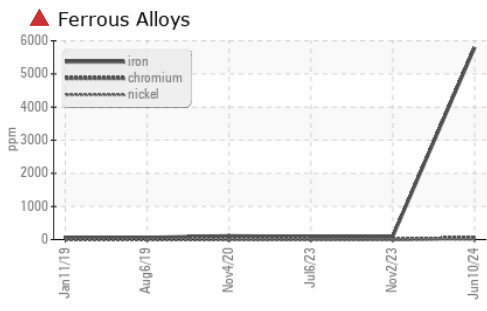
Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

Silicon	ppm	ASTM D5185m	>31	▲ 1336	21	24
Potassium	ppm	ASTM D5185m	>20	134	0	3
Water		WC Method	>0.1	NEG	NEG	NEG
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 oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185m	>51	16	<1	2
Boron	ppm	ASTM D5185m	400	203	29	29
Barium	ppm	ASTM D5185m	200	4	0	0
Molybdenum	ppm	ASTM D5185m	12	173	15	15
Manganese	ppm	ASTM D5185m		50	1	1
Magnesium	ppm	ASTM D5185m	12	600	144	162
Calcium	ppm	ASTM D5185m	150	1358	2953	3409
Phosphorus	ppm	ASTM D5185m	1650	916	864	1040
Zinc	ppm	ASTM D5185m	125	699	1128	1246
Sulfur	ppm	ASTM D5185m	22500	7066	4476	5290
Visc @ 40°C	cSt	ASTM D445	183	92.0	● 60.4	61.3



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LEC0049303 **Received** : 03 Jul 2024
Lab Number : 06227722 **Tested** : 05 Jul 2024
Unique Number : 1111215 **Diagnosed** : 06 Jul 2024 - Don Baldrige
Test Package : CONST (Additional Tests: PQ)

LANE PIPELINE
 2946 E MAIN ST
 BRIDGEPORT, WV
 US 26330
 Contact: JESSE WILBURN
 jessewilburn@gmail.com
 T: (740)440-0927
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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)