James River Equipment

OIL ANALYSIS REPORT

WEAR	SEVERE
CONTAMINATION	SEVERE
FLUID CONDITION	ABNORMAL

Machine Id
HITACHI 300LC-6 1FFDDP70PHF840255
Component
Left Final Drive
Fluid
JOHN DEERE GL-5 80W90 (--- GAL)

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.

WEAR

Gear wear is indicated. The very high ferrous density (PQ) index indicates that severe wear is occurring.

CONTAMINATION

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

FLUID CONDITION

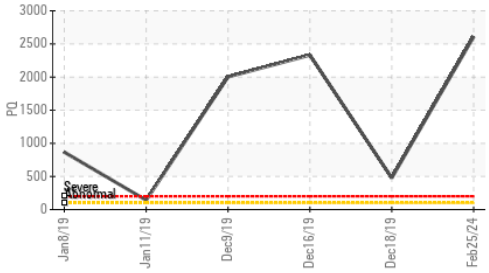
The oil viscosity is higher than normal. The oil is no longer serviceable due to the presence of contaminants.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0205146	JR0026733	JR0014176
Sample Date		Client Info		25 Feb 2024	18 Dec 2019	16 Dec 2019
Machine Age	hrs	Client Info		6359	1802	1799
Oil Age	hrs	Client Info		0	1802	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	Changed	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				SEVERE	ABNORMAL	SEVERE
PQ		ASTM D8184		▲ 2608	478	▲ 2332
Iron	ppm	ASTM D5185m	>500	▲ 5541	2064	▲ 10802
Chromium	ppm	ASTM D5185m	>10	▲ 32	16	▲ 96
Nickel	ppm	ASTM D5185m	>10	9	3	18
Titanium	ppm	ASTM D5185m		44	14	86
Silver	ppm	ASTM D5185m		0	<1	0
Aluminum	ppm	ASTM D5185m	>25	▲ 373	● 48	● 312
Lead	ppm	ASTM D5185m	>25	2	0	3
Copper	ppm	ASTM D5185m	>50	9	3	7
Tin	ppm	ASTM D5185m	>10	<1	0	0
Vanadium	ppm	ASTM D5185m		2	<1	2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>75	▲ 1522	▲ 654	▲ 4647
Potassium	ppm	ASTM D5185m	>20	18	9	69
Water		WC Method	>0.2	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	>0.2	NEG	NEG	0.2%
Sodium	ppm	ASTM D5185m		57	2	14
Boron	ppm	ASTM D5185m		24	30	189
Barium	ppm	ASTM D5185m		0	<1	0
Molybdenum	ppm	ASTM D5185m		3	0	0
Manganese	ppm	ASTM D5185m		41	13	85
Magnesium	ppm	ASTM D5185m		72	6	28
Calcium	ppm	ASTM D5185m		173	38	196
Phosphorus	ppm	ASTM D5185m		312	369	1090
Zinc	ppm	ASTM D5185m		7	21	94
Sulfur	ppm	ASTM D5185m		19498	24541	66380
Visc @ 40°C	cSt	ASTM D445		▲ 465	142.2	246

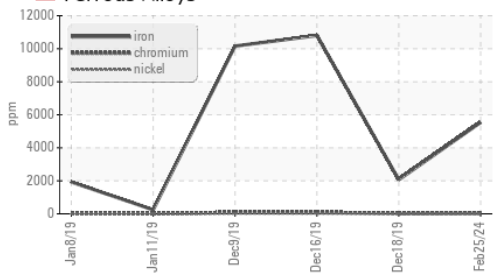
Report Id: JAMGRE [WUSCAR] 06100368 (Generated: 02/28/2024 20:29:34) Rev: 1

Contact/Location: NICK GALLAHER - JAMGRE

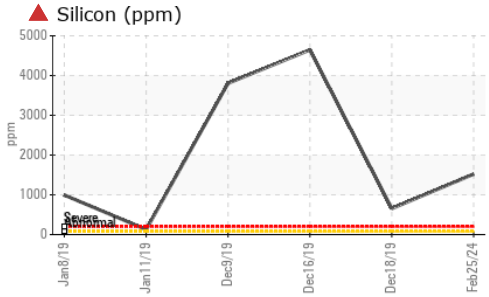
PQ



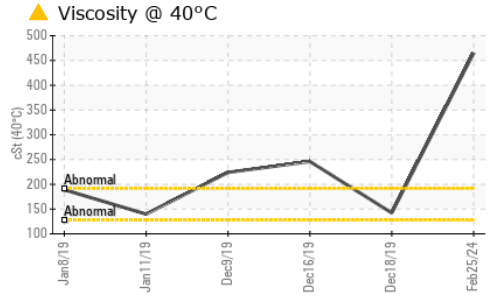
Ferrous Alloys



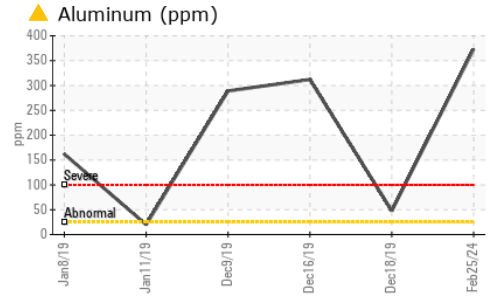
Silicon (ppm)



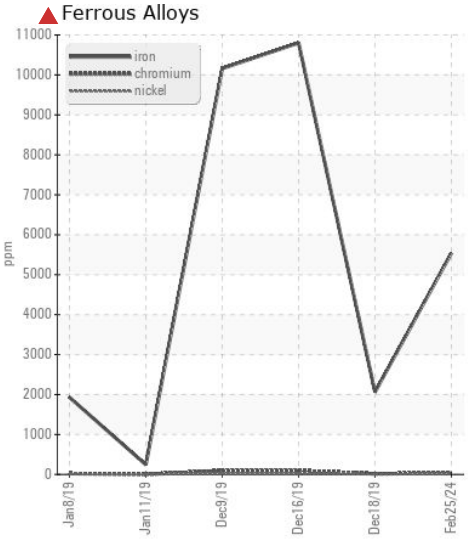
Viscosity @ 40°C



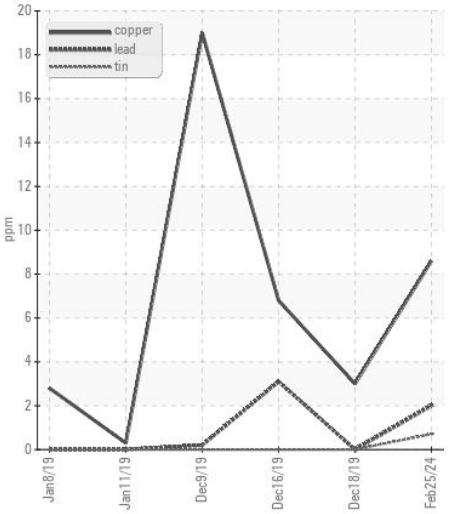
Aluminum (ppm)



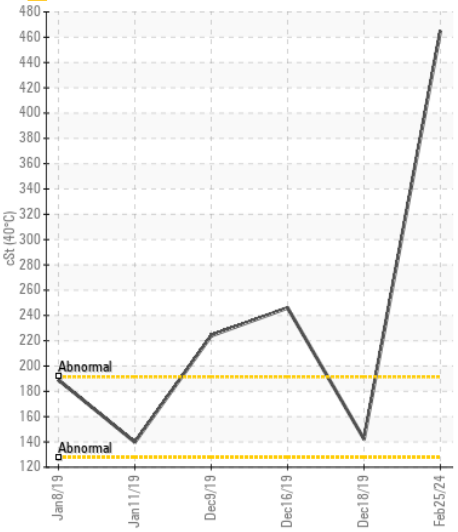
Ferrous Alloys



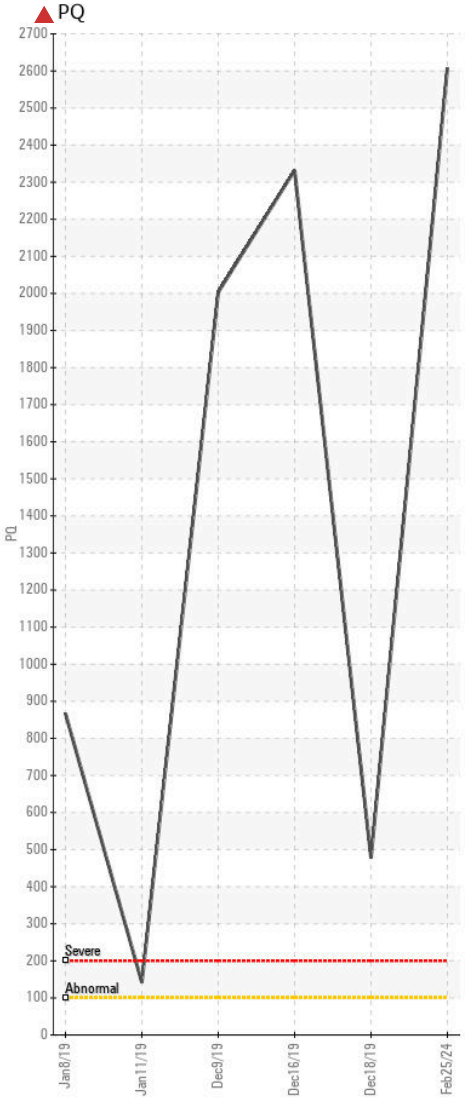
Non-ferrous Metals



Viscosity @ 40°C



PQ



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0205146
Lab Number : 06100368
Unique Number : 10898598
Test Package : CONST (Additional Tests: PQ)

Received : 26 Feb 2024
Tested : 27 Feb 2024
Diagnosed : 28 Feb 2024 - Sean Felton

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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