



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
HITACHI 470 HCMJAA70K00030813
 Component
Left Swing Drive Gear Case
 Fluid
JOHN DEERE GL-5 80W90 (--- QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0224440	JR0180031	JR0147338
Sample Date		Client Info		10 Jul 2024	26 Sep 2023	12 Dec 2022
Machine Age	hrs	Client Info		13968	12978	11953
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		N/A	N/A	Changed
Sample Status				NORMAL	ABNORMAL	NORMAL

WEAR

All component wear rates are normal.

PQ	UOM	Method	Limit/Abn	Current	History1	History2
PQ		ASTM D8184		32	24	13
Iron	ppm	ASTM D5185m	>200	94	▲ 308	50
Chromium	ppm	ASTM D5185m	>10	1	4	<1
Nickel	ppm	ASTM D5185m	>10	<1	0	0
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m		<1	0	0
Aluminum	ppm	ASTM D5185m		4	<1	2
Lead	ppm	ASTM D5185m		0	0	0
Copper	ppm	ASTM D5185m		<1	<1	<1
Tin	ppm	ASTM D5185m		0	0	0
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	LIGHT
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

There is no indication of any contamination in the oil.

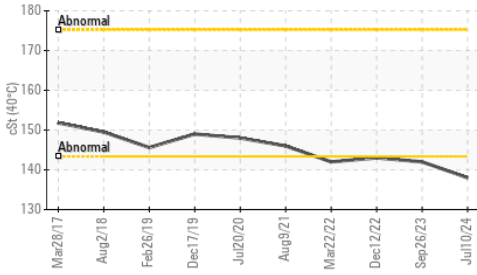
Test	UOM	Method	Limit/Abn	Current	History1	History2
Silicon	ppm	ASTM D5185m		16	5	4
Potassium	ppm	ASTM D5185m	>20	3	10	0
Water		WC Method	>0.2	NEG	NEG	NEG
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	LIGHT
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	● MILKY	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	0.2%	NEG

FLUID CONDITION

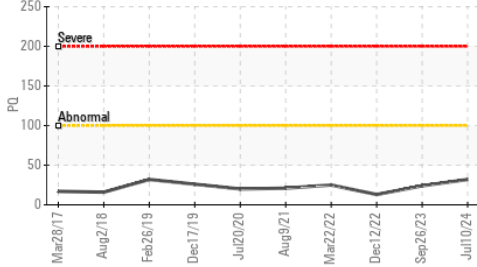
The condition of the oil is acceptable for the time in service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sodium	ppm	ASTM D5185m		0	<1	1
Boron	ppm	ASTM D5185m		18	38	82
Barium	ppm	ASTM D5185m		1	2	0
Molybdenum	ppm	ASTM D5185m		<1	<1	0
Manganese	ppm	ASTM D5185m		1	5	<1
Magnesium	ppm	ASTM D5185m		2	3	1
Calcium	ppm	ASTM D5185m		<1	33	11
Phosphorus	ppm	ASTM D5185m		1699	611	886
Zinc	ppm	ASTM D5185m		6	22	20
Sulfur	ppm	ASTM D5185m		23975	23154	25056
Visc @ 40°C	cSt	ASTM D445		138	142	143

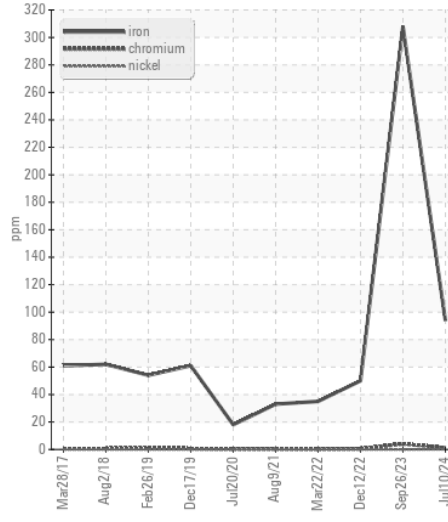
Viscosity @ 40°C



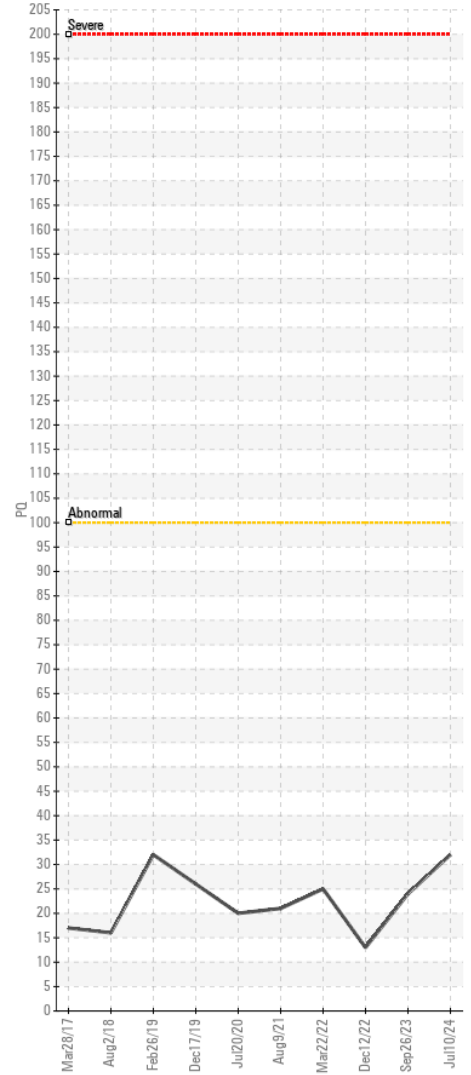
PQ



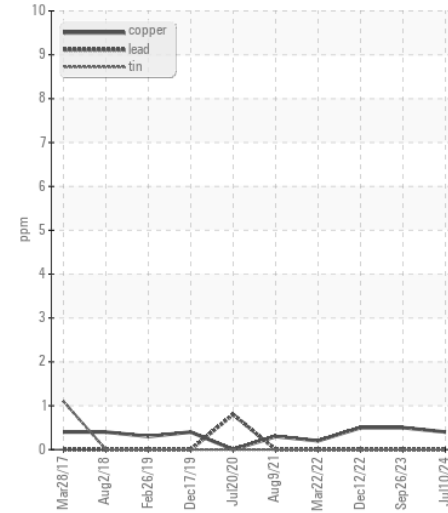
Ferrous Alloys



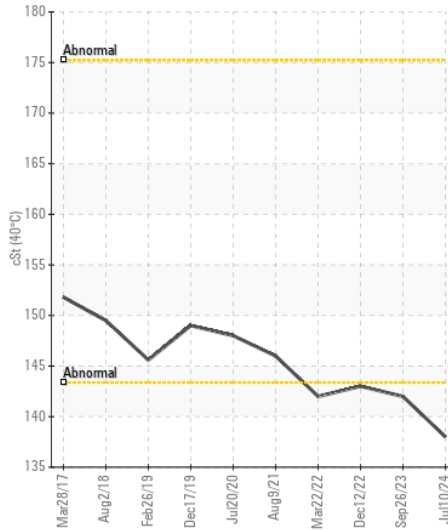
PQ



Non-ferrous Metals



Viscosity @ 40°C



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : JR0224440 Received : 11 Jul 2024
 Lab Number : 06234073 Tested : 12 Jul 2024
 Unique Number : 11122907 Diagnosed : 14 Jul 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)

JRE - ASHLAND
 11047 LEADBETTER RD
 ASHLAND, VA
 US 23005
 Contact: DAVID ZIEG
 dzieg@jamesriverequipment.com
 T: (804)798-6001
 F: (804)798-0292