James River Equipment

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	SEVERE
FLUID CONDITION	NORMAL

Machine Id
JOHN DEERE 1T0410LXLKF350371
Component
Hydraulic System
Fluid
JOHN DEERE HYDRAU (--- QTS)

RECOMMENDATION

Check seals and/or filters for points of contaminant entry. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. We recommend you service the filters on this component. Resample in 30-45 days to monitor this situation.

WEAR

All component wear rates are normal.

CONTAMINATION

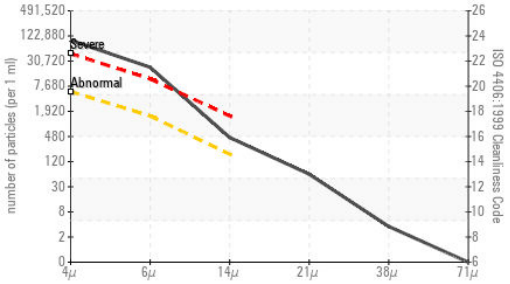
There is a high amount of silt (particulates < 14 microns in size) present in the oil.

FLUID CONDITION

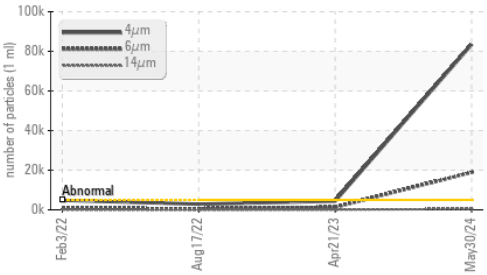
The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0217877	JR0169109	JR0140111
Sample Date		Client Info		30 May 2024	21 Apr 2023	17 Aug 2022
Machine Age	hrs	Client Info		1614	1404	1115
Oil Age	hrs	Client Info		1325	289	1115
Filter Age	hrs	Client Info		1325	289	0
Oil Changed		Client Info		Not Changd	Not Changd	Changed
Filter Changed		Client Info		Not Changd	Not Changd	Changed
Sample Status				SEVERE	NORMAL	NORMAL
PQ		ASTM D8184		12	7	14
Iron	ppm	ASTM D5185m	>20	0	9	7
Chromium	ppm	ASTM D5185m	>10	0	2	2
Nickel	ppm	ASTM D5185m	>10	0	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	<1
Aluminum	ppm	ASTM D5185m	>10	<1	0	2
Lead	ppm	ASTM D5185m	>10	0	<1	<1
Copper	ppm	ASTM D5185m	>75	0	1	2
Tin	ppm	ASTM D5185m	>10	0	0	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>20	<1	3	3
Potassium	ppm	ASTM D5185m	>20	0	4	2
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>5000	▲ 83432	4372	2864
Particles >6µm		ASTM D7647	>1300	▲ 18905	1272	557
Particles >14µm		ASTM D7647	>160	▲ 399	98	7
Particles >21µm		ASTM D7647	>40	53	29	1
Particles >38µm		ASTM D7647	>10	3	1	0
Particles >71µm		ASTM D7647	>3	0	0	1
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ 24/21/16	19/17/14	19/16/10
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
Sodium	ppm	ASTM D5185m		<1	0	1
Boron	ppm	ASTM D5185m		0	0	0
Barium	ppm	ASTM D5185m		0	0	<1
Molybdenum	ppm	ASTM D5185m		<1	<1	<1
Manganese	ppm	ASTM D5185m		0	<1	<1
Magnesium	ppm	ASTM D5185m		2	6	2
Calcium	ppm	ASTM D5185m	87	141	92	86
Phosphorus	ppm	ASTM D5185m	727	689	588	569
Zinc	ppm	ASTM D5185m	900	848	783	772
Sulfur	ppm	ASTM D5185m	1500	1885	1404	1425
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	0.75	0.47	0.75
Visc @ 40°C	cSt	ASTM D445	65	63.0	57.6	57.0

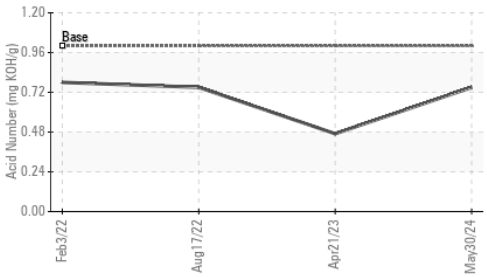
Particle Count



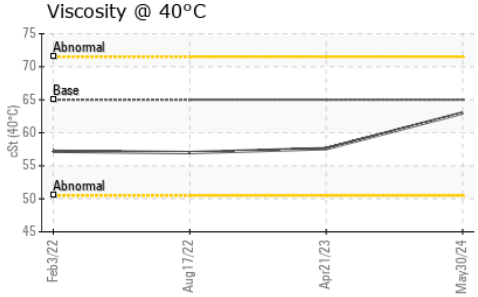
Particle Trend



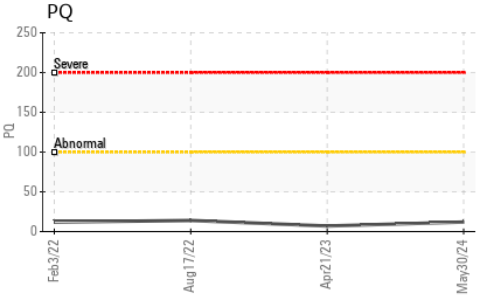
Acid Number



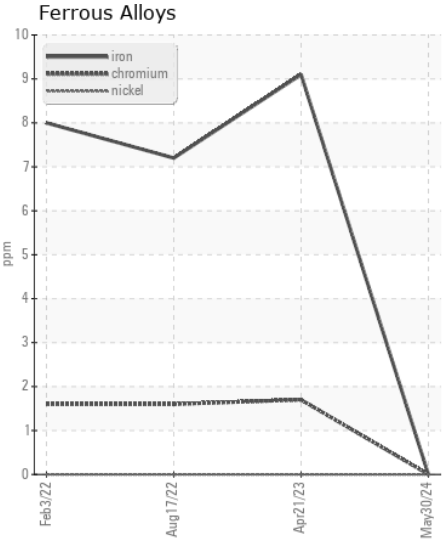
Viscosity @ 40°C



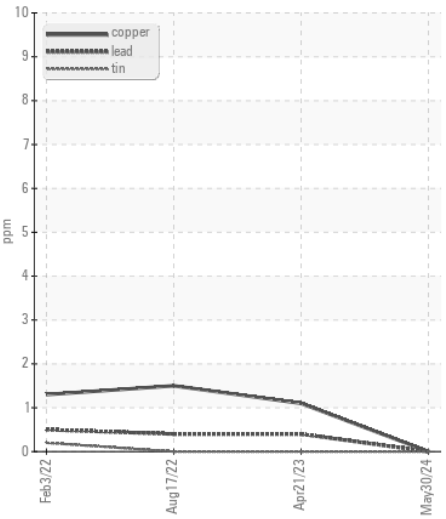
PQ



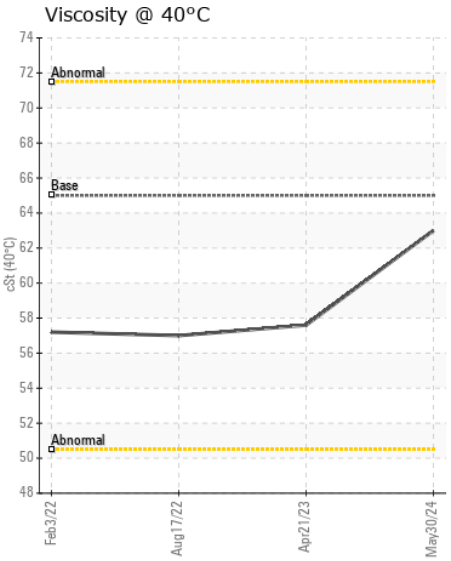
Ferrous Alloys



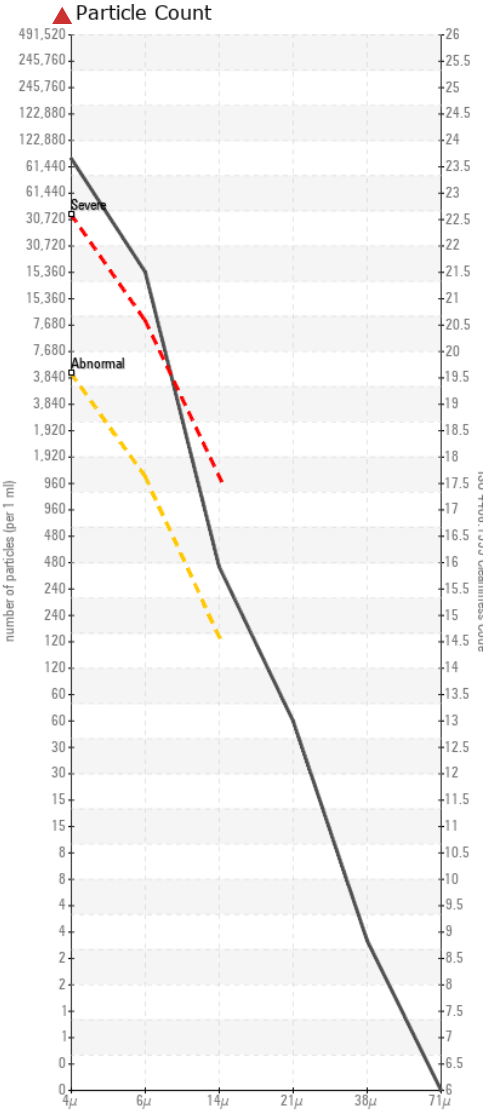
Non-ferrous Metals



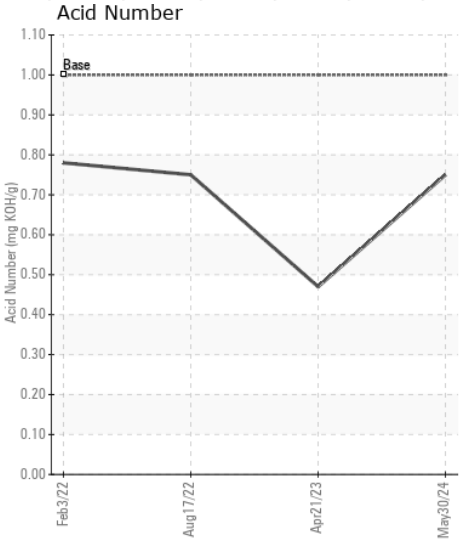
Viscosity @ 40°C



Particle Count



Acid Number



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0217877
Lab Number : 06197547
Unique Number : 11059670
Test Package : CONST (Additional Tests: PQ)

Received : 03 Jun 2024
Tested : 04 Jun 2024
Diagnosed : 04 Jun 2024 - Wes Davis

Certificate L2367

NPL CONSTRUCTION
7611 COPPERMINE DR
MANASSAS, VA
US 20109-2668
Contact: BRANDON

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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