



TRAAP

Texas Refinery Advanced Analysis Program

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
JOHN DEERE 772G 72 - JOHN DEERE (S/N HF682978)

Component
Hydraulic System

Fluid
TRC UNIVERSAL TORQUE FLUID (2 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		TR06086673	TR05604991	TR05392467
Sample Date		Client Info		07 Feb 2024	07 Jul 2022	28 Oct 2021
Machine Age	hrs	Client Info		5981	4509	4000
Oil Age	hrs	Client Info		1981	509	4000
Filter Age	hrs	Client Info		1981	509	2000
Oil Changed		Client Info		Not Changd	Not Changd	Changed
Filter Changed		Client Info		Changed	Not Changd	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>20	16	10	17
Chromium	ppm	ASTM D5185m	>10	2	2	3
Nickel	ppm	ASTM D5185m	>10	0	0	0
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m		0	<1	7
Aluminum	ppm	ASTM D5185m	>10	1	2	0
Lead	ppm	ASTM D5185m	>10	2	1	2
Copper	ppm	ASTM D5185m	>75	9	7	10
Tin	ppm	ASTM D5185m	>10	2	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

CONTAMINATION

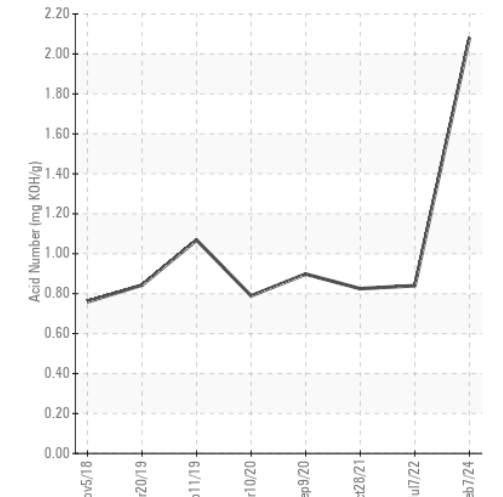
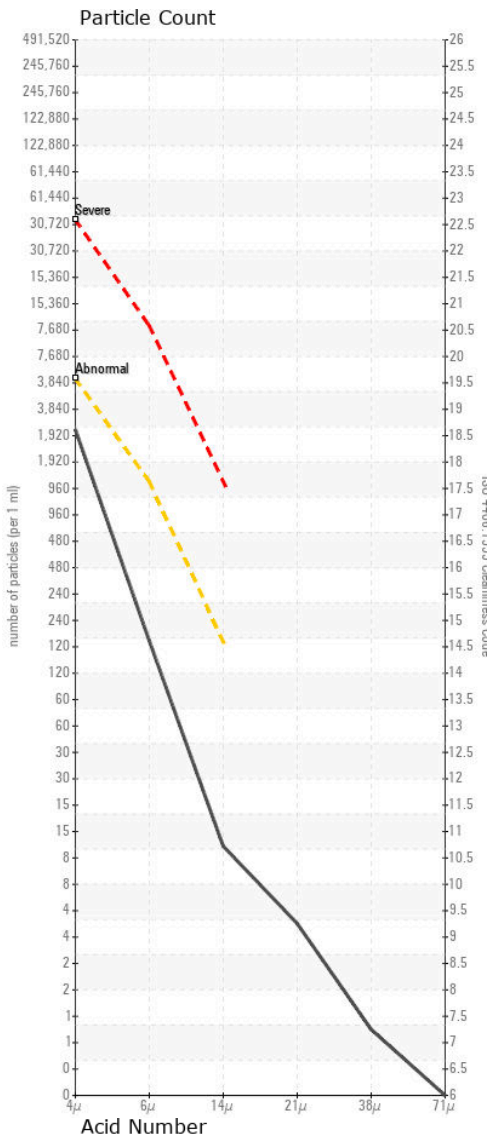
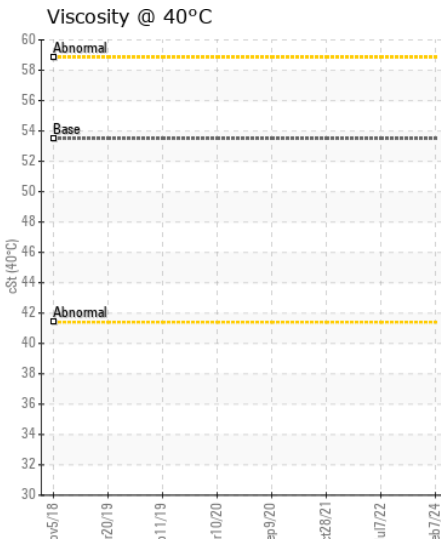
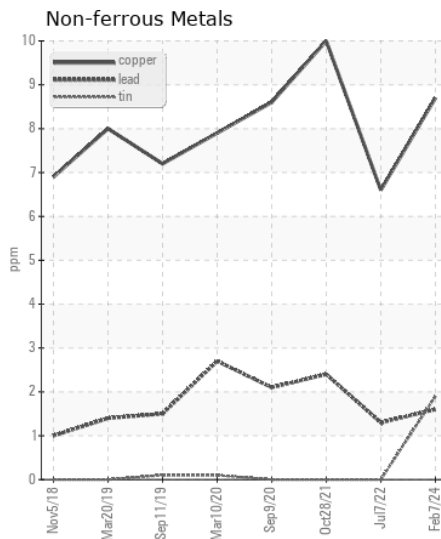
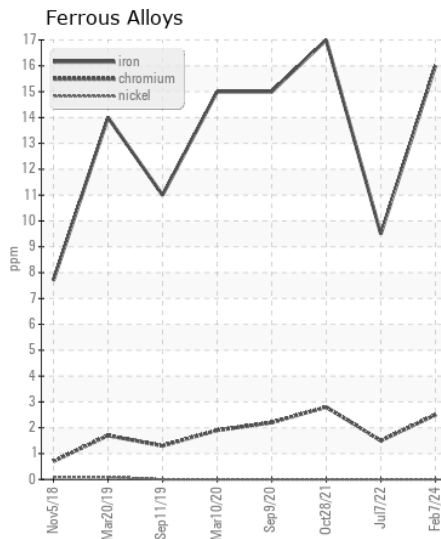
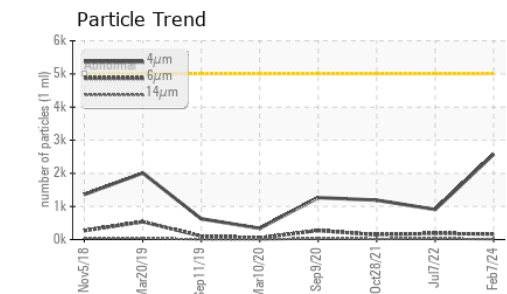
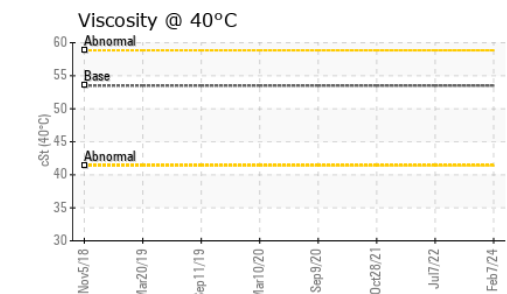
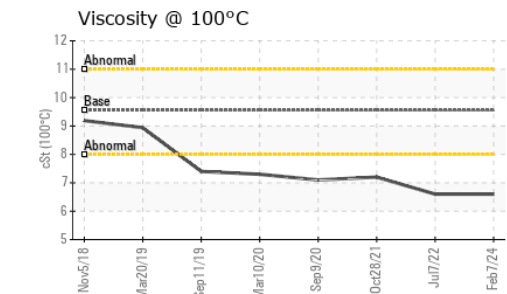
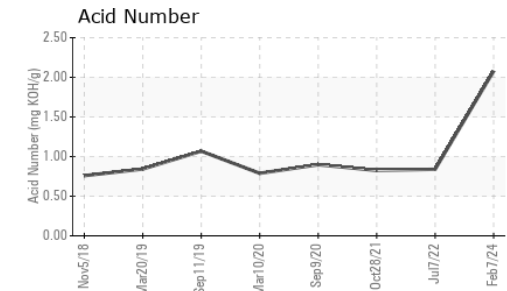
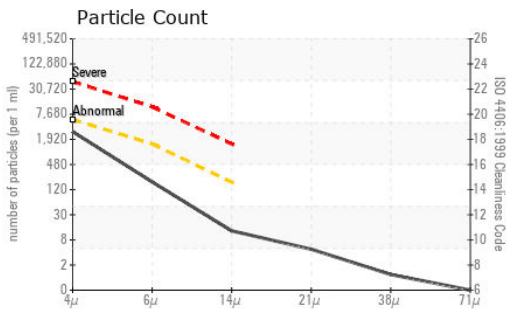
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185m	>20	13	11	12
Potassium	ppm	ASTM D5185m	>20	<1	3	3
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>5000	2573	907	1190
Particles >6µm		ASTM D7647	>1300	162	186	143
Particles >14µm		ASTM D7647	>160	11	24	16
Particles >21µm		ASTM D7647	>40	4	10	4
Particles >38µm		ASTM D7647	>10	1	1	0
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	19/15/11	17/15/12	17/14/11
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 AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		8	5	0
Boron	ppm	ASTM D5185m		120	109	66
Barium	ppm	ASTM D5185m		0	0	<1
Molybdenum	ppm	ASTM D5185m		0	<1	<1
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		4	9	9
Calcium	ppm	ASTM D5185m	4200	3037	2990	2190
Phosphorus	ppm	ASTM D5185m	1100	1109	1120	999
Zinc	ppm	ASTM D5185m	2000	1465	1452	1226
Sulfur	ppm	ASTM D5185m		3866	4891	3458
Acid Number (AN)	mg KOH/g	ASTM D8045		2.08	0.84	0.825
Visc @ 40°C	cSt	ASTM D445	53.5	32.6	---	---
Visc @ 100°C	cSt	ASTM D445	9.55	6.6	6.6	7.2
Viscosity Index (VI)	Scale	ASTM D2270	164	163	---	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : TR06086673

Lab Number : 06086673

Unique Number : 10874118

Test Package : MOB 2 (Additional Tests: KV100, VI)

Received : 12 Feb 2024

Tested : 13 Feb 2024

Diagnosed : 13 Feb 2024 - Wes Davis

COTTONWOOD COUNTY

1355 9TH AVE

WINDOM, MN

US 56101

Contact: DARRYL BARGEN

To discuss this sample report, contact Customer Service at 1-800-827-0711.

* - 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)

T: (507)831-1389

F: (507)831-2367