MOB

James River Equipment

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id
JOHN DEERE 437E 1T0437EDVNF423486
Component
Hydraulic System
Fluid
JOHN DEERE HYDRAU (--- GAL)

RECOMMENDATION

We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. We recommend an early resample to monitor this condition.

WEAR

All component wear rates are normal.

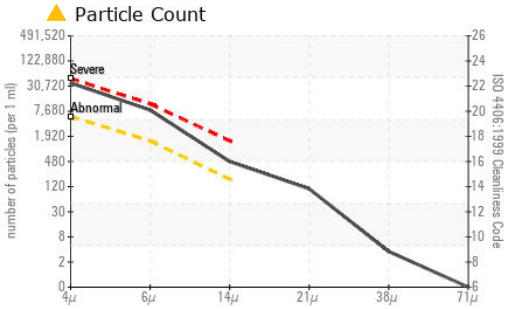
CONTAMINATION

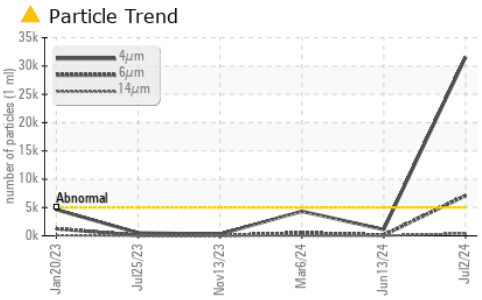
There is a moderate amount of particulates (2 to 100 microns in size) present in the oil.

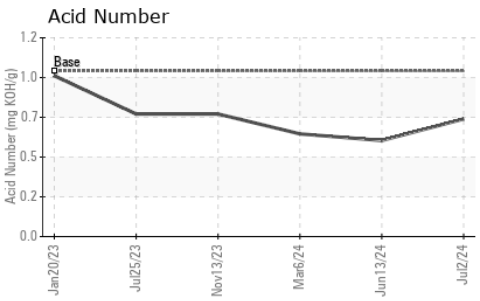
FLUID CONDITION

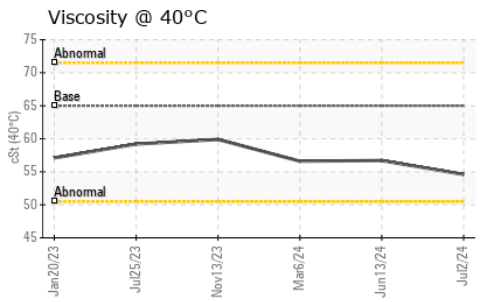
The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

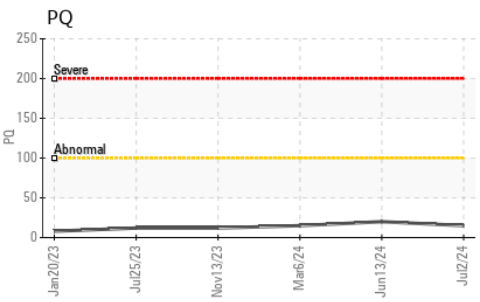
Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0167096	JR0200422	JR0200390
Sample Date		Client Info		02 Jul 2024	13 Jun 2024	06 Mar 2024
Machine Age	hrs	Client Info		3014	2966	2500
Oil Age	hrs	Client Info		3014	2966	2500
Filter Age	hrs	Client Info		0	2966	2500
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Filter Changed		Client Info		N/A	Not Changd	Not Changd
Sample Status				ABNORMAL	NORMAL	NORMAL
PQ		ASTM D8184		15	20	15
Iron	ppm	ASTM D5185m	>20	8	0	1
Chromium	ppm	ASTM D5185m	>10	0	<1	<1
Nickel	ppm	ASTM D5185m	>10	0	<1	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>10	<1	0	0
Lead	ppm	ASTM D5185m	>10	0	0	0
Copper	ppm	ASTM D5185m	>75	4	5	5
Tin	ppm	ASTM D5185m	>10	0	0	0
Vanadium	ppm	ASTM D5185m		0	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>20	<1	3	2
Potassium	ppm	ASTM D5185m	>20	1	4	1
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>5000	▲ 31580	1108	4328
Particles >6µm		ASTM D7647	>1300	▲ 7123	125	521
Particles >14µm		ASTM D7647	>160	▲ 421	14	26
Particles >21µm		ASTM D7647	>40	▲ 94	4	7
Particles >38µm		ASTM D7647	>10	3	0	0
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ 22/20/16	17/14/11	19/16/12
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	2	3
Boron	ppm	ASTM D5185m		0	0	0
Barium	ppm	ASTM D5185m		0	<1	1
Molybdenum	ppm	ASTM D5185m		0	0	<1
Manganese	ppm	ASTM D5185m		0	<1	0
Magnesium	ppm	ASTM D5185m		1	1	0
Calcium	ppm	ASTM D5185m	87	99	91	88
Phosphorus	ppm	ASTM D5185m	727	683	633	617
Zinc	ppm	ASTM D5185m	900	850	845	768
Sulfur	ppm	ASTM D5185m	1500	1987	1823	1756
Acid Number (AN)	mg KOH/g	ASTM D8045	1.0	0.71	0.58	0.62
Visc @ 40°C	cSt	ASTM D445	65	54.6	56.7	56.6

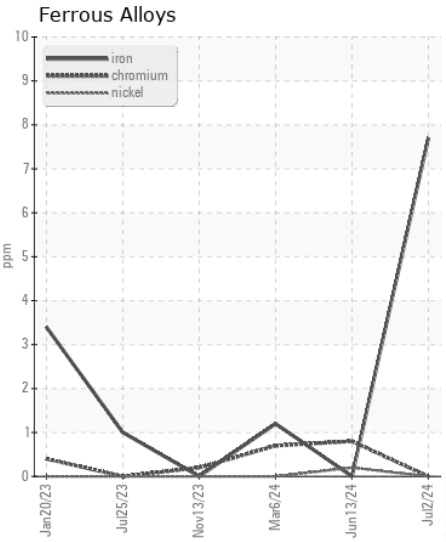


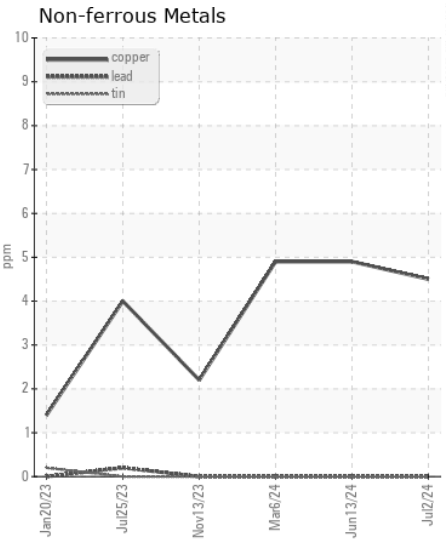


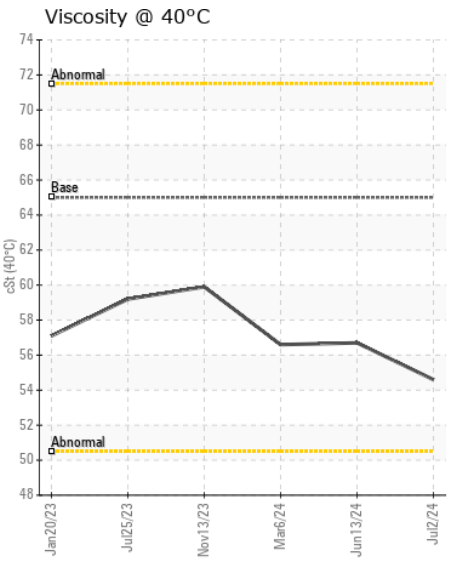


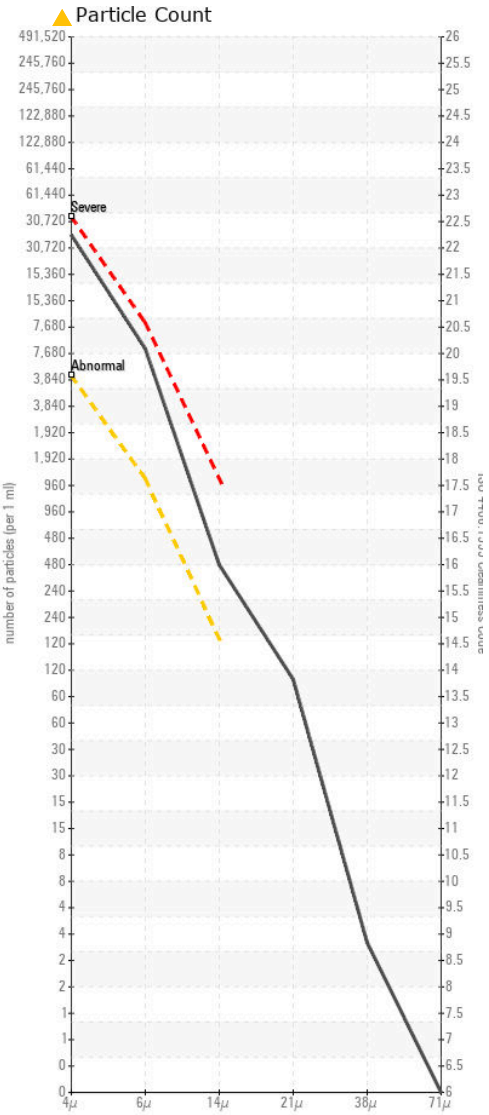


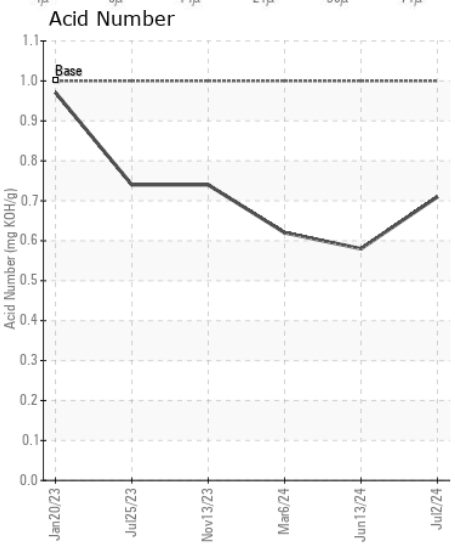












Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0167096
Lab Number : 06227295
Unique Number : 11110788
Test Package : MOBCE (Additional Tests: PQ)

Received : 03 Jul 2024
Tested : 05 Jul 2024
Diagnosed : 05 Jul 2024 - Wes Davis

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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