



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
JOHN DEERE 644K 1DW644KZAJF690443
Component
Brake
Fluid
JOHN DEERE HY-GARD HYD/TRANS (1 QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0221093	JR0201288	JR0193585
Sample Date		Client Info		03 Jul 2024	25 Mar 2024	04 Jan 2024
Machine Age	hrs	Client Info		7989	7512	7050
Oil Age	hrs	Client Info		7527	462	1000
Filter Age	hrs	Client Info		0	462	1000
Oil Changed		Client Info		Changed	N/A	Changed
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

PQ		ASTM D8184		69	91	136
Iron	ppm	ASTM D5185m	>350	105	112	144
Chromium	ppm	ASTM D5185m	>5	0	<1	0
Nickel	ppm	ASTM D5185m	>5	0	<1	0
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>8	9	9	12
Lead	ppm	ASTM D5185m	>10	<1	<1	2
Copper	ppm	ASTM D5185m	>150	<1	<1	<1
Tin	ppm	ASTM D5185m	>5	0	<1	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	MODER	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

There is no indication of any contamination in the oil.

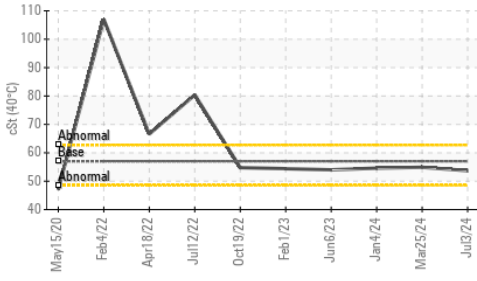
Silicon	ppm	ASTM D5185m	>400	100	116	138
Potassium	ppm	ASTM D5185m	>20	4	4	4
Water		WC Method	>0.2	NEG	NEG	NEG
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG

FLUID CONDITION

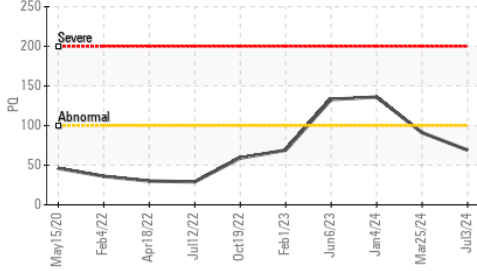
The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		10	8	11
Boron	ppm	ASTM D5185m	6	9	8	12
Barium	ppm	ASTM D5185m	0	2	0	1
Molybdenum	ppm	ASTM D5185m	0	8	5	7
Manganese	ppm	ASTM D5185m		1	2	1
Magnesium	ppm	ASTM D5185m	145	94	96	94
Calcium	ppm	ASTM D5185m	3570	3418	3279	3151
Phosphorus	ppm	ASTM D5185m	1290	1053	979	967
Zinc	ppm	ASTM D5185m	1640	1180	1157	1152
Sulfur	ppm	ASTM D5185m		4197	4048	3494
Visc @ 40°C	cSt	ASTM D445	57.0	53.7	54.9	54.6

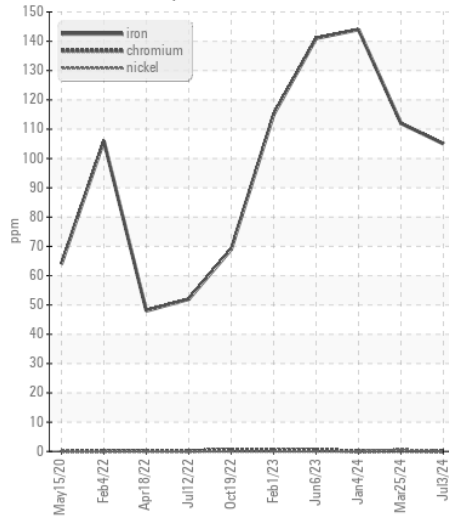
Viscosity @ 40°C



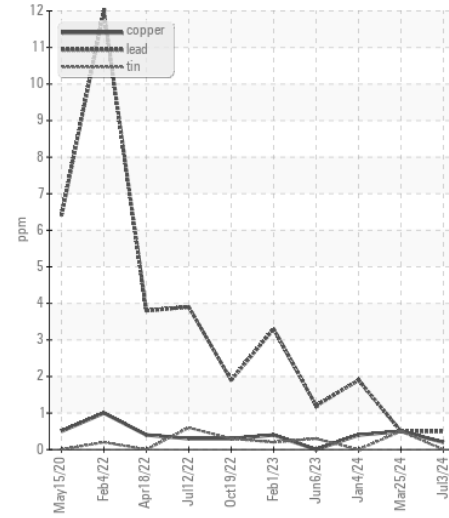
PQ



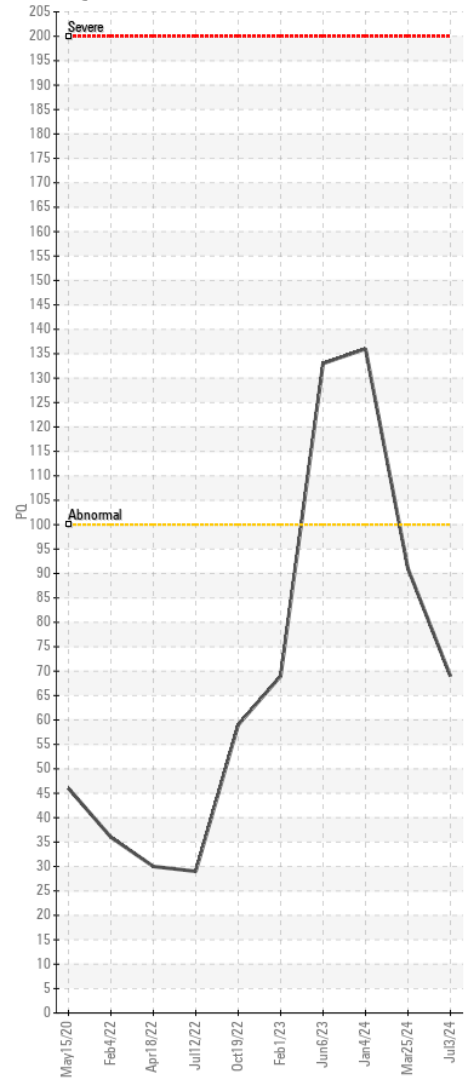
Ferrous Alloys



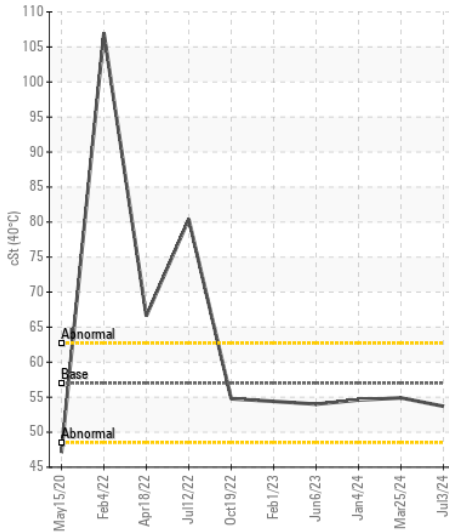
Non-ferrous Metals



PQ



Viscosity @ 40°C



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0221093 **Received** : 09 Jul 2024
Lab Number : 06231709 **Tested** : 10 Jul 2024
Unique Number : 11115202 **Diagnosed** : 11 Jul 2024 - Don Baldridge
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)

MORTON TRUCKING
 121 GARNET LANE
 JACKSONVILLE, NC
 US 28546
 Contact: TIM MORTON
 timm@timmortontrucking.com
 T: (252)322-4031
 F: (252)322-5215