



Area
[05W44255]
 Machine Id
JOHN DEERE 850L 1T0850LXKNF426545
 Component
Left Outer Final Drive
 Fluid
JOHN DEERE HY-GARD HYD/TRANS (18 GAL)

RECOMMENDATION

We advise that you check all areas where dirt can enter the system. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0192031	JR0187786	JR0176034
Sample Date		Client Info		11 Jan 2024	20 Sep 2023	15 Jun 2023
Machine Age	hrs	Client Info		2977	2444	1944
Oil Age	hrs	Client Info		1000	500	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	N/A	Changed
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				SEVERE	NORMAL	ABNORMAL

WEAR

All component wear rates are normal.

PQ		ASTM D8184	>1250	518	136	568
Iron	ppm	ASTM D5185m	>750	708	181	856
Chromium	ppm	ASTM D5185m	>9	3	<1	4
Nickel	ppm	ASTM D5185m	>10	4	2	5
Titanium	ppm	ASTM D5185m		11	1	6
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>40	▲ 147	22	▲ 102
Lead	ppm	ASTM D5185m	>15	<1	<1	0
Copper	ppm	ASTM D5185m	>40	<1	<1	2
Tin	ppm	ASTM D5185m	>10	<1	0	<1
Vanadium	ppm	ASTM D5185m		<1	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

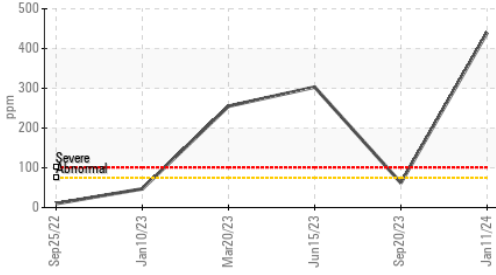
Silicon	ppm	ASTM D5185m	>75	◆ 440	62	▲ 303
Potassium	ppm	ASTM D5185m	>20	33	6	29
Water		WC Method	>0.075	NEG	NEG	NEG
Silt	scalar	*Visual	NONE	MODER	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	LIGHT	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.075	NEG	NEG	NEG

FLUID CONDITION

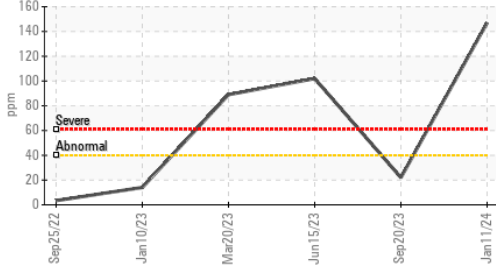
The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m	>51	19	0	10
Boron	ppm	ASTM D5185m	6	6	6	8
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	0	4	5	5
Manganese	ppm	ASTM D5185m		7	2	8
Magnesium	ppm	ASTM D5185m	145	147	115	138
Calcium	ppm	ASTM D5185m	3570	3327	3374	3512
Phosphorus	ppm	ASTM D5185m	1290	1093	1024	1008
Zinc	ppm	ASTM D5185m	1640	1281	1279	1253
Sulfur	ppm	ASTM D5185m		3564	3954	4456
Visc @ 40°C	cSt	ASTM D445	57.0	55.4	59.0	55.1

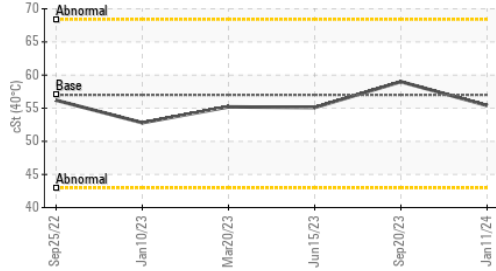
Silicon (ppm)



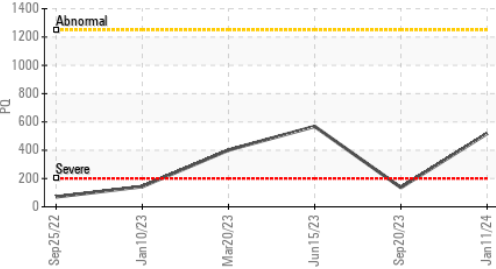
Aluminum (ppm)



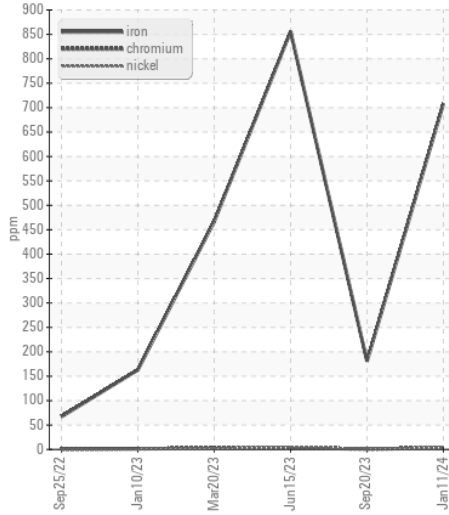
Viscosity @ 40°C



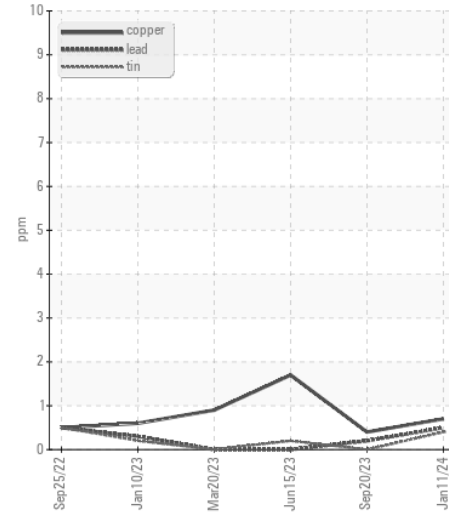
PQ



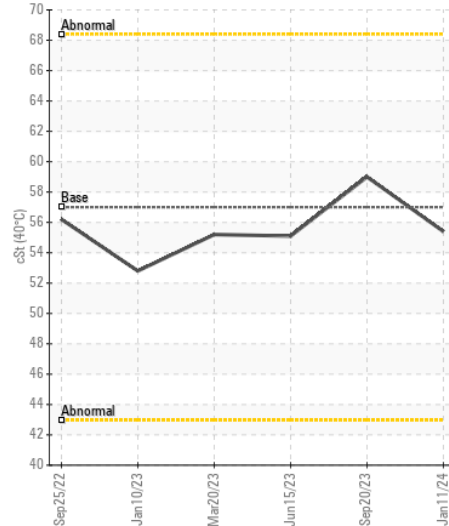
Ferrous Alloys



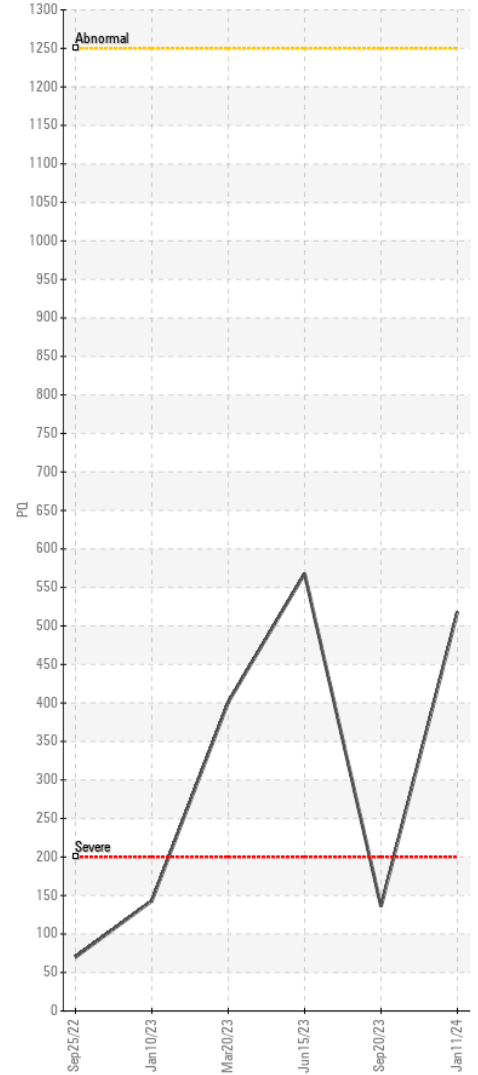
Non-ferrous Metals



Viscosity @ 40°C



PQ



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0192031 **Received** : 12 Jan 2024
Lab Number : 06060449 **Diagnosed** : 16 Jan 2024
Unique Number : 10831831 **Diagnostician** : Don Baldrige
Test Package : CONST (Additional Tests: PQ)

B & S SITE DEVELOPMENT
 7800 PINEY BRANCH LANE
 BRISTOW, VA
 US 20136
 Contact: DANNY HUFF
 dhuff@bandssite.com
 T: (540)270-3203
 F: (703)753-0605

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)