



OIL ANALYSIS REPORT

WEAR
CONTAMINATION
FLUID CONDITION

SEVERE
SEVERE
ATTENTION



Area
Store 1 - Cowen [RO#147626]
Machine Id
JOHN DEERE 850K 1T0850KXCEE259008
Component
Right Outer Final Drive
Fluid
JOHN DEERE HY-GARD HYD/TRANS (4 GAL)

RECOMMENDATION

We advise that you check all areas where dirt can enter the system. We advise that you check for the source of water entry. The oil change at the time of sampling has been noted. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

WEAR

Gear wear is indicated.

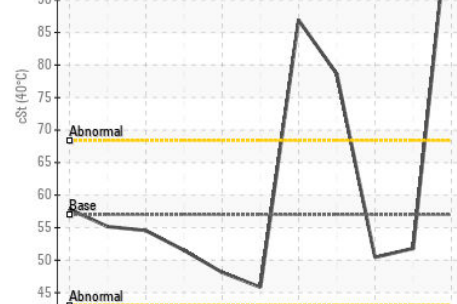
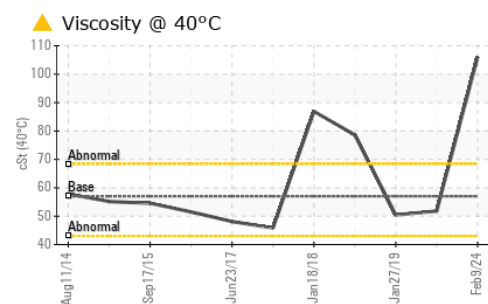
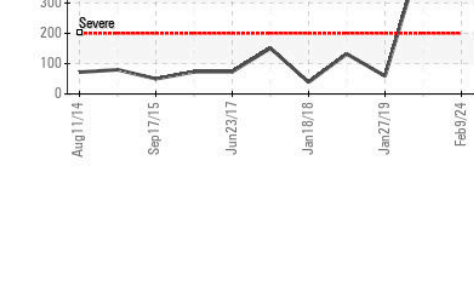
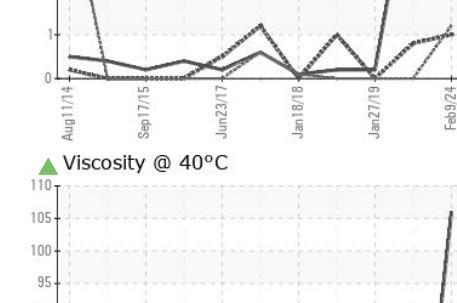
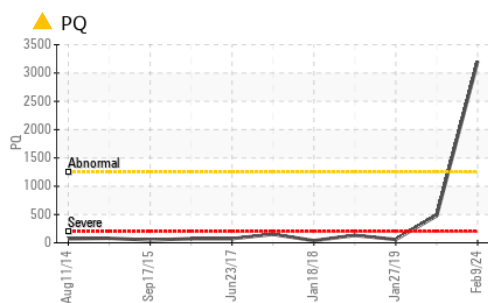
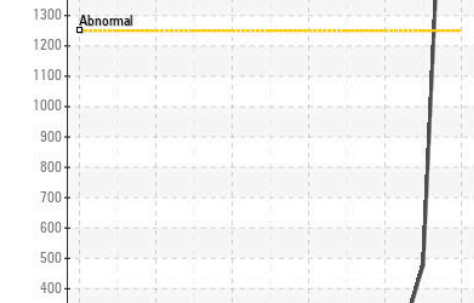
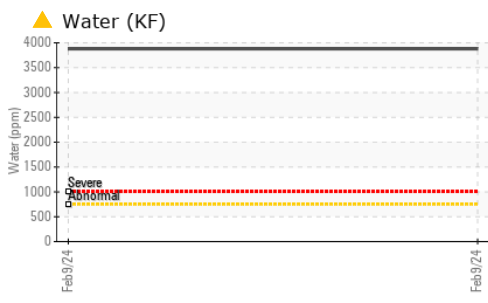
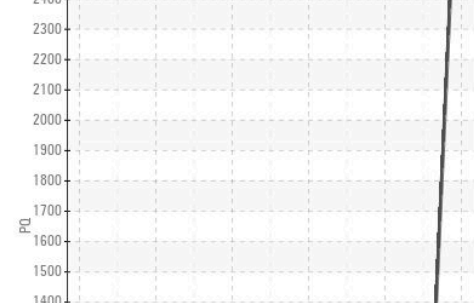
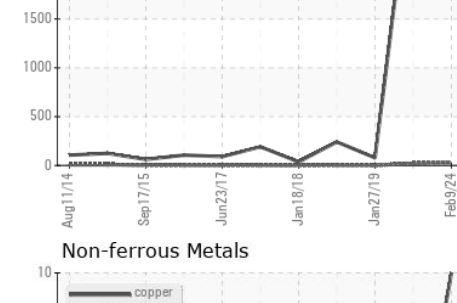
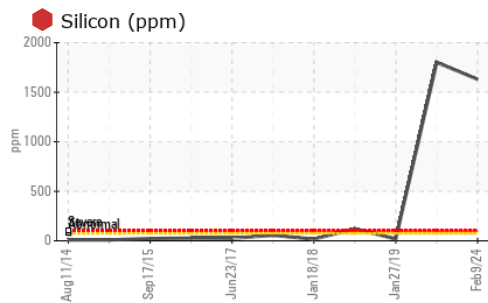
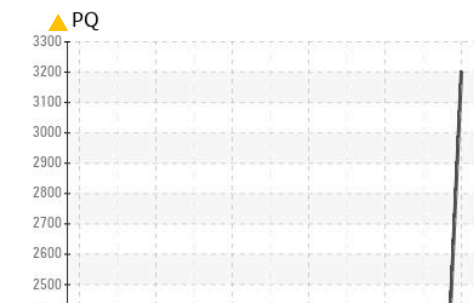
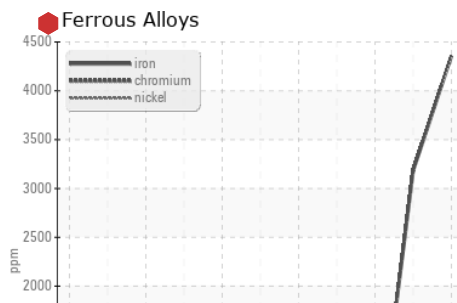
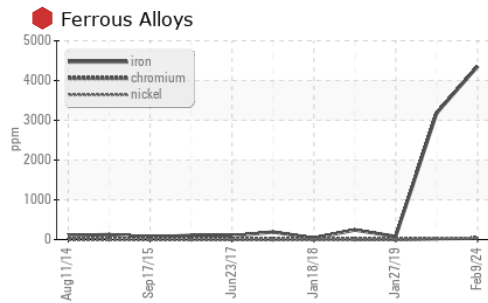
CONTAMINATION

Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. There is a moderate concentration of water present in the oil.

FLUID CONDITION

The oil viscosity is higher than normal. The oil is no longer serviceable due to the presence of contaminants.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LEC0046870	LEC0041457	LECP185295
Sample Date		Client Info		09 Feb 2024	13 Jun 2023	27 Jan 2019
Machine Age	hrs	Client Info		7356	6318	4318
Oil Age	hrs	Client Info		1038	2372	3946
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				SEVERE	SEVERE	NORMAL
PQ		ASTM D8184	>1250	▲ 3202	478	59
Iron	ppm	ASTM D5185m	>750	● 4356	● 3183	78
Chromium	ppm	ASTM D5185m	>9	● 31	▲ 21	<1
Nickel	ppm	ASTM D5185m	>10	● 39	▲ 19	<1
Titanium	ppm	ASTM D5185m		26	30	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>40	▲ 313	▲ 502	<1
Lead	ppm	ASTM D5185m	>15	1	<1	0
Copper	ppm	ASTM D5185m	>40	10	5	<1
Tin	ppm	ASTM D5185m	>10	1	0	0
Vanadium	ppm	ASTM D5185m		<1	1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>75	● 1631	● 1801	18
Potassium	ppm	ASTM D5185m	>20	93	144	0
Water	%	ASTM D6304	>0.075	▲ 0.388	---	---
ppm Water	ppm	ASTM D6304	>750	▲ 3880	---	---
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	>0.075	▲ 0.2%	NEG	NEG
Sodium	ppm	ASTM D5185m	>51	10	22	2
Boron	ppm	ASTM D5185m	6	20	36	1
Barium	ppm	ASTM D5185m	0	2	2	0
Molybdenum	ppm	ASTM D5185m	0	20	16	0
Manganese	ppm	ASTM D5185m		32	28	<1
Magnesium	ppm	ASTM D5185m	145	142	172	99
Calcium	ppm	ASTM D5185m	3570	3118	3394	3500
Phosphorus	ppm	ASTM D5185m	1290	903	1065	1006
Zinc	ppm	ASTM D5185m	1640	1203	1266	1226
Sulfur	ppm	ASTM D5185m		3263	4894	3166
Visc @ 40°C	cSt	ASTM D445	57.0	▲ 106	51.8	50.44



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LEC0046870 **Received** : 14 Feb 2024
Lab Number : 06089043 **Tested** : 15 Feb 2024
Unique Number : 10876488 **Diagnosed** : 15 Feb 2024 - Sean Felton
Test Package : CONST (Additional Tests: KF, PQ)

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Certificate L2367
 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)