



# OIL ANALYSIS REPORT

WEAR  
CONTAMINATION  
FLUID CONDITION

ATTENTION
SEVERE
NORMAL



Area  
**Store 1 - Cowen [RO#147626]**  
Machine Id  
**JOHN DEERE 850K 1T0850KXCEE259008**  
Component  
**Left 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. 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		LEC0046868	LEC0041455	LECP185307
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	372
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	SEVERE

## WEAR

All component wear rates are normal.

PQ		ASTM D8184	>1250	1268	864	212
Iron	ppm	ASTM D5185m	>750	2044	4782	322
Chromium	ppm	ASTM D5185m	>9	16	34	3
Nickel	ppm	ASTM D5185m	>10	20	36	3
Titanium	ppm	ASTM D5185m		12	34	7
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>40	159	541	116
Lead	ppm	ASTM D5185m	>15	<1	<1	0
Copper	ppm	ASTM D5185m	>40	5	9	<1
Tin	ppm	ASTM D5185m	>10	<1	0	0
Vanadium	ppm	ASTM D5185m		<1	2	0
White Metal	scalar	*Visual	NONE	NONE	NONE	MODER
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

## CONTAMINATION

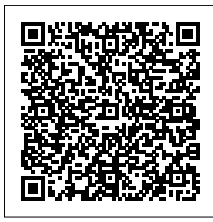
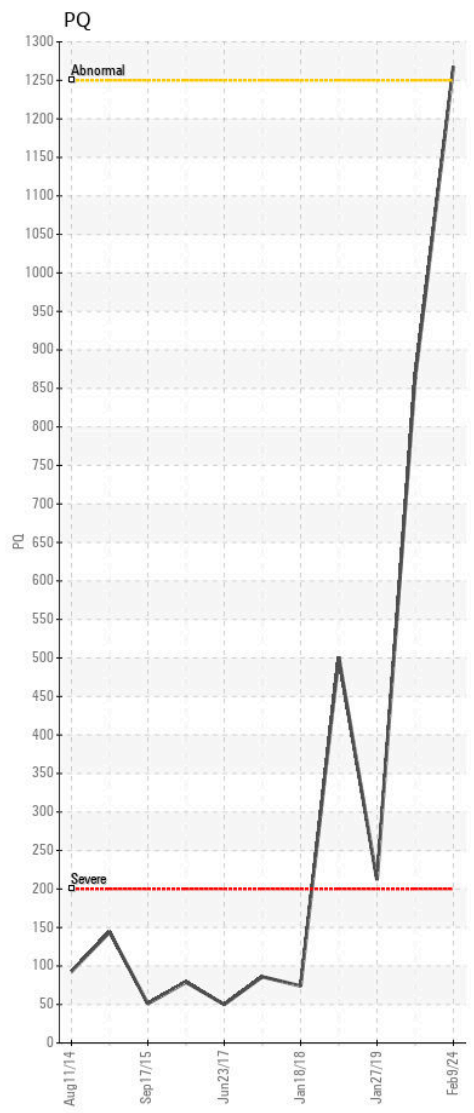
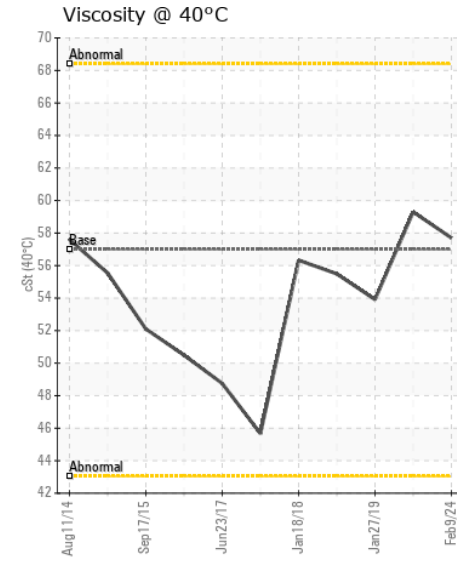
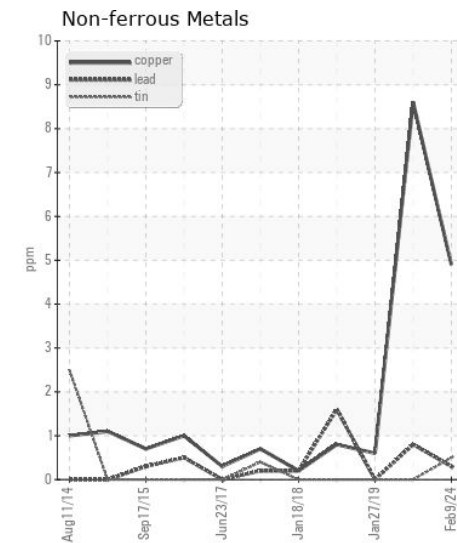
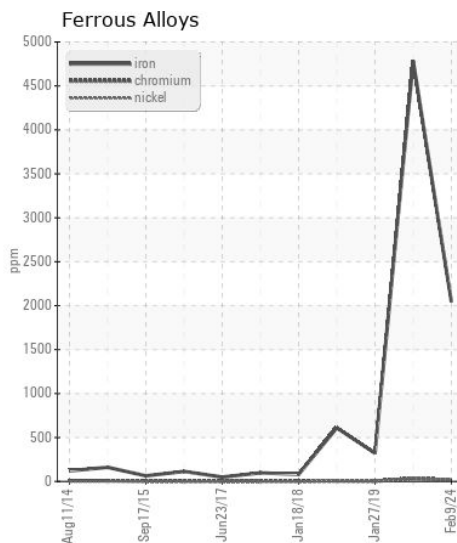
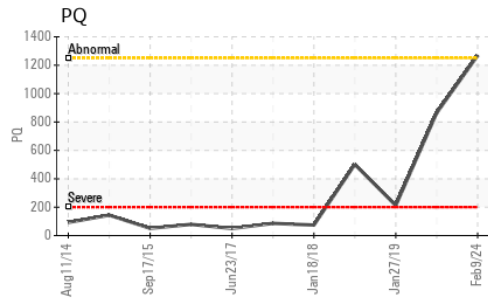
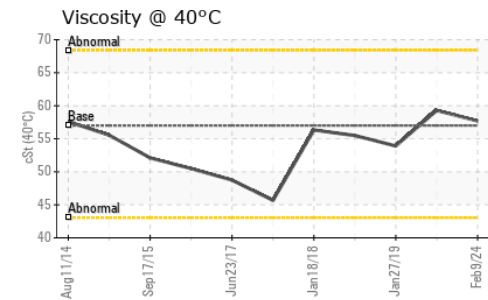
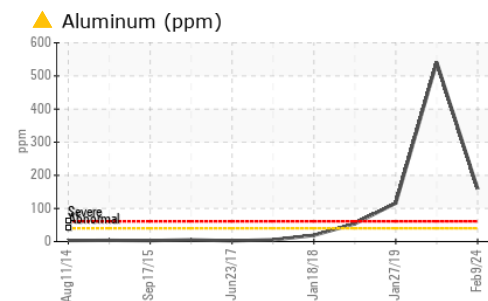
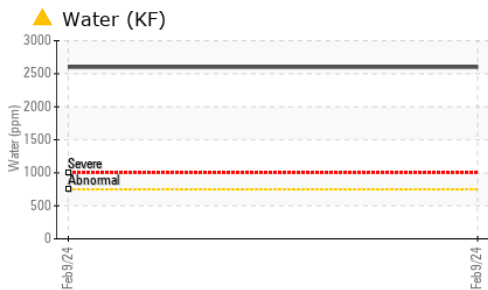
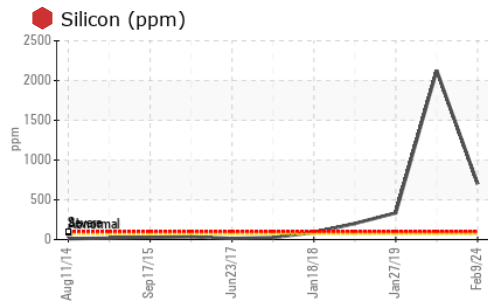
Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. There is a light concentration of water present in the oil.

Silicon	ppm	ASTM D5185m	>75	701	2127	335
Potassium	ppm	ASTM D5185m	>20	49	161	38
Water	%	ASTM D6304	>0.075	0.260	---	---
ppm Water	ppm	ASTM D6304	>750	2600	---	---
Silt	scalar	*Visual	NONE	NONE	NONE	LIGHT
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

## FLUID CONDITION

The oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185m	>51	6	25	6
Boron	ppm	ASTM D5185m	6	7	7	1
Barium	ppm	ASTM D5185m	0	<1	2	0
Molybdenum	ppm	ASTM D5185m	0	10	8	0
Manganese	ppm	ASTM D5185m		15	39	3
Magnesium	ppm	ASTM D5185m	145	116	156	101
Calcium	ppm	ASTM D5185m	3570	3186	4149	3386
Phosphorus	ppm	ASTM D5185m	1290	899	1287	962
Zinc	ppm	ASTM D5185m	1640	1178	1552	1176
Sulfur	ppm	ASTM D5185m		3250	5247	3033
Visc @ 40°C	cSt	ASTM D445	57.0	57.7	59.3	53.91



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : LEC0046868 **Received** : 14 Feb 2024  
**Lab Number** : 06089046 **Tested** : 15 Feb 2024  
**Unique Number** : 10876491 **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)