



OIL ANALYSIS REPORT

WEAR
CONTAMINATION
FLUID CONDITION

SEVERE
ABNORMAL
NORMAL



Area
Store 2 - Beaver [1536 ASPEN]
Machine Id
JOHN DEERE 350GL 1FF350GXADE809611
Component
Pump Drive
Fluid
JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (1 QTS)

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 advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LEC0008840	LEC0009543	LECP183077
Sample Date		Client Info		19 Mar 2020	02 Mar 2020	15 Jan 2018
Machine Age	hrs	Client Info		5770	5702	4028
Oil Age	hrs	Client Info		1742	1674	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	SEVERE	SEVERE

WEAR

The iron level has decreased, but is still abnormal. Gear wear is indicated.

PQ	UOM	Method	Limit/Abn	Current	History1	History2
PQ		ASTM D8184		147	697	74
Iron	ppm	ASTM D5185m	>151	499	2930	421
Chromium	ppm	ASTM D5185m	>11	10	34	9
Nickel	ppm	ASTM D5185m		<1	1	0
Titanium	ppm	ASTM D5185m		1	1	1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>21	15	16	26
Lead	ppm	ASTM D5185m	>51	0	0	0
Copper	ppm	ASTM D5185m	>51	3	2	1
Tin	ppm	ASTM D5185m		2	0	<1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	LIGHT
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

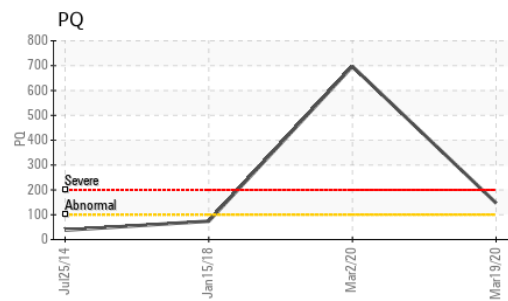
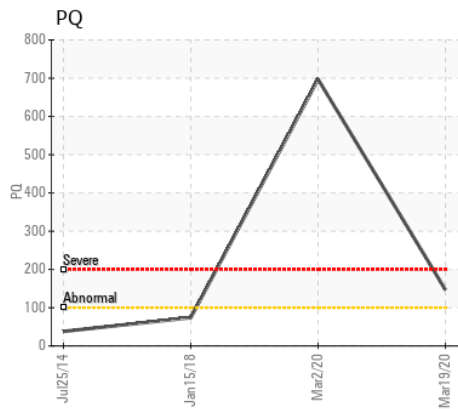
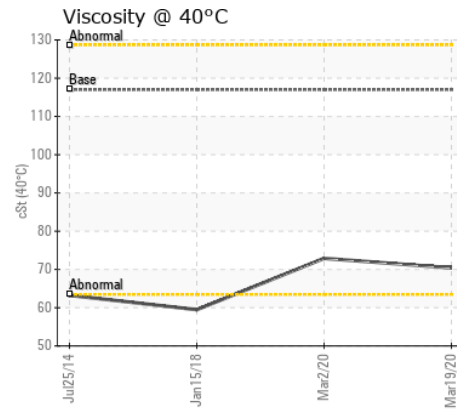
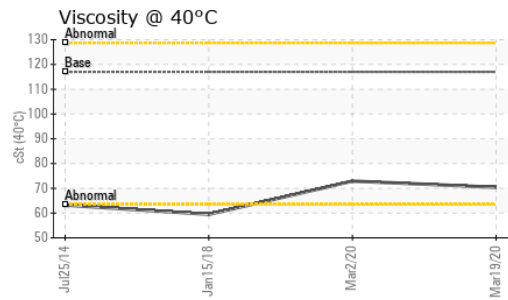
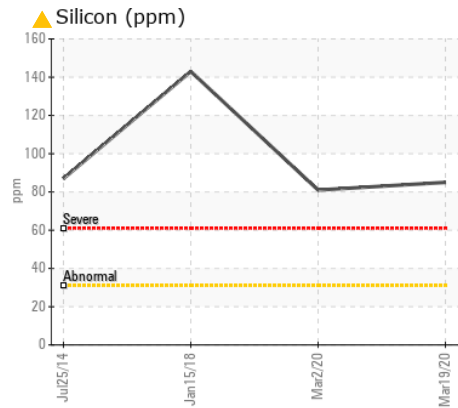
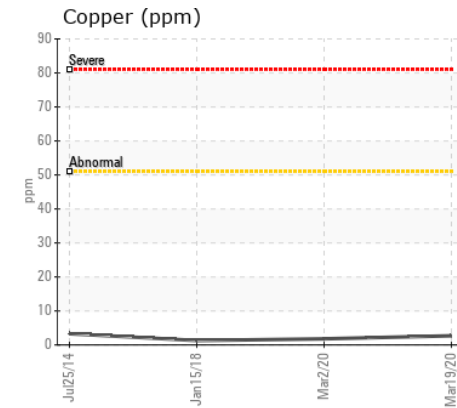
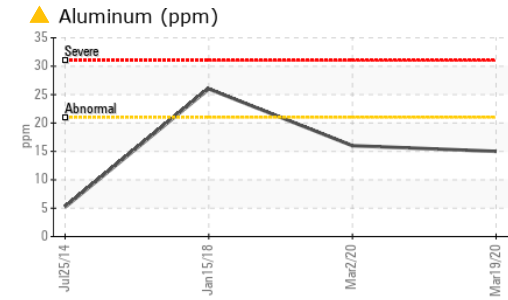
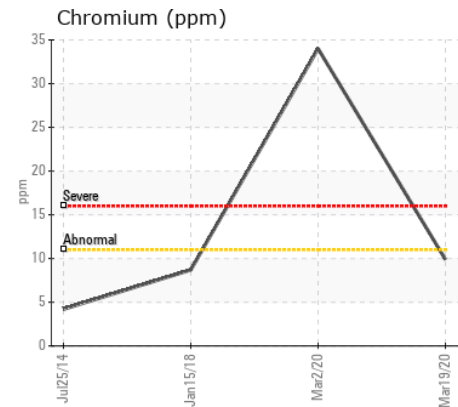
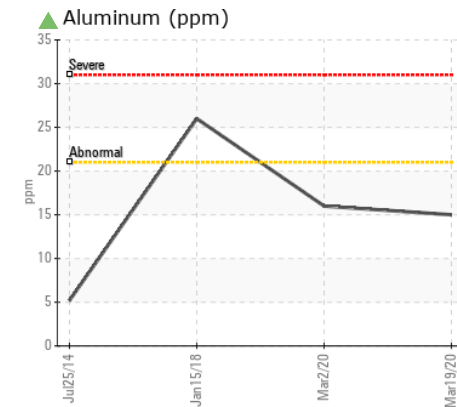
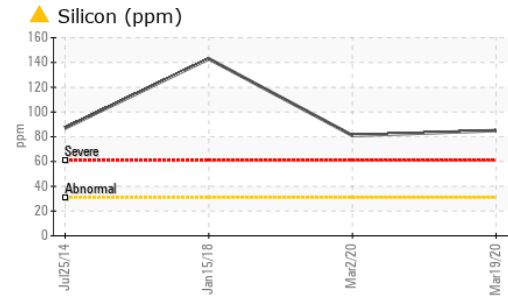
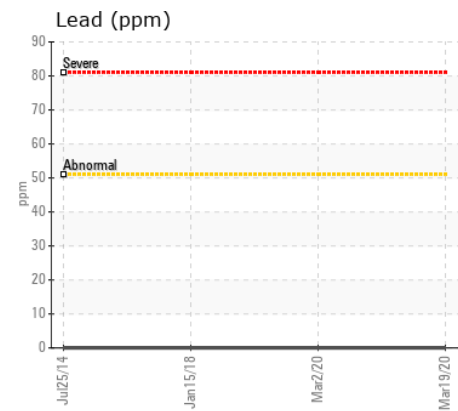
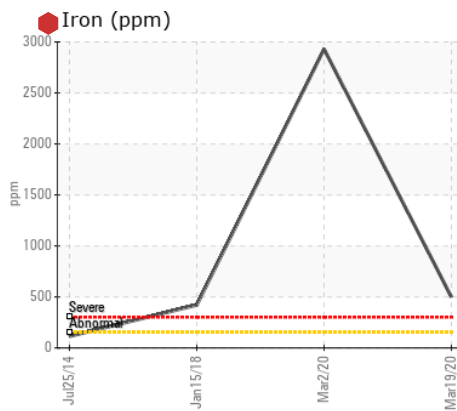
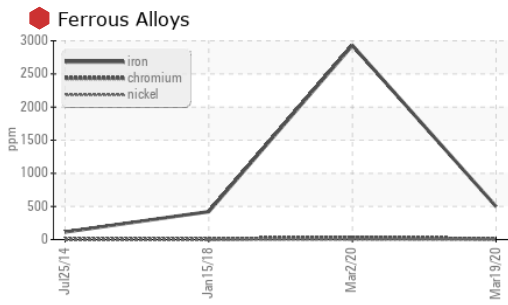
Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

Silicon	ppm	ASTM D5185m	>31	85	81	143
Potassium	ppm	ASTM D5185m	>20	5	4	8
Water		WC Method	>0.1	NEG	NEG	NEG
Silt	scalar	*Visual	NONE	NONE	LIGHT	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

FLUID CONDITION

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

Sodium	ppm	ASTM D5185m	>51	31	3	6
Boron	ppm	ASTM D5185m		267	20	205
Barium	ppm	ASTM D5185m		8	0	1
Molybdenum	ppm	ASTM D5185m		241	47	242
Manganese	ppm	ASTM D5185m		16	22	9
Magnesium	ppm	ASTM D5185m		784	903	739
Calcium	ppm	ASTM D5185m		1784	1138	1540
Phosphorus	ppm	ASTM D5185m		965	1064	938
Zinc	ppm	ASTM D5185m		1012	1103	957
Sulfur	ppm	ASTM D5185m		2607	3117	4325
Visc @ 40°C	cSt	ASTM D445	117	70.4	72.9	59.48



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LEC0008840 **Received** : 25 Mar 2020
Lab Number : 04941713 **Diagnosed** : 26 Mar 2020
Unique Number : 8971814 **Diagnostician** : Don Baldridge
Test Package : MOBCE (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)

ASPEN CORP
 2400 RITTER DR
 DANIELS, WV
 US 25832
 Contact: JASON ST CLAIR
 jstclair@aspen-golf.com
 T: (304)688-8753
 F: