



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL



Area
Store 5 - Cross Lanes
Machine Id
JOHN DEERE 318D 1T0318DALCG235284
Component
Diesel Engine
Fluid
JOHN DEERE BREAK IN (2 GAL)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LECP151136	---	---
Sample Date		Client Info		16 May 2016	---	---
Machine Age	hrs	Client Info		110	---	---
Oil Age	hrs	Client Info		110	---	---
Filter Age	hrs	Client Info		110	---	---
Oil Changed		Client Info		Changed	---	---
Filter Changed		Client Info		Changed	---	---
Sample Status				ABNORMAL	---	---

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>50	23	---	---
Chromium	ppm	ASTM D5185m	>11	0	---	---
Nickel	ppm	ASTM D5185m	>5	<1	---	---
Titanium	ppm	ASTM D5185m		0	---	---
Silver	ppm	ASTM D5185m		0	---	---
Aluminum	ppm	ASTM D5185m	>20	6	---	---
Lead	ppm	ASTM D5185m	>26	<1	---	---
Copper	ppm	ASTM D5185m	>13	21	---	---
Tin	ppm	ASTM D5185m	>4	8	---	---
Vanadium	ppm	ASTM D5185m		0	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

CONTAMINATION

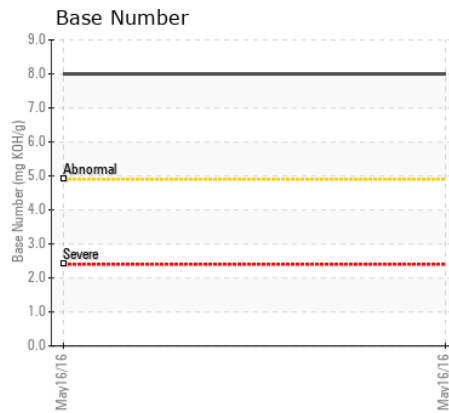
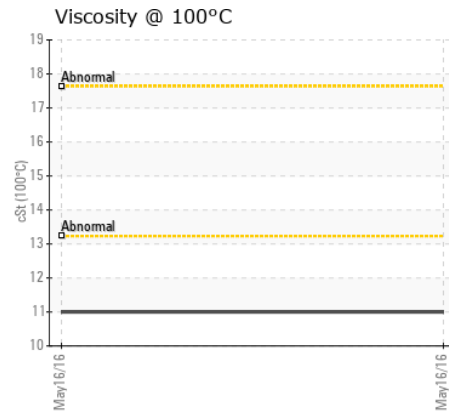
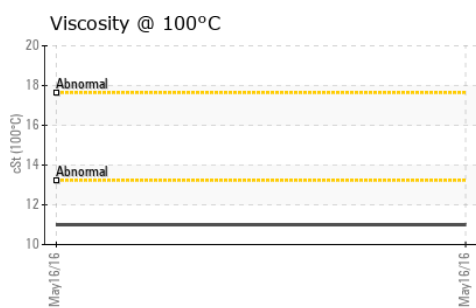
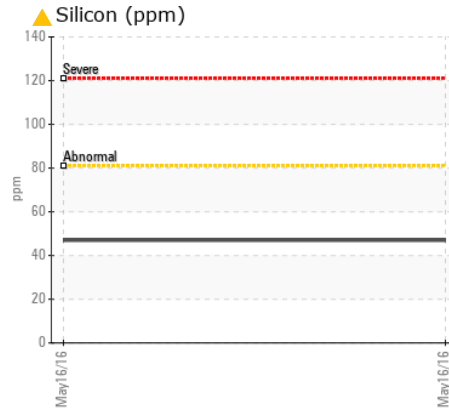
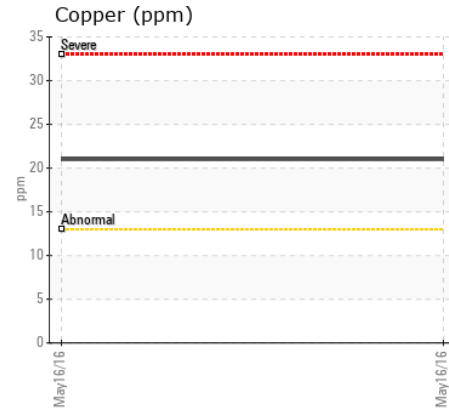
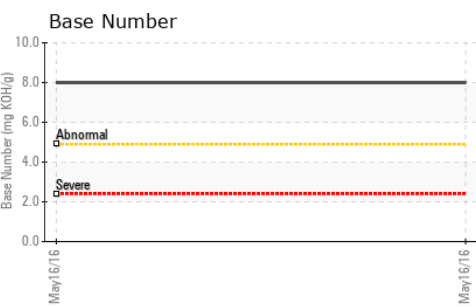
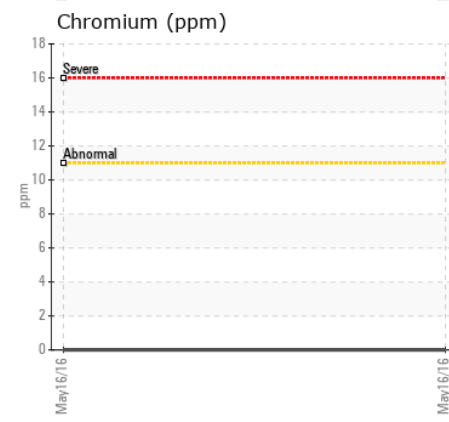
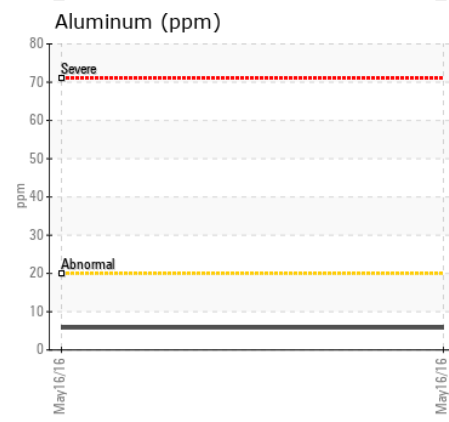
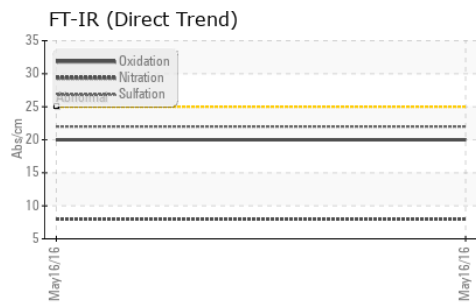
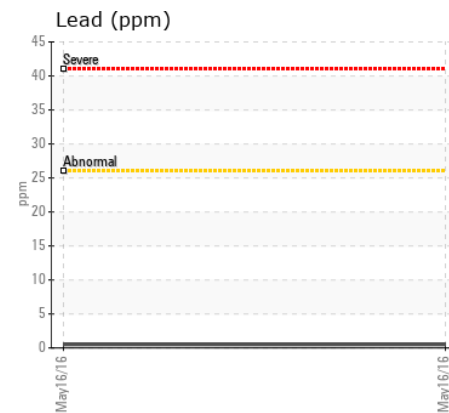
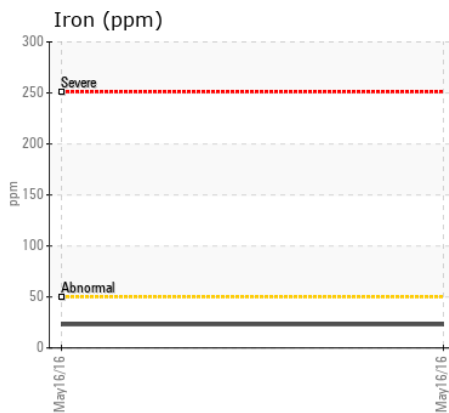
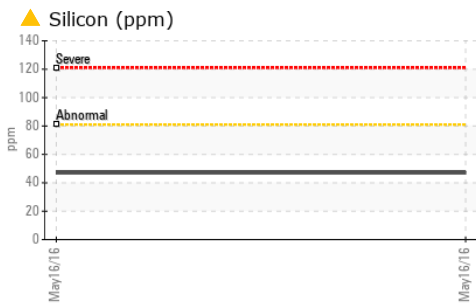
Elemental level of silicon (Si) above normal indicating ingress of seal material.

Silicon	ppm	ASTM D5185m	>81	▲ 47	---	---
Potassium	ppm	ASTM D5185m	>20	16	---	---
Fuel	%	ASTM D3524	>1.6	<1.0	---	---
Water		WC Method	>0.21	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	*ASTM D7844	>3	0.1	---	---
Nitration	Abs/cm	*ASTM D7624		8.	---	---
Sulfation	Abs/.1mm	*ASTM D7415		22.	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	NORML	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual	>0.21	NEG	---	---

FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>31	9	---	---
Boron	ppm	ASTM D5185m		220	---	---
Barium	ppm	ASTM D5185m		16	---	---
Molybdenum	ppm	ASTM D5185m		194	---	---
Manganese	ppm	ASTM D5185m		6	---	---
Magnesium	ppm	ASTM D5185m		689	---	---
Calcium	ppm	ASTM D5185m		1244	---	---
Phosphorus	ppm	ASTM D5185m		752	---	---
Zinc	ppm	ASTM D5185m		896	---	---
Sulfur	ppm	ASTM D5185m		2881	---	---
Oxidation	Abs/.1mm	*ASTM D7414		20.	---	---
Base Number (BN)	mg KOH/g	ASTM D2896		8.00	---	---
Visc @ 100°C	cSt	ASTM D445		11.00	---	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LEC151136 **Received** : 18 May 2016
Lab Number : 03988025 **Tested** : 20 May 2016
Unique Number : 7408500 **Diagnosed** : 20 May 2016 - Don Baldrige
Test Package : MOB 2 (Additional Tests: FuelDilution)

LESLIE EQUIPMENT COMPANY
 105 TENNIS CENTER DR.
 MARIETTA, OH
 US 45750-9765
 Contact: LEANNE KENDALL
 KendalLeanne@lec1.com

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)

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