



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
JOHN DEERE LW-102
Component
Diesel Engine
Fluid
MOBIL DELVAC 1300 SUPER 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WCM2261125	WCM2261128	WCM2267441
Sample Date		Client Info		18 Jan 2018	10 May 2017	18 May 2016
Machine Age	hrs	Client Info		5800	5520	5240
Oil Age	hrs	Client Info		750	500	170
Filter Age	hrs	Client Info		750	500	170
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Filter Changed		Client Info		Not Changd	Not Changd	Not Changd
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>51	55	38	14
Chromium	ppm	ASTM D5185m	>11	2	1	<1
Nickel	ppm	ASTM D5185m	>5	3	2	<1
Titanium	ppm	ASTM D5185m		0	<1	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>31	7	8	<1
Lead	ppm	ASTM D5185m	>26	6	3	3
Copper	ppm	ASTM D5185m	>26	2	2	<1
Tin	ppm	ASTM D5185m	>4	0	4	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

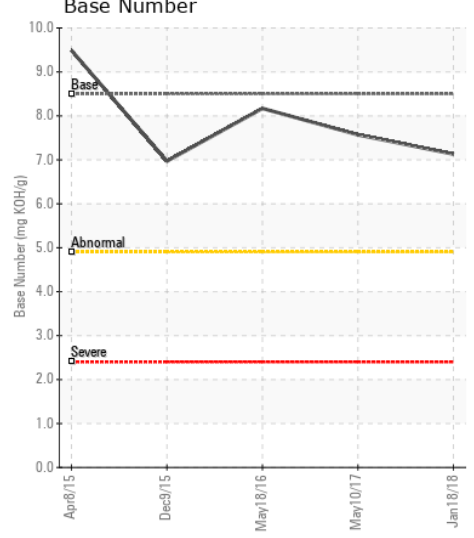
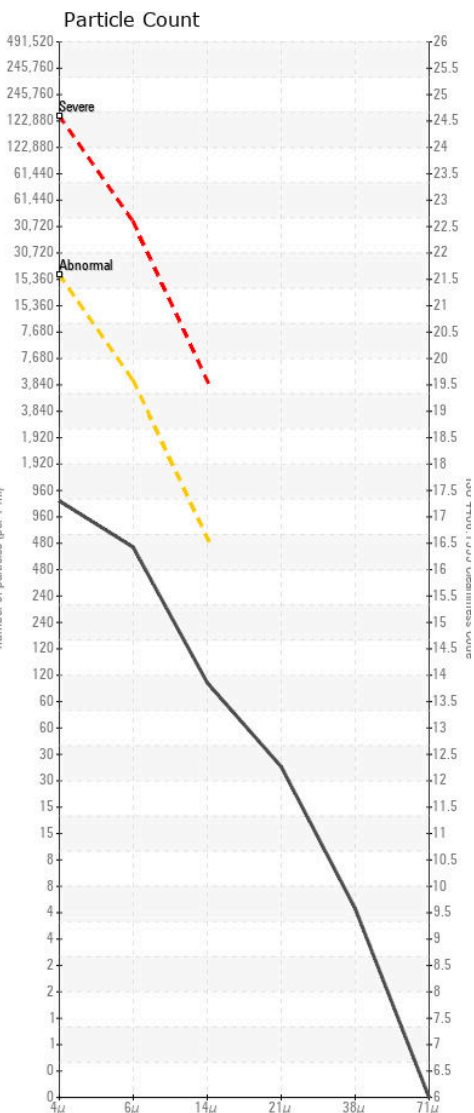
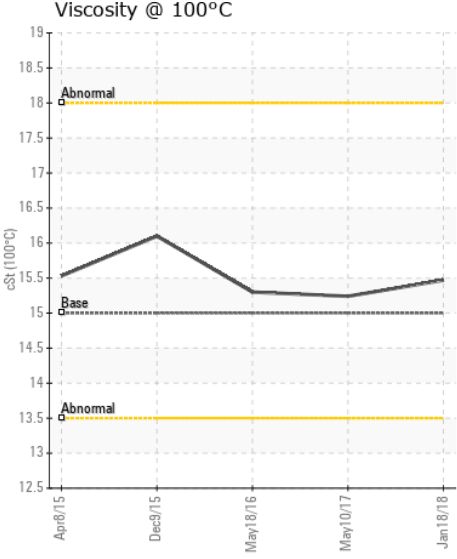
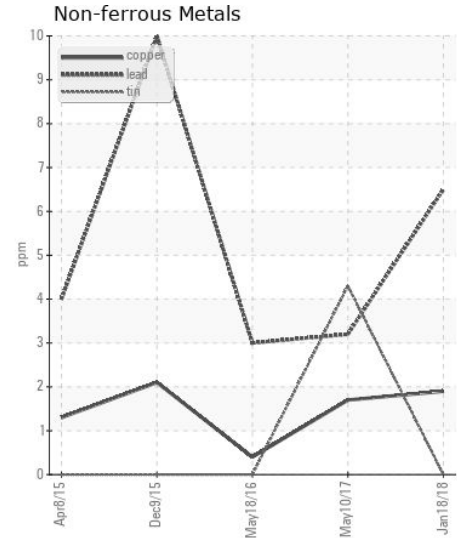
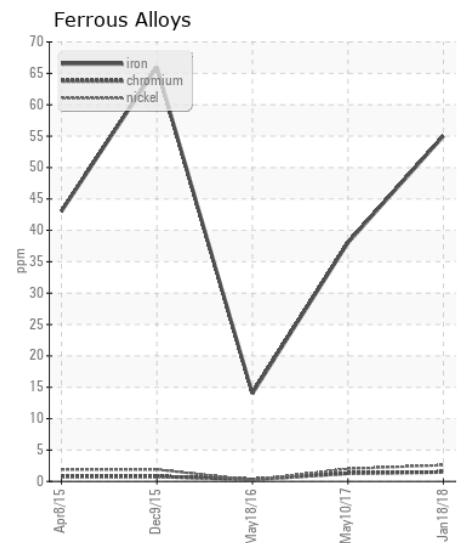
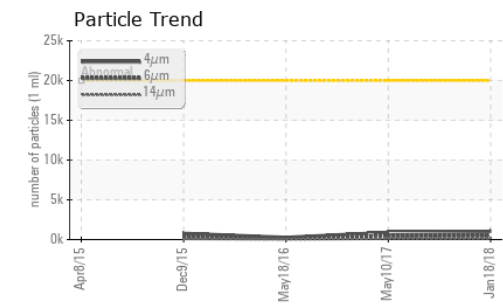
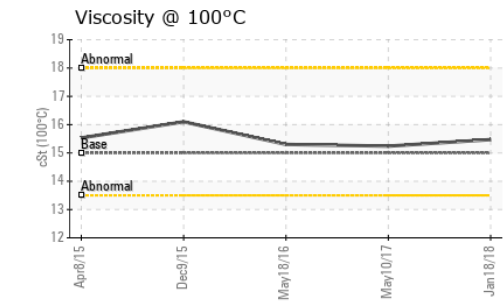
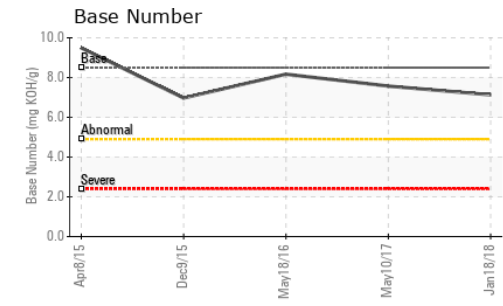
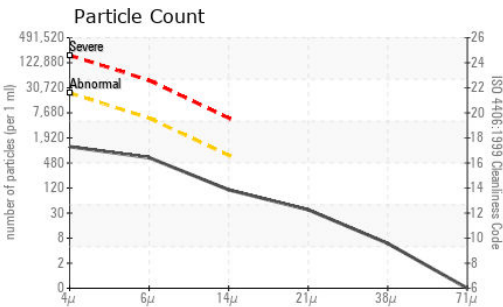
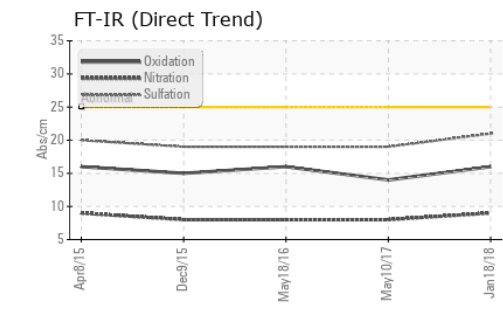
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185m	>22	14	16	3
Potassium	ppm	ASTM D5185m	>20	3	2	0
Fuel		WC Method	>2.1	<1.0	<1.0	<1.0
Water		WC Method	>0.21	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.6	0.3	0.2
Nitration	Abs/cm	*ASTM D7624	>25	9.	8.	8.
Sulfation	Abs/.1mm	*ASTM D7415	>35	21.	19.	19.
Particles >4µm		ASTM D7647	>20000	1038	910	269
Particles >6µm		ASTM D7647	>5000	565	495	146
Particles >14µm		ASTM D7647	>640	96	84	24
Particles >21µm		ASTM D7647	>160	32	28	8
Particles >38µm		ASTM D7647	>40	5	4	1
Particles >71µm		ASTM D7647	>10	0	0	0
Oil Cleanliness		ISO 4406 (c)	>21/19/16	17/16/14	17/16/14	15/14/12
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	>0.21	NEG	NEG	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	<1	2	1
Boron	ppm	ASTM D5185m	0	18	23	24
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	0	16	9	6
Manganese	ppm	ASTM D5185m		1	<1	<1
Magnesium	ppm	ASTM D5185m	0	95	37	34
Calcium	ppm	ASTM D5185m		2452	2144	2173
Phosphorus	ppm	ASTM D5185m		952	900	970
Zinc	ppm	ASTM D5185m		1027	1033	1050
Sulfur	ppm	ASTM D5185m		3550	3212	3094
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.	14.	16.
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	7.13	7.57	8.17
Visc @ 100°C	cSt	ASTM D445	15.0	15.47	15.24	15.3



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WCM2261125 **Received** : 20 Mar 2018
Lab Number : 04431471 **Tested** : 21 Mar 2018
Unique Number : 8135201 **Diagnosed** : 21 Mar 2018 - Jonathan Hester
Test Package : MOB 2 (Additional Tests: PQ, PrtCount)
 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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