CONST

LESLIE EQUIPMENT CO.

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	SEVERE
FLUID CONDITION	ATTENTION

Area
SOLD LOCATIONS - LESCHI - CHILLICOTHE
Machine Id
JOHN DEERE 644J DW644JZ616347
Component
Hydraulic System
Fluid
JOHN DEERE HY-GARD HYD/TRANS (32 GAL)

RECOMMENDATION

The filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

WEAR

All component wear rates are normal.

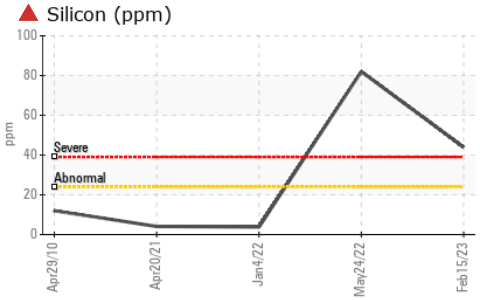
CONTAMINATION

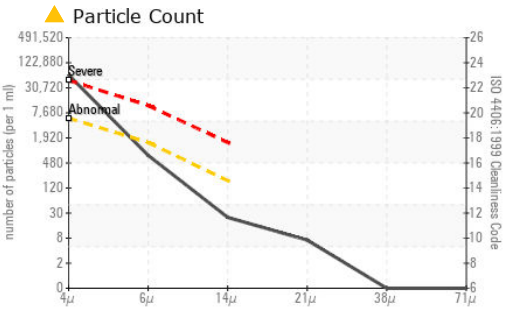
There is a high amount of silt (particulates < 6 microns in size) present in the oil. Elemental level of silicon (Si) above normal indicating ingress of seal material.

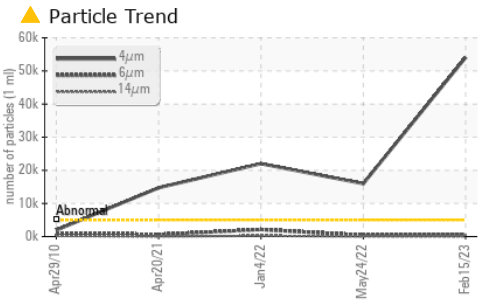
FLUID CONDITION

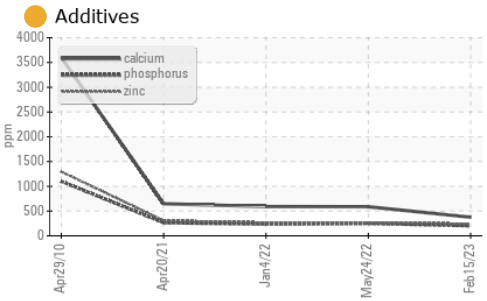
Additive levels indicate the addition of a different brand, or type of oil. The AN level is acceptable for this fluid.

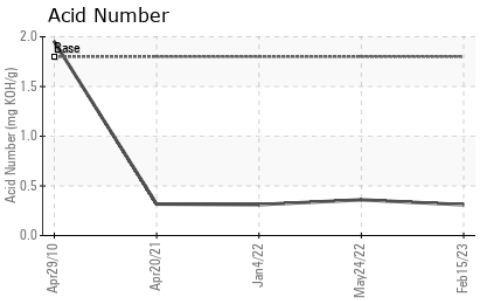
Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LEC0038958	LEC0033127	LEC0027611
Sample Date		Client Info		15 Feb 2023	24 May 2022	04 Jan 2022
Machine Age	hrs	Client Info		17371	16524	15997
Oil Age	hrs	Client Info		17371	16524	15997
Filter Age	hrs	Client Info		17371	0	0
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Filter Changed		Client Info		Changed	Changed	Not Changd
Sample Status				SEVERE	SEVERE	ABNORMAL
PQ		ASTM D8184	>50	13	16	22
Iron	ppm	ASTM D5185m	>71	8	9	7
Chromium	ppm	ASTM D5185m	>11	11	9	8
Nickel	ppm	ASTM D5185m	>6	0	0	0
Titanium	ppm	ASTM D5185m		0	0	<1
Silver	ppm	ASTM D5185m		0	<1	<1
Aluminum	ppm	ASTM D5185m	>11	<1	2	1
Lead	ppm	ASTM D5185m	>13	<1	<1	<1
Copper	ppm	ASTM D5185m	>21	<1	<1	<1
Tin	ppm	ASTM D5185m	>5	0	0	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>24	▲ 44	▲ 82	4
Potassium	ppm	ASTM D5185m	>20	2	0	<1
Water		WC Method	>0.075	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>5000	▲ 54085	▲ 15975	▲ 22011
Particles >6µm		ASTM D7647	>1300	642	411	▲ 2121
Particles >14µm		ASTM D7647	>160	21	37	▲ 217
Particles >21µm		ASTM D7647	>40	6	9	▲ 71
Particles >38µm		ASTM D7647	>10	0	0	3
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ 23/17/12	▲ 21/16/12	▲ 22/18/15
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	NEG	NEG	NEG
Sodium	ppm	ASTM D5185m	>21	0	<1	<1
Boron	ppm	ASTM D5185m	6	11	18	8
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	0	11	13	14
Manganese	ppm	ASTM D5185m		0	<1	<1
Magnesium	ppm	ASTM D5185m	145	50	64	67
Calcium	ppm	ASTM D5185m	3570	● 376	● 587	● 591
Phosphorus	ppm	ASTM D5185m	1290	● 204	● 252	● 238
Zinc	ppm	ASTM D5185m	1640	● 242	● 268	● 266
Sulfur	ppm	ASTM D5185m		● 1654	● 1535	● 1521
Acid Number (AN)	mg KOH/g	ASTM D8045	1.8	0.31	0.36	0.311
Visc @ 40°C	cSt	ASTM D445	57.0	38.8	40.0	40.7

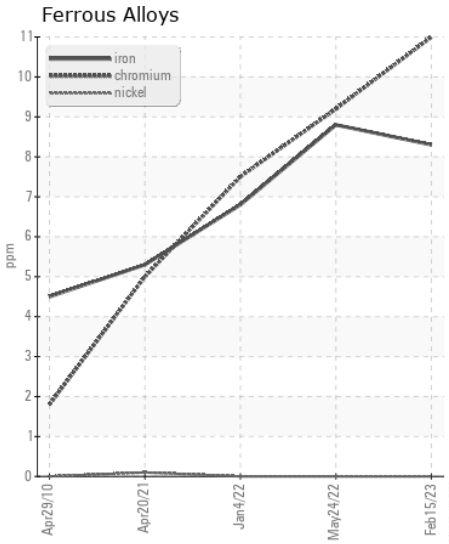


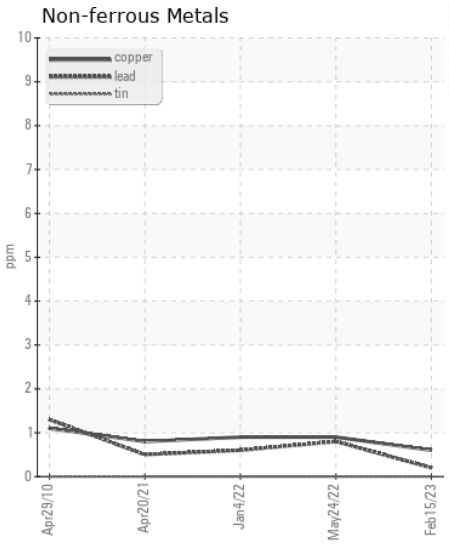


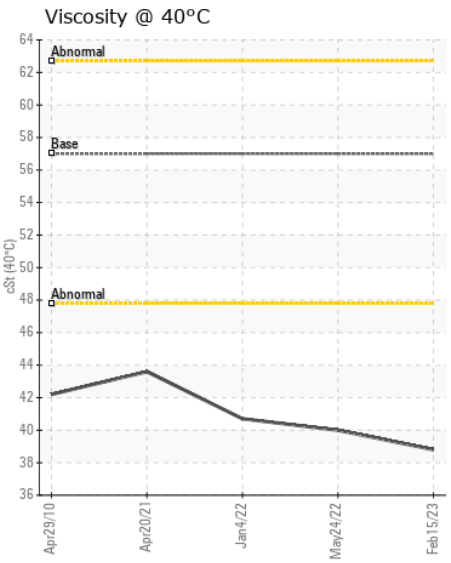


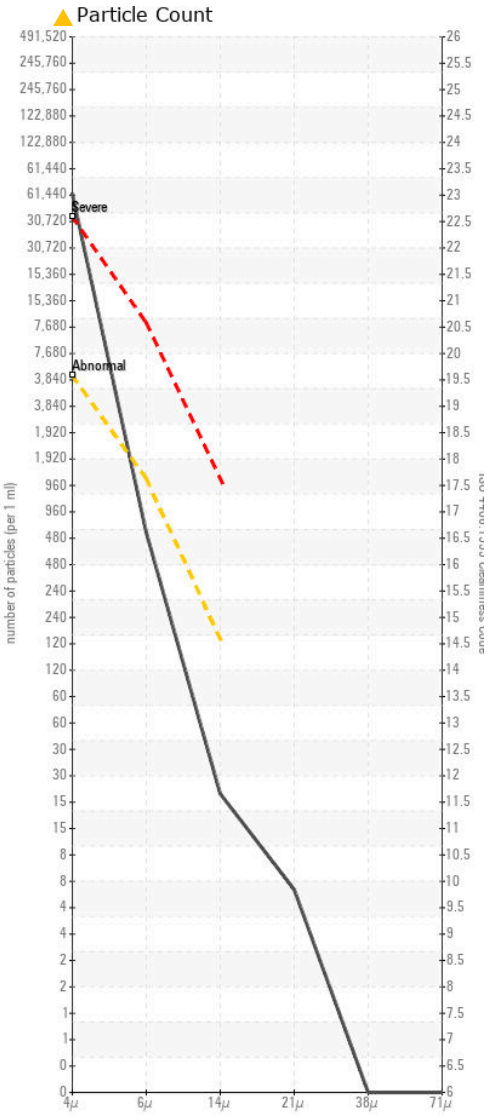


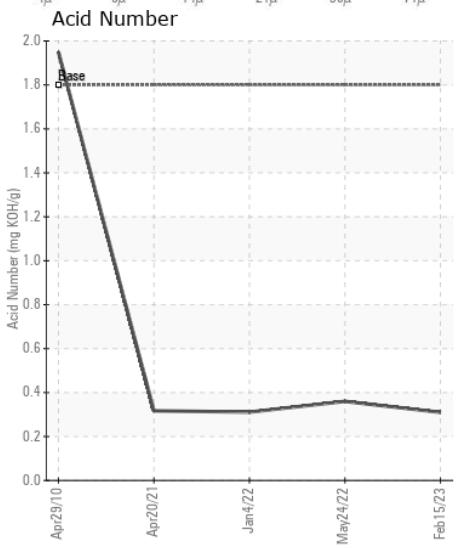












Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LEC0038958 **Received** : 17 Feb 2023
Lab Number : 05770706 **Tested** : 20 Feb 2023
Unique Number : 10345323 **Diagnosed** : 20 Feb 2023 - Don Baldridge
Test Package : CONST (Additional Tests: PQ)

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)

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