



OIL ANALYSIS REPORT

WEAR	<b>SEVERE</b>
CONTAMINATION	<b>SEVERE</b>
FLUID CONDITION	<b>NORMAL</b>

Area  
**Store 2 - Beaver [RO#150373]**  
 Machine Id  
**JOHN DEERE 2954D 1FF2954DCF0290217**  
 Component  
**Pump Drive**  
 Fluid  
**JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (1 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 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		<b>LEC0051790</b>	LEC0034823	LEC0029409
Sample Date		Client Info		<b>24 May 2024</b>	17 Oct 2022	01 Jun 2022
Machine Age	hrs	Client Info		<b>11162</b>	10565	9971
Oil Age	hrs	Client Info		<b>597</b>	1084	490
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	Changed	Not Changd
Filter Changed		Client Info		<b>N/A</b>	N/A	N/A
Sample Status				<b>SEVERE</b>	SEVERE	NORMAL

**WEAR**

Gear wear is indicated.

PQ		ASTM D8184		<b>1313</b>	765	18
Iron	ppm	ASTM D5185m	>151	<b>▲ 4185</b>	▲ 3863	43
Chromium	ppm	ASTM D5185m	>11	<b>▲ 45</b>	▲ 39	<1
Nickel	ppm	ASTM D5185m	>10	<b>2</b>	2	0
Titanium	ppm	ASTM D5185m		<b>2</b>	1	<1
Silver	ppm	ASTM D5185m		<b>0</b>	0	2
Aluminum	ppm	ASTM D5185m	>21	<b>● 58</b>	● 46	11
Lead	ppm	ASTM D5185m	>51	<b>&lt;1</b>	<1	<1
Copper	ppm	ASTM D5185m	>51	<b>4</b>	5	<1
Tin	ppm	ASTM D5185m	>4	<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	▲ MODER	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

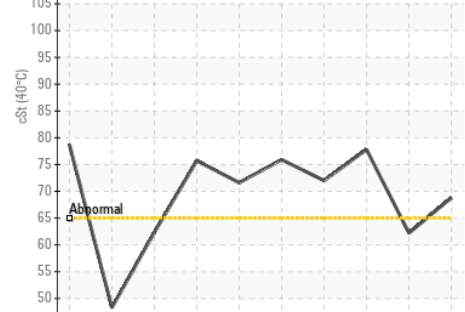
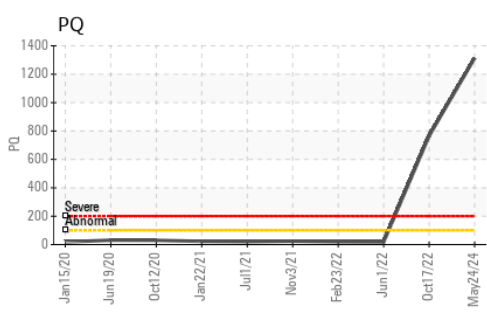
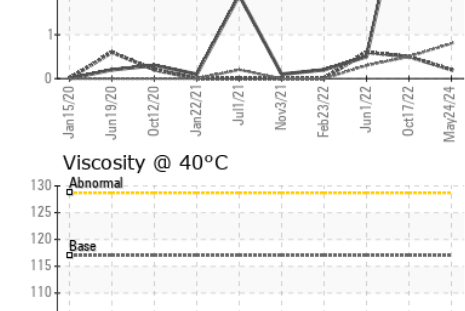
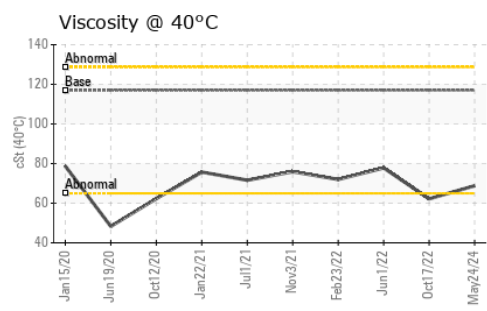
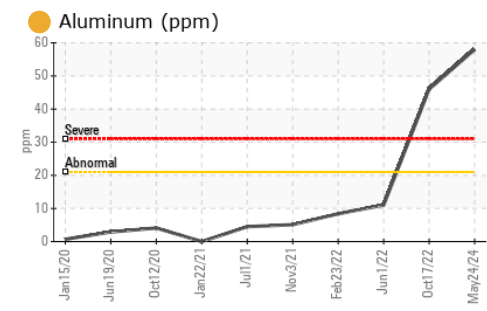
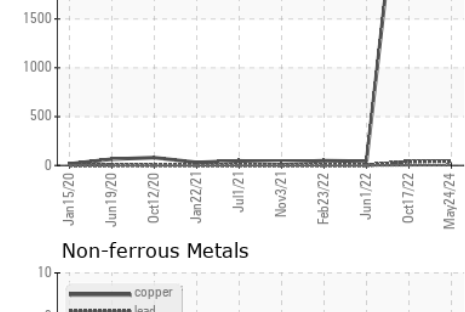
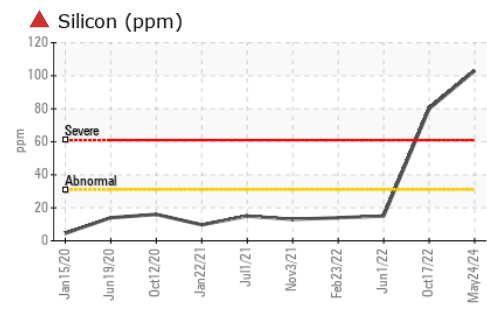
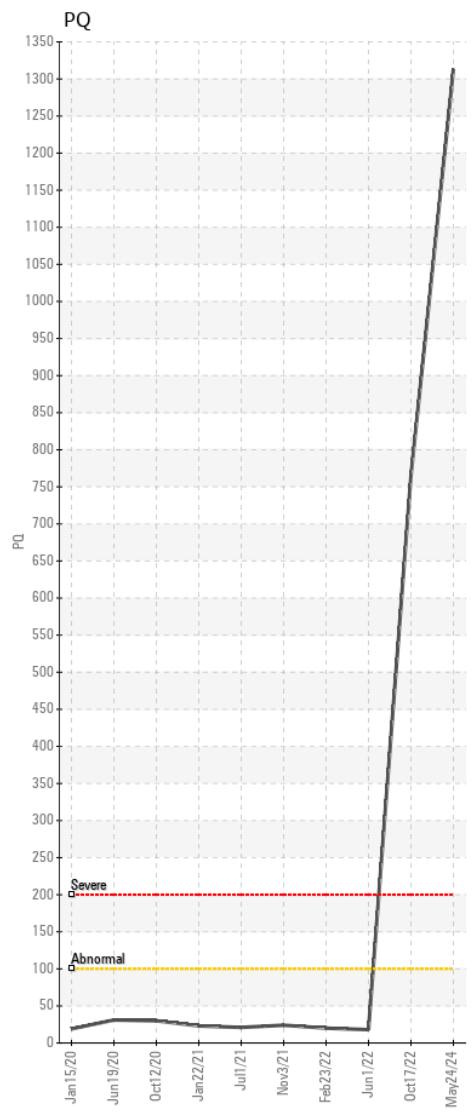
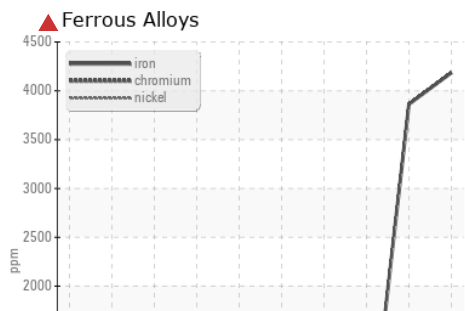
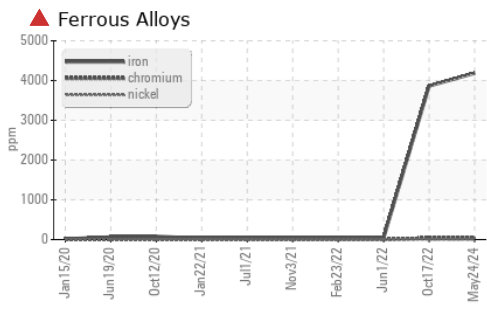
Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

Silicon	ppm	ASTM D5185m	>31	<b>▲ 103</b>	▲ 80	15
Potassium	ppm	ASTM D5185m	>20	<b>11</b>	5	0
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	<b>NEG</b>	NEG	NEG

**FLUID CONDITION**

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

Sodium	ppm	ASTM D5185m	>51	<b>5</b>	2	2
Boron	ppm	ASTM D5185m		<b>258</b>	205	344
Barium	ppm	ASTM D5185m		<b>2</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>219</b>	169	243
Manganese	ppm	ASTM D5185m		<b>37</b>	33	<1
Magnesium	ppm	ASTM D5185m		<b>688</b>	538	754
Calcium	ppm	ASTM D5185m		<b>1450</b>	2061	1445
Phosphorus	ppm	ASTM D5185m		<b>926</b>	942	863
Zinc	ppm	ASTM D5185m		<b>974</b>	995	987
Sulfur	ppm	ASTM D5185m		<b>3444</b>	3796	2853
Visc @ 40°C	cSt	ASTM D445	117	<b>68.8</b>	62.2	77.8



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : LEC0051790 **Received** : 30 May 2024  
**Lab Number** : 06195705 **Tested** : 31 May 2024  
**Unique Number** : 11057828 **Diagnosed** : 01 Jun 2024 - Don Baldrige  
**Test Package** : CONST ( Additional Tests: PQ )

**MOUNTAINEER MECHANIZED**  
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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)