

[[CARDINAL METALS]] JOHN DEERE 230C FF230CX603466 - DIESEL ENGINE

Sample No: JR0187215

Oil Type: JOHN DEERE ENGINE OIL PLUS 50 II 15W40

SAMPLE INFORMATION

Sample Number	JR0187215	---	---	---
Sample Date	19 Apr 2024	---	---	---
Machine Hours	13262	---	---	---
Oil Hours	0	---	---	---
Oil Changed	N/A	---	---	---
Sample Status	ABNORMAL	---	---	---

JRE - GREENSBORO
 411 SOUTH REGIONAL ROAD
 GREENSBORO, NC
 US 27409
 Contact: GREG WEATHERLY
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 T:
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OIL CONDITION

Visc @ 100°C	cSt	█ 17.1	---	---	---
Base Number (BN)	mg KOH/g	█ 6.7	---	---	---
Oxidation (PA)	%	123	---	---	---

Diagnosis

No corrective action is recommended at this time. Resample at the next service interval to monitor. Cylinder, crank, or cam shaft wear is indicated. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

CONTAMINATION

Water	%	NEG	---	---	---
Soot %	%	█ 0.9	---	---	---
Nitration (PA)	%	113	---	---	---
Sulfation (PA)	%	85	---	---	---
Glycol	%	NEG	---	---	---
Fuel	%	<1.0	---	---	---
Silicon	ppm	█ 13	---	---	---
Sodium	ppm	█ 3	---	---	---
Potassium	ppm	█ 1	---	---	---

WEAR METALS

Iron	ppm	▲ 144	---	---	---
Copper	ppm	█ 5	---	---	---
Lead	ppm	█ 7	---	---	---
Tin	ppm	█ <1	---	---	---
Aluminum	ppm	█ 15	---	---	---
Chromium	ppm	█ 8	---	---	---
Molybdenum	ppm	█ 206	---	---	---
Nickel	ppm	█ 5	---	---	---
Titanium	ppm	<1	---	---	---
Silver	ppm	█ 0	---	---	---
Manganese	ppm	█ 1	---	---	---
Vanadium	ppm	<1	---	---	---

ADDITIVES

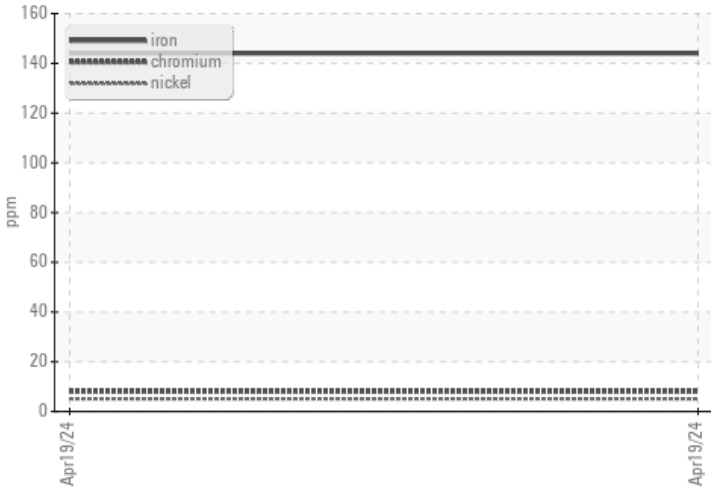
Calcium	ppm	█ 1646	---	---	---
Magnesium	ppm	█ 926	---	---	---
Zinc	ppm	█ 1389	---	---	---
Phosphorus	ppm	█ 1073	---	---	---
Barium	ppm	█ <1	---	---	---
Boron	ppm	█ 70	---	---	---

Depot: JAMGRE
Unique No: 10992857
Signed: Sean Felton
Report Date: 25 Apr 2024

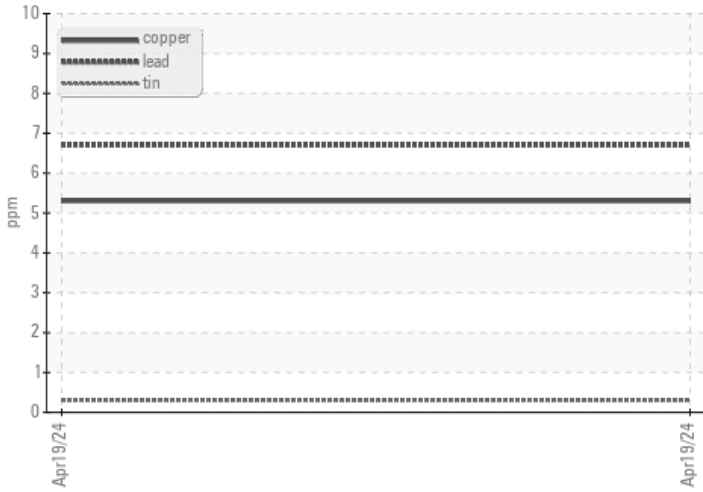
Contact/Location: GREG WEATHERLY - JAMGRE

GRAPHS

▲ Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



Base Number

