



# CONSTRUCTION EQUIPMENT

SWO598136 JOHN DEERE 350G LC 1FF350GXXDE809571 - DIESEL ENGINE



**Sample No:** VCP306413  
**Oil Type:** DIESEL ENGINE OIL SAE 15W40  
**Job No:** SWO598136



## SAMPLE INFORMATION

Sample Number	VCP306413	---	---	---
Sample Date	20 Apr 2021	---	---	---
Machine Hours	5356	---	---	---
Oil Hours	0	---	---	---
Oil Changed	Changed	---	---	---
Sample Status	NORMAL	---	---	---

### ACQUA CONTRACTORS

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 Contact: ALEX RENDINA  
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## OIL CONDITION

Visc @ 100°C	cSt	█ 14.1	---	---	---
Oxidation (PA)	%	72	---	---	---



## CONTAMINATION

Water	%	NEG	---	---	---
Soot %	%	█ 0.8	---	---	---
Nitration (PA)	%	88	---	---	---
Sulfation (PA)	%	65	---	---	---
Glycol	%	NEG	---	---	---
Fuel	%	<1.0	---	---	---
Silicon	ppm	█ 5	---	---	---
Sodium	ppm	█ <1	---	---	---
Potassium	ppm	█ 5	---	---	---

### Diagnosis

Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.



## WEAR METALS

Iron	ppm	█ 76	---	---	---
Copper	ppm	█ 2	---	---	---
Lead	ppm	█ 2	---	---	---
Tin	ppm	█ <1	---	---	---
Aluminum	ppm	█ 4	---	---	---
Chromium	ppm	█ 2	---	---	---
Molybdenum	ppm	█ 63	---	---	---
Nickel	ppm	█ 2	---	---	---
Titanium	ppm	█ 64	---	---	---
Silver	ppm	<1	---	---	---
Manganese	ppm	█ <1	---	---	---
Vanadium	ppm	<1	---	---	---



## ADDITIVES

Calcium	ppm	█ 1669	---	---	---
Magnesium	ppm	█ 551	---	---	---
Zinc	ppm	█ 1213	---	---	---
Phosphorus	ppm	█ 1030	---	---	---
Barium	ppm	█ 0	---	---	---
Boron	ppm	█ 45	---	---	---

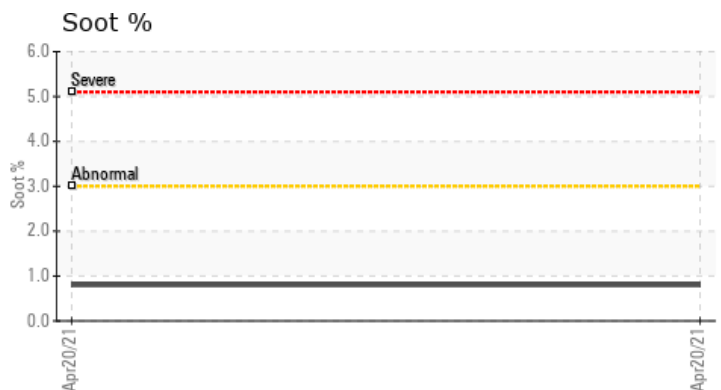
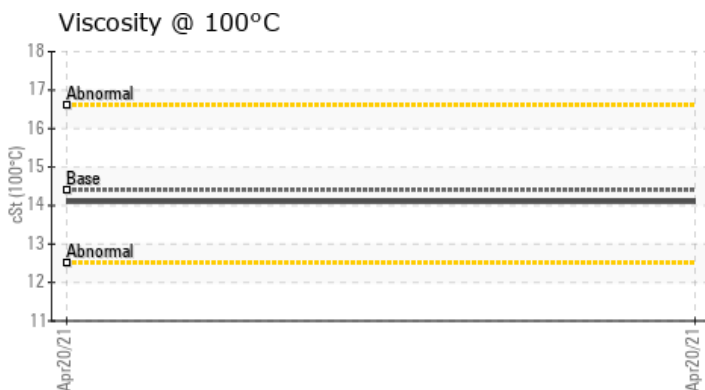
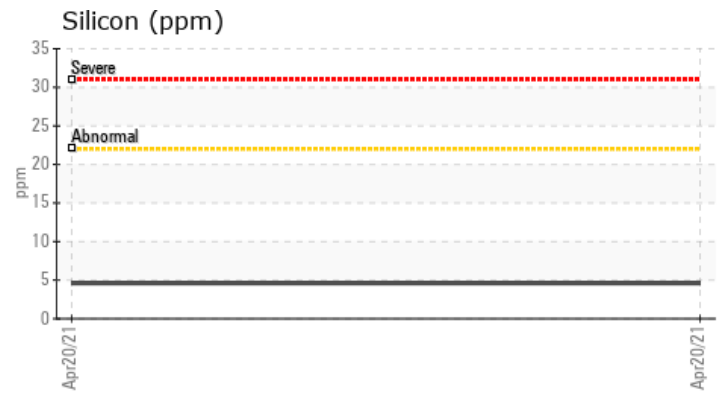
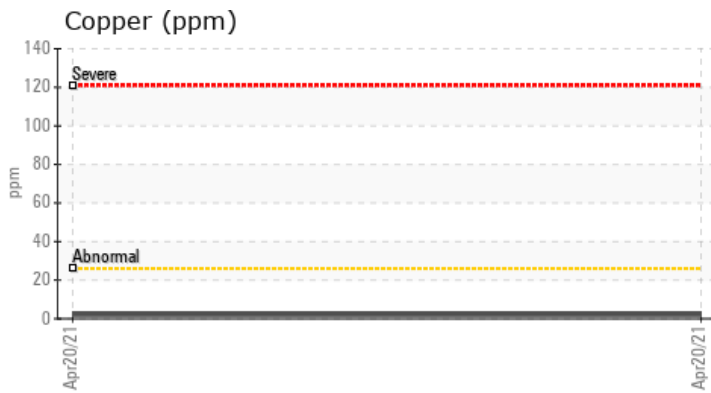
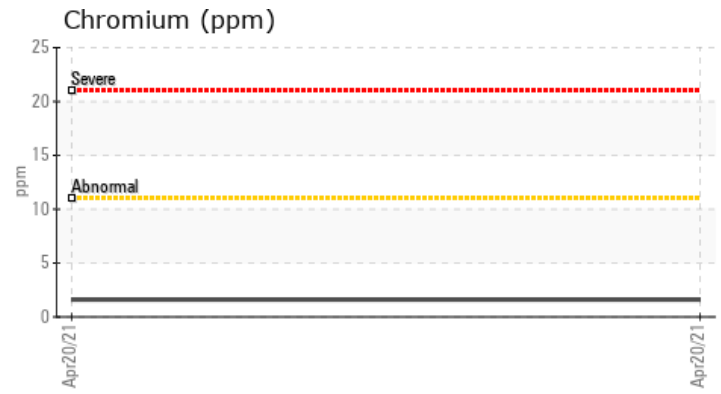
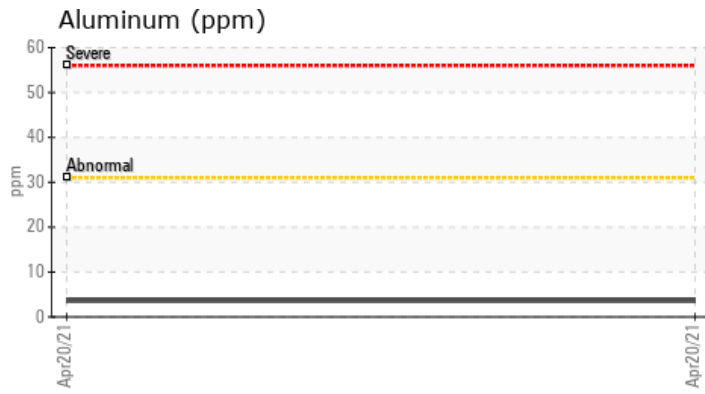
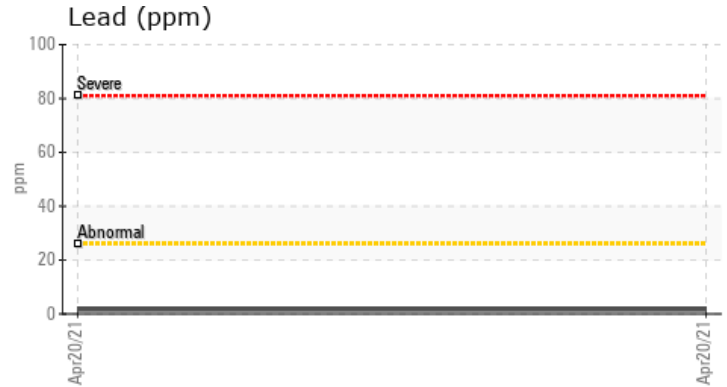
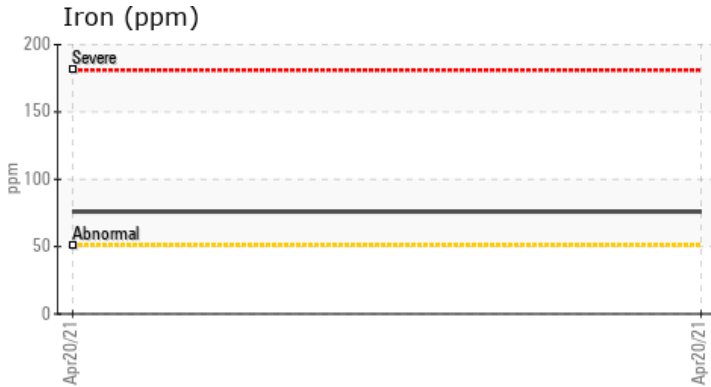
**Depot:** ACQELM  
**Unique No:** 9486403  
**Signed:** Jonathan Hester  
**Report Date:** 03 May 2021



# CONSTRUCTION EQUIPMENT



## GRAPHS





# CONSTRUCTION EQUIPMENT

SWO598136 JOHN DEERE 350G LC 1FF350GXXDE809571 - HYDRAULIC SYSTEM



**Sample No:** VCP306416  
**Oil Type:** SAE 10W30  
**Job No:** SWO598136



**ACQUA CONTRACTORS**  
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## SAMPLE INFORMATION

Sample Number	VCP306416	---	---	---
Sample Date	20 Apr 2021	---	---	---
Machine Hours	5356	---	---	---
Oil Hours	0	---	---	---
Oil Changed	Changed	---	---	---
Sample Status	ABNORMAL	---	---	---



## OIL CONDITION

Visc @ 40°C	cSt	44.9	---	---	---
Acid Number (AN)	mg KOH/g	0.293	---	---	---



## CONTAMINATION

Water	%	NEG	---	---	---
Silicon	ppm	2	---	---	---
Sodium	ppm	1	---	---	---
Potassium	ppm	0	---	---	---



## WEAR METALS

Iron	ppm	7	---	---	---
Copper	ppm	1	---	---	---
Lead	ppm	<1	---	---	---
Tin	ppm	0	---	---	---
Aluminum	ppm	1	---	---	---
Chromium	ppm	<1	---	---	---
Molybdenum	ppm	<1	---	---	---
Nickel	ppm	0	---	---	---
Titanium	ppm	<1	---	---	---
Silver	ppm	<1	---	---	---
Manganese	ppm	<1	---	---	---
Vanadium	ppm	0	---	---	---



## ADDITIVES

Calcium	ppm	219	---	---	---
Magnesium	ppm	4	---	---	---
Zinc	ppm	▲ 150	---	---	---
Phosphorus	ppm	513	---	---	---
Barium	ppm	0	---	---	---
Boron	ppm	3	---	---	---

## Diagnosis

Recommend drain oil if not already done. Reduce drain interval to 2000 hours or drain and flush and use recommended zinc free oil. Oil and filter change at the time of sampling has been noted. We were unable to perform a particle count due to a high concentration of particles present in this sample. All component wear rates are normal. Moderate concentration of visible dirt/debris present in the oil. Zinc level above manufacturer's recommendations. The AN level is acceptable for this fluid.

**Depot:** ACQELM  
**Unique No:** 9486107  
**Signed:** Jonathan Hester  
**Report Date:** 03 May 2021

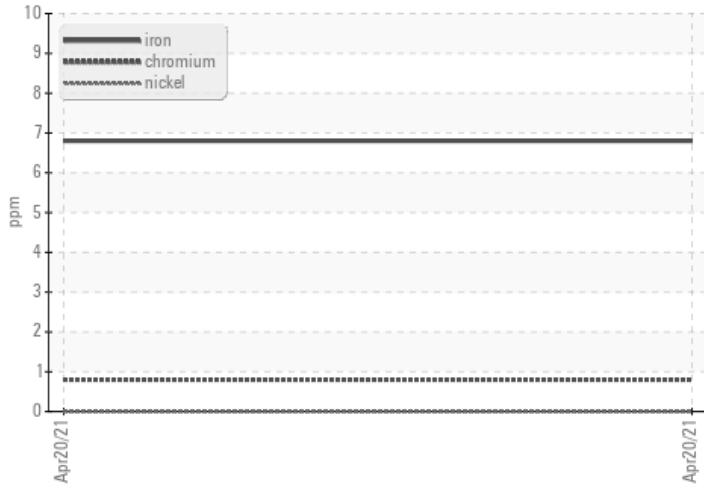


# CONSTRUCTION EQUIPMENT

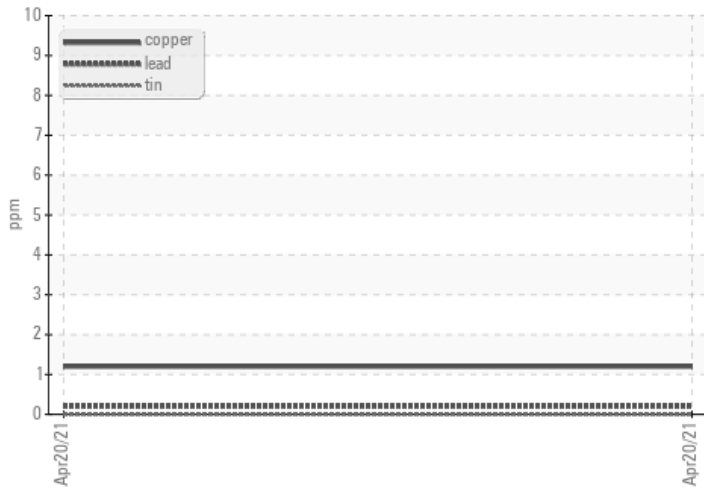


## GRAPHS

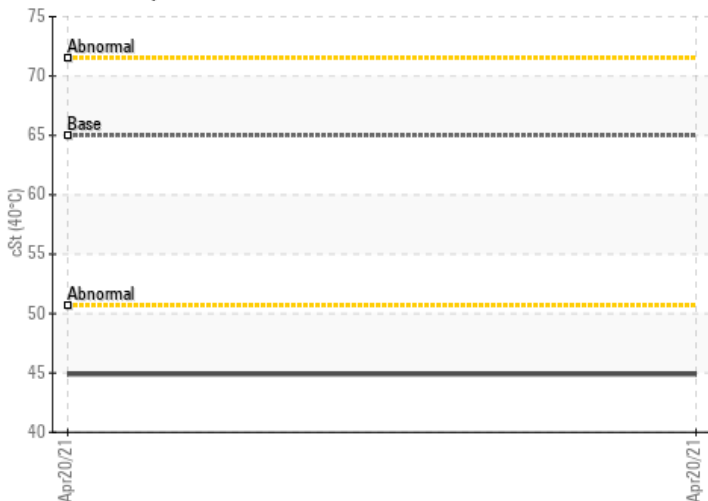
### Ferrous Alloys



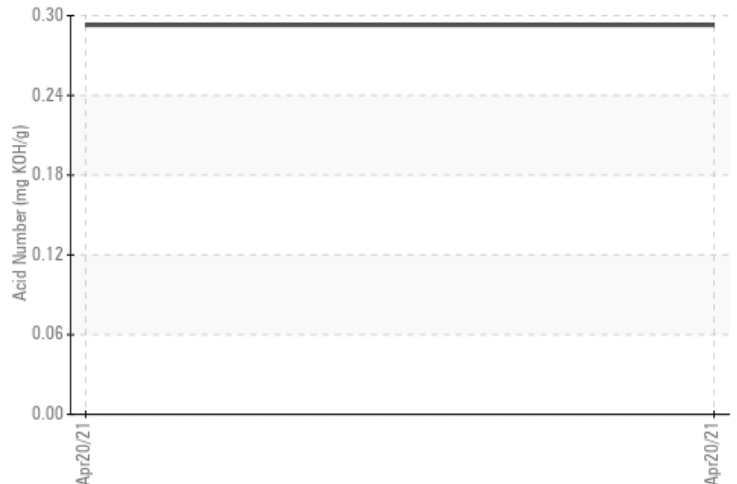
### Non-ferrous Metals



### Viscosity @ 40°C



### Acid Number





# CONSTRUCTION EQUIPMENT

SWO598136 JOHN DEERE 350G LC 1FF350GXXDE809571 - SWING DRIVE



Sample No: VCP315352

Oil Type: SAE 30W

Job No: SWO598136



## SAMPLE INFORMATION

Sample Number	VCP315352	---	---	---
Sample Date	20 Apr 2021	---	---	---
Machine Hours	5356	---	---	---
Oil Hours	0	---	---	---
Oil Changed	Changed	---	---	---
Sample Status	NORMAL	---	---	---



## OIL CONDITION

Visc @ 40°C	cSt	█ 144	---	---	---
-------------	-----	-------	-----	-----	-----



## CONTAMINATION

Water	%	NEG	---	---	---
Silicon	ppm	█ 2	---	---	---
Sodium	ppm	█ <1	---	---	---
Potassium	ppm	█ <1	---	---	---



## WEAR METALS

Iron	ppm	█ 24	---	---	---
Copper	ppm	█ <1	---	---	---
Lead	ppm	█ 0	---	---	---
Tin	ppm	█ 0	---	---	---
Aluminum	ppm	█ 0	---	---	---
Chromium	ppm	█ <1	---	---	---
Molybdenum	ppm	█ <1	---	---	---
Nickel	ppm	█ 0	---	---	---
Titanium	ppm	█ 0	---	---	---
Silver	ppm	█ 0	---	---	---
Manganese	ppm	█ <1	---	---	---
Vanadium	ppm	█ 0	---	---	---



## ADDITIVES

Calcium	ppm	█ 40	---	---	---
Magnesium	ppm	█ 9	---	---	---
Zinc	ppm	█ 4	---	---	---
Phosphorus	ppm	█ 674	---	---	---
Barium	ppm	█ 0	---	---	---
Boron	ppm	█ 11	---	---	---



### ACQUA CONTRACTORS

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### Diagnosis

Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.

Depot: ACQELM

Unique No: 9486481

Signed: Don Baldrige

Report Date: 03 May 2021

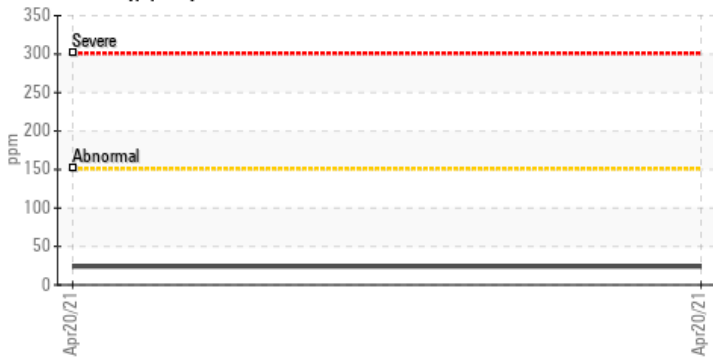


# CONSTRUCTION EQUIPMENT

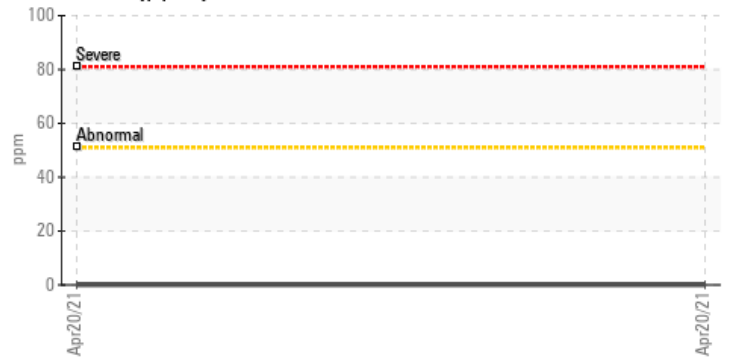


## GRAPHS

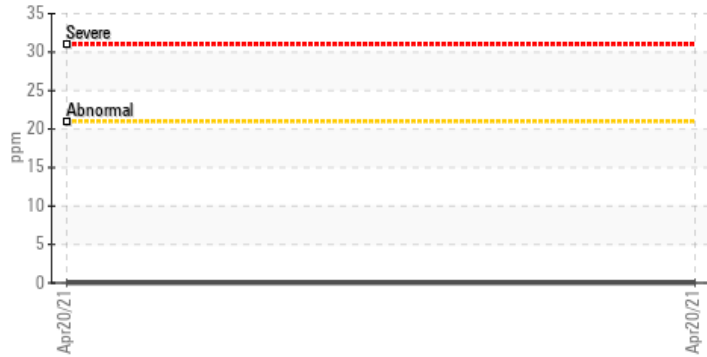
### Iron (ppm)



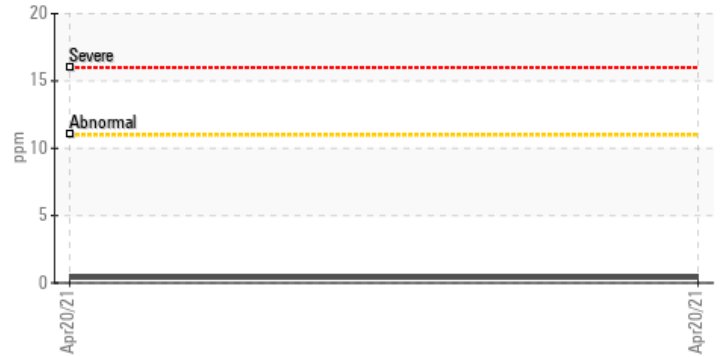
### Lead (ppm)



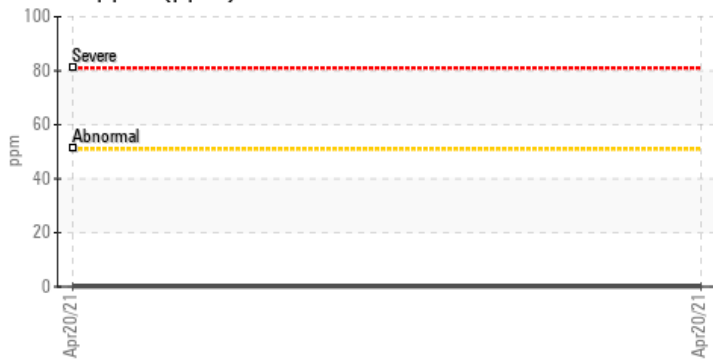
### Aluminum (ppm)



### Chromium (ppm)



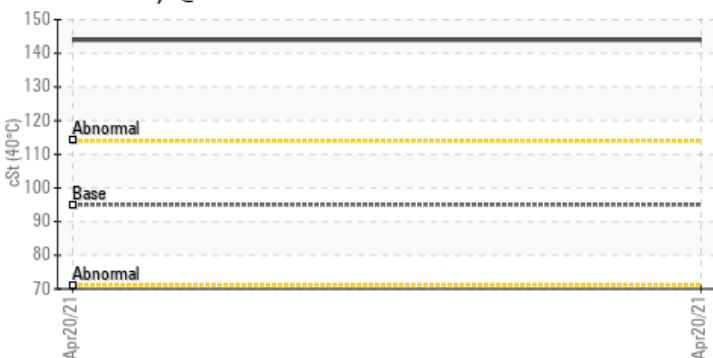
### Copper (ppm)



### Silicon (ppm)



### Viscosity @ 40°C



### Additives

