



# CONSTRUCTION EQUIPMENT

## JOHN DEERE HP 77 - HYDRAULIC SYSTEM



**Sample No:** VCP437774  
**Oil Type:** TRACTOR FLUID HYD 46  
**Job No:**



### SAMPLE INFORMATION

Sample Number	VCP437774	---	---	---
Sample Date	23 Jan 2024	---	---	---
Machine Hours	2683	---	---	---
Oil Hours	2000	---	---	---
Oil Changed	Changed	---	---	---
Sample Status	ATTENTION	---	---	---

**MITCHELL & STARK CONSTRUCTION CO**  
 6001 Shirley St  
 NAPLES, FL  
 US 34109  
 Contact: SERVICE MANAGER



### OIL CONDITION

Visc @ 40°C	cSt	■ 53.5	---	---	---
Acid Number (AN)	mg KOH/g	■ 1.27	---	---	---

T: (239)597-2165  
 F: (239)566-7865



### CONTAMINATION

Water	%	NEG	---	---	---
Particles >4µm		▲ 9767	---	---	---
Particles >6µm		■ 209	---	---	---
Particles >14µm		■ 8	---	---	---
ISO 4406:1999 (c)		20/15/10	---	---	---
Silicon	ppm	■ 3	---	---	---
Sodium	ppm	■ 0	---	---	---
Potassium	ppm	■ <1	---	---	---

### Diagnosis

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. There is a moderate amount of particulates present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



### WEAR METALS

Iron	ppm	■ 2	---	---	---
Copper	ppm	■ <1	---	---	---
Lead	ppm	■ 0	---	---	---
Tin	ppm	■ 0	---	---	---
Aluminum	ppm	■ 2	---	---	---
Chromium	ppm	■ <1	---	---	---
Molybdenum	ppm	<1	---	---	---
Nickel	ppm	■ 0	---	---	---
Titanium	ppm	0	---	---	---
Silver	ppm	0	---	---	---
Manganese	ppm	0	---	---	---
Vanadium	ppm	0	---	---	---



### ADDITIVES

Calcium	ppm	1679	---	---	---
Magnesium	ppm	13	---	---	---
Zinc	ppm	942	---	---	---
Phosphorus	ppm	750	---	---	---
Barium	ppm	0	---	---	---
Boron	ppm	0	---	---	---

**Depot:** MITNAP  
**Unique No:** 10849421  
**Signed:** Don Baldrige  
**Report Date:** 30 Jan 2024

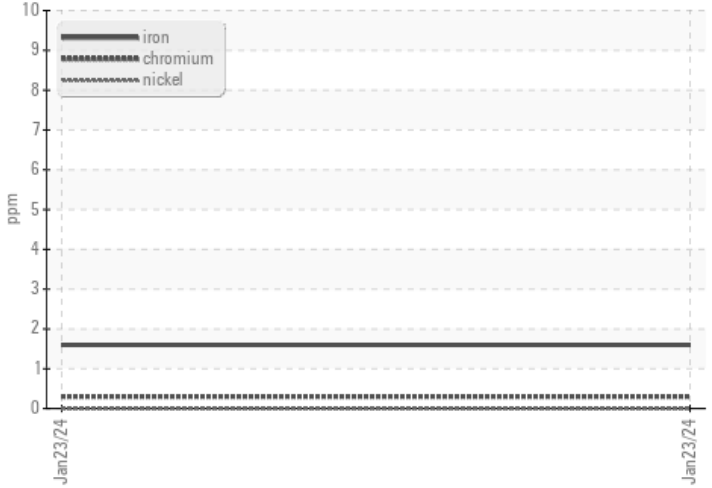


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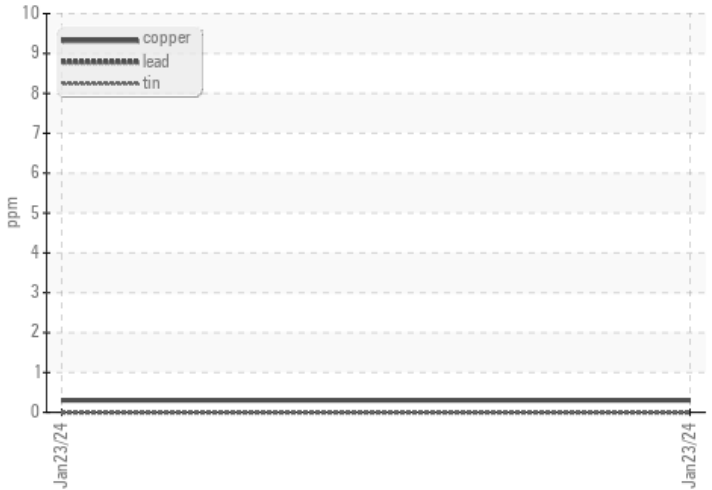


## GRAPHS

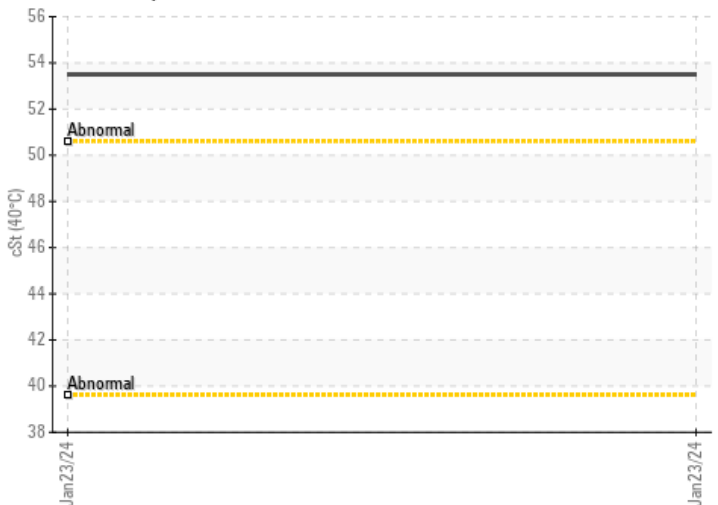
### Ferrous Alloys



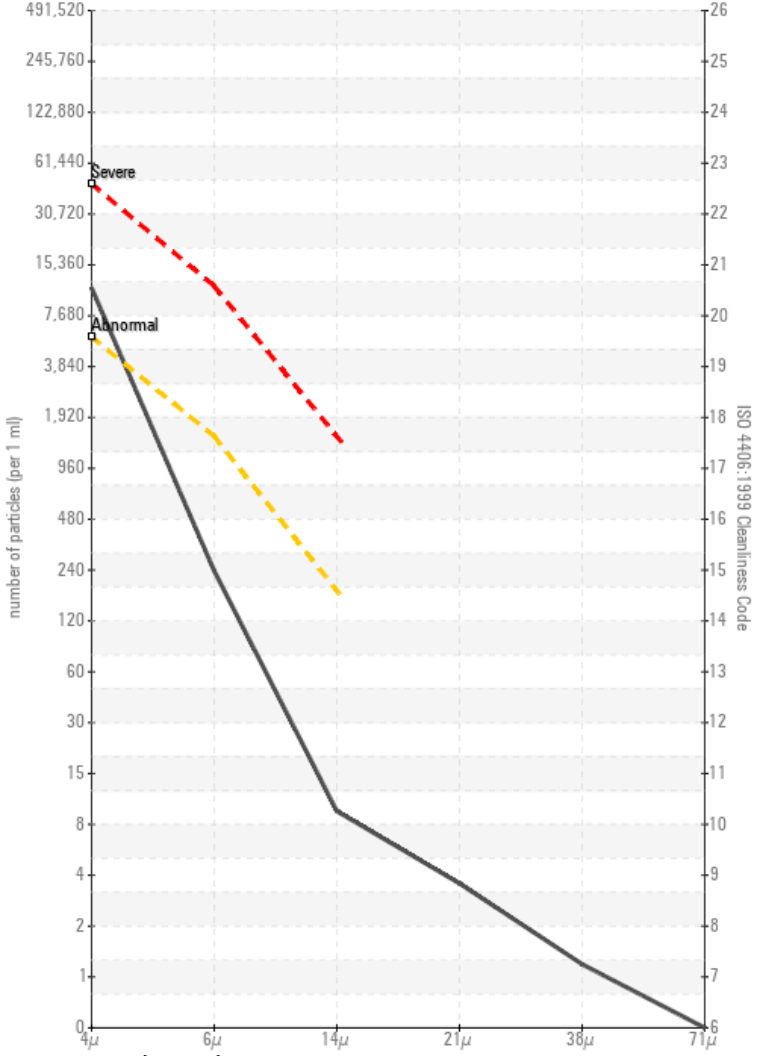
### Non-ferrous Metals



### Viscosity @ 40°C



### Particle Count



### Acid Number

