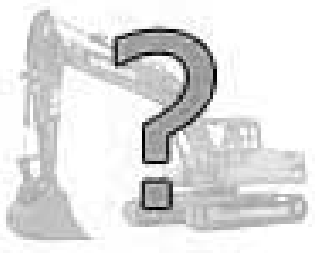
CONSTRUCTION EQUIPMENT
YALE FORKLIFT 4 - HYDRAULIC SYSTEM

Sample No: VCP416329
Oil Type: MOBIL MOBILFLUID 424
Job No:



MARYLAND ENVIRONMENTAL SERVICES
21210 MARTINSBURG RD
DICKERSON, MD
US 20842
Contact: ALAN PARRISH
aparr@menv.com
T: (301)428-8185
F: (301)428-8311

SAMPLE INFORMATION

Sample Number		**VCP416329**	VCP399941	VCP340105	VCP366563
Sample Date		**08 Aug 2023**	13 Apr 2023	02 Jan 2023	19 Oct 2022
Machine Hours		**2739**	2504	2231	2002
Oil Hours		**739**	502	2231	2002
Oil Changed		**Not Changd**	Not Changd	Not Changd	Not Changd
Sample Status		**NORMAL**	NORMAL	NORMAL	ATTENTION

OIL CONDITION

Visc @ 40°C	cSt	**46.1**	45.8	45.9	45.8
Acid Number (AN)	mg KOH/g	**0.43**	0.42	0.43	0.43

CONTAMINATION

Particles >4µm		**451**	631	954	7111
Particles >6µm		**152**	305	271	1112
Particles >14µm		**21**	48	27	46
ISO 4406:1999 (c)		**16/14/12**	16/15/13	17/15/12	20/17/13
Silicon	ppm	**2**	1	1	<1
Sodium	ppm	**1**	0	<1	0
Potassium	ppm	**0**	2	0	0

WEAR METALS

Iron	ppm	**5**	5	4	3
Copper	ppm	**2**	2	2	2
Lead	ppm	**0**	0	0	0
Tin	ppm	**0**	0	0	0
Aluminum	ppm	**2**	0	<1	<1
Chromium	ppm	**0**	<1	0	0
Molybdenum	ppm	**<1**	<1	<1	0
Nickel	ppm	**0**	0	0	0
Titanium	ppm	**0**	0	0	0
Silver	ppm	**0**	0	0	0
Manganese	ppm	**<1**	<1	<1	<1
Vanadium	ppm	**<1**	0	0	0

ADDITIVES

Calcium	ppm	**437**	180	194	180
Magnesium	ppm	**4**	3	<1	2
Zinc	ppm	**459**	392	391	385
Phosphorus	ppm	**379**	300	318	307
Barium	ppm	**0**	0	0	0
Boron	ppm	**13**	4	4	4

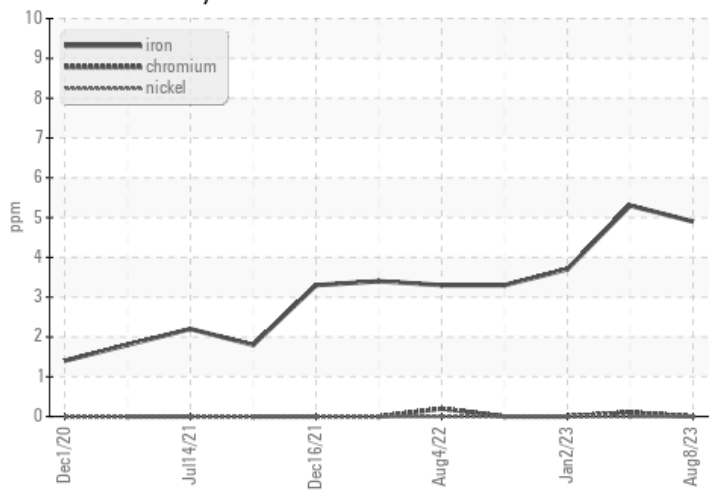
Diagnosis

Resample at the next service interval to monitor.All component wear rates are normal. The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil. Silt level is normal. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

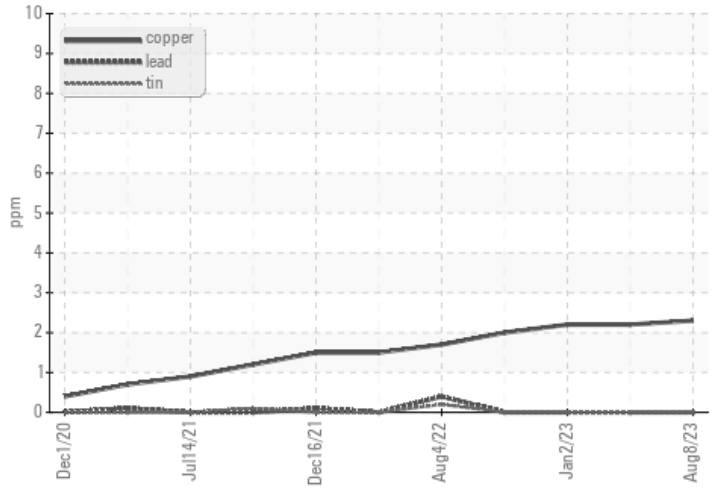
Depot: MARDIC
Unique No: 10602752
Signed: Don Baldridge
Report Date: 14 Aug 2023

GRAPHS

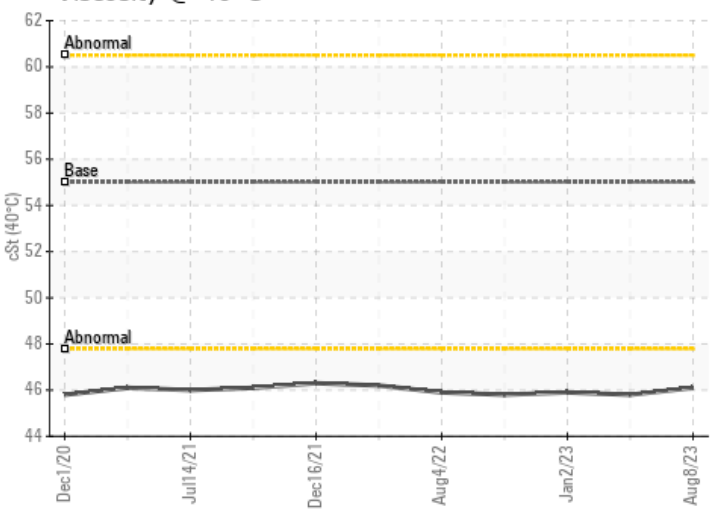
Ferrous Alloys



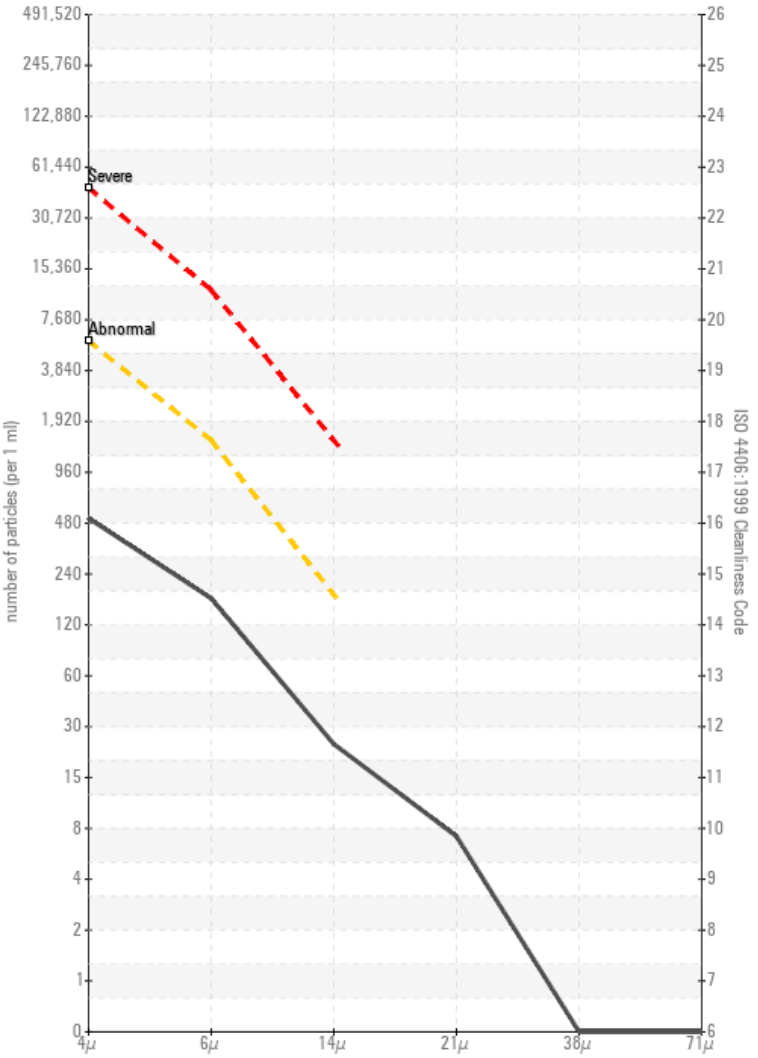
Non-ferrous Metals



Viscosity @ 40°C



Particle Count



Acid Number