



CONSTRUCTION EQUIPMENT

YALE FORKLIFT 3 - HYDRAULIC SYSTEM



Sample No: VCP404269
Oil Type: MOBIL MOBILFLUID 424
Job No:



SAMPLE INFORMATION

Sample Number	VCP404269	VCP366663	VCP328633	VCP274772
Sample Date	16 Nov 2023	01 Nov 2022	18 Oct 2021	29 Jan 2021
Machine Hours	6723	6467	6261	6001
Oil Hours	722	466	260	2003
Oil Changed	Not Chngd	Not Chngd	Not Chngd	Changed
Sample Status	ABNORMAL	ABNORMAL	ATTENTION	ABNORMAL

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OIL CONDITION

Visc @ 40°C	cSt	44.7	45.2	47.0	48.4
Acid Number (AN)	mg KOH/g	1.05	1.17	1.278	1.094

CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Particles >4µm		▲ 89063	▲ 92218	▲ 7910	▲ 14806
Particles >6µm		■ 1948	■ 953	■ 152	■ 180
Particles >14µm		■ 9	■ 47	■ 14	■ 15
ISO 4406:1999 (c)		24/18/10	24/17/13	20/14/11	21/15/11
Silicon	ppm	■ 7	■ 7	■ 6	■ 10
Sodium	ppm	■ 2	■ 3	■ 3	■ 0
Potassium	ppm	■ 1	■ 0	■ 1	■ <1

Diagnosis
 No corrective action is recommended at this time. Resample at the next service interval to monitor. The iron level is abnormal. All other component wear rates are normal. There is a high amount of silt (particulates < 14 microns in size) 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	▲ 39	▲ 37	■ 8	■ 13
Copper	ppm	■ <1	■ 1	■ <1	■ 1
Lead	ppm	■ <1	■ <1	■ <1	■ 0
Tin	ppm	■ <1	■ <1	■ <1	■ 0
Aluminum	ppm	■ 1	■ 1	■ 1	■ 0
Chromium	ppm	■ 0	■ <1	■ <1	■ <1
Molybdenum	ppm	■ <1	■ 2	2	1
Nickel	ppm	■ <1	0	<1	0
Titanium	ppm	<1	<1	<1	<1
Silver	ppm	<1	0	<1	<1
Manganese	ppm	■ <1	■ <1	<1	<1
Vanadium	ppm	<1	0	<1	0

ADDITIVES

Calcium	ppm	■ 3359	3474	3453	3463
Magnesium	ppm	■ 28	■ 26	27	12
Zinc	ppm	■ 1406	■ 1421	1398	1234
Phosphorus	ppm	■ 1141	■ 1079	1120	1007
Barium	ppm	■ 0	■ 0	0	0
Boron	ppm	■ 71	■ 81	79	2

Depot: MARDIC
Unique No: 10762504
Signed: Don Baldrige
Report Date: 29 Nov 2023

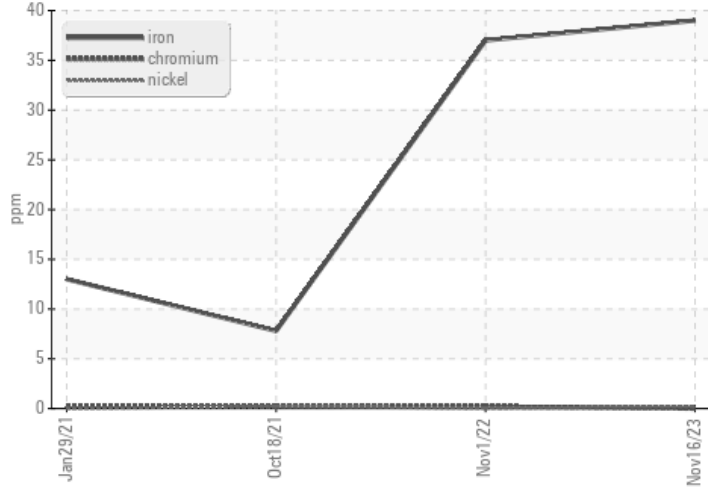


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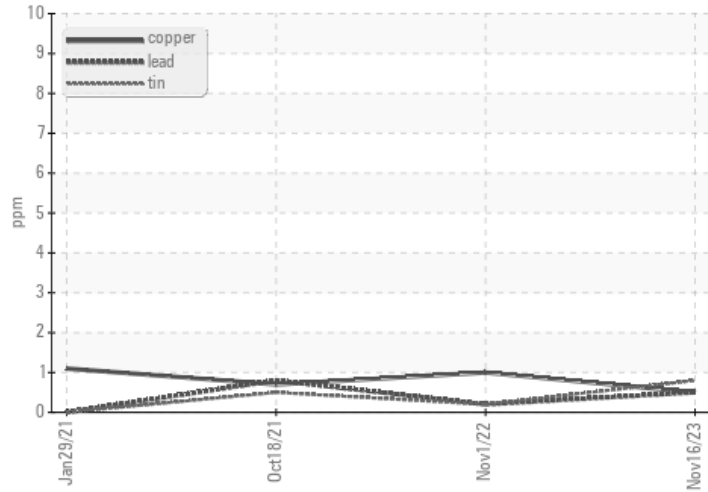


GRAPHS

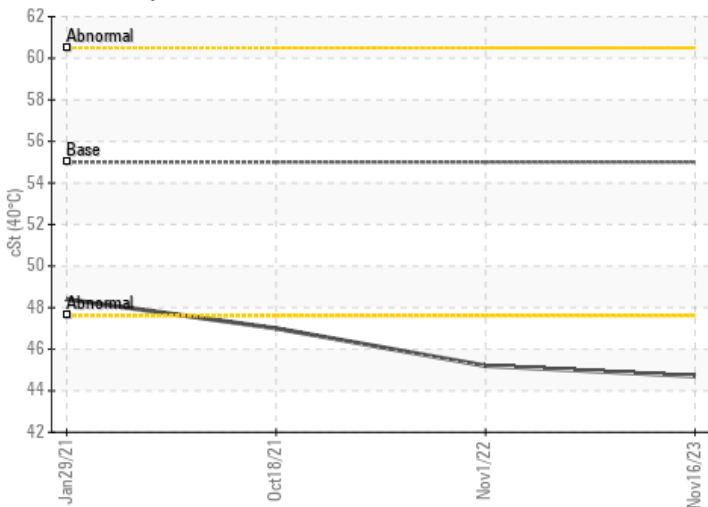
▲ Ferrous Alloys



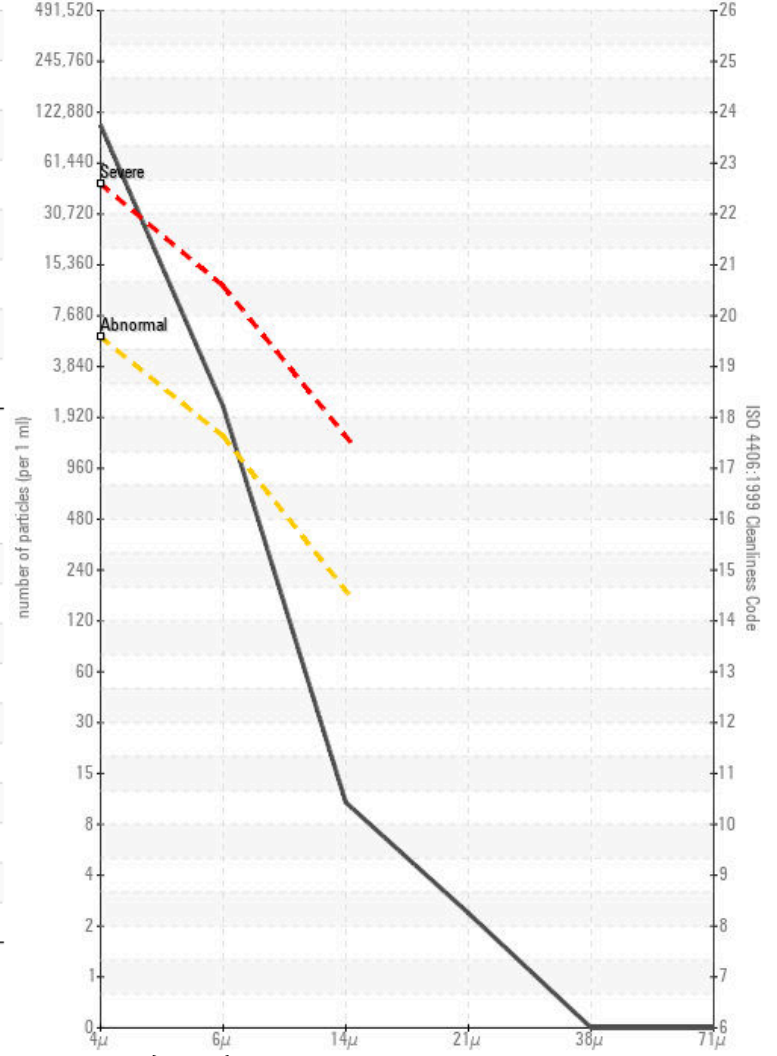
Non-ferrous Metals



Viscosity @ 40°C



▲ Particle Count



Acid Number

