



CONSTRUCTION EQUIPMENT

607016 VOLVO A40F 342498 - HYDRAULIC SYSTEM



Sample No: VCP414717
Oil Type: VOLVO SUPER HYDRAULIC OIL 46
Job No: 607016



SAMPLE INFORMATION

Sample Number	VCP414717	VCP402340	VCP375849	VCP332180
Sample Date	18 Sep 2023	27 Feb 2023	15 Jun 2022	05 Jan 2022
Machine Hours	8432	7463	6561	5591
Oil Hours	4000	3000	2000	1500
Oil Changed	Changed	Not Changd	Not Changd	Not Changd
Sample Status	NORMAL	NORMAL	NORMAL	ABNORMAL

RIPA AND ASSOCIATES

10149 FISHER AVENUE
 TAMPA, FL
 US 33619
 Contact: PM Services
 PMServices@ripaconstruction.com
 T:
 F:



OIL CONDITION

Visc @ 40°C	cSt	43.1	43.5	42.0	42.4
Acid Number (AN)	mg KOH/g	0.53	0.45	0.35	0.33



CONTAMINATION

Particles >4µm		585	988	2249	10423
Particles >6µm		181	263	717	3689
Particles >14µm		21	27	80	409
ISO 4406:1999 (c)		16/15/12	17/15/12	18/17/13	21/19/16
Silicon	ppm	9	7	4	4
Sodium	ppm	5	3	<1	1
Potassium	ppm	1	<1	1	0

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. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



WEAR METALS

Iron	ppm	8	8	14	10
Copper	ppm	2	2	3	3
Lead	ppm	4	2	3	3
Tin	ppm	<1	0	<1	<1
Aluminum	ppm	2	2	2	1
Chromium	ppm	<1	<1	<1	<1
Molybdenum	ppm	3	4	2	1
Nickel	ppm	<1	0	0	0
Titanium	ppm	0	0	0	0
Silver	ppm	<1	0	0	0
Manganese	ppm	<1	0	0	0
Vanadium	ppm	0	0	0	0



ADDITIVES

Calcium	ppm	863	804	70	76
Magnesium	ppm	34	27	6	5
Zinc	ppm	733	622	437	427
Phosphorus	ppm	546	504	327	336
Barium	ppm	0	0	2	0
Boron	ppm	25	22	1	1

Depot: RIPTAM
Unique No: 10709061
Signed: Don Baldrige
Report Date: 25 Oct 2023

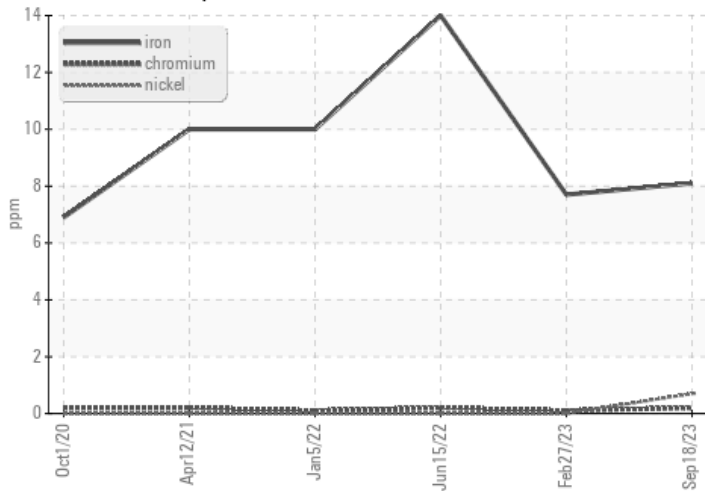


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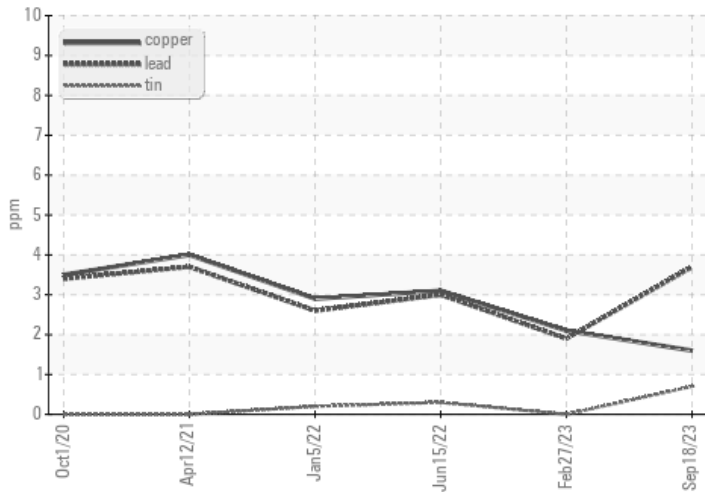


GRAPHS

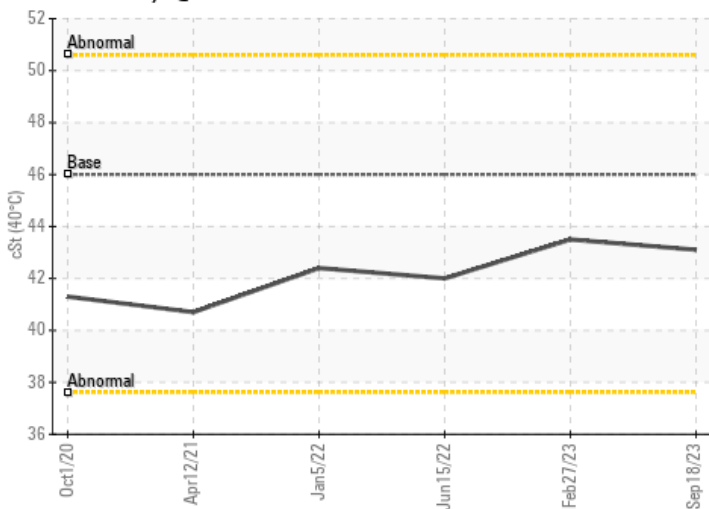
Ferrous Alloys



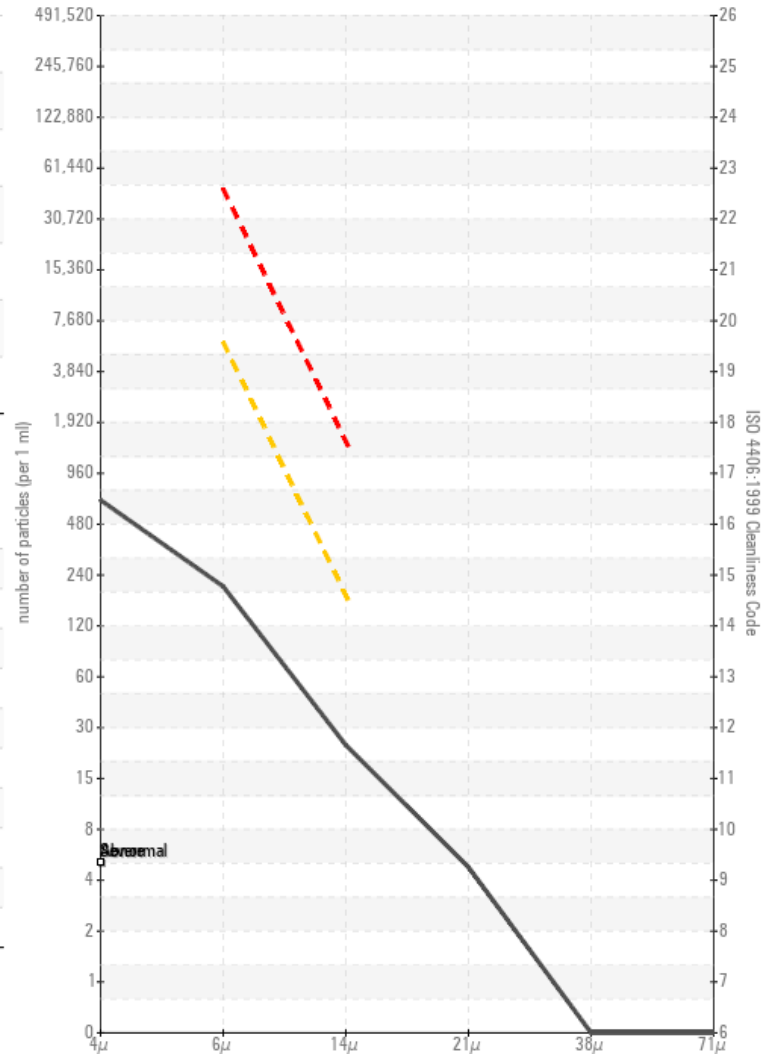
Non-ferrous Metals



Viscosity @ 40°C



Particle Count



Acid Number

