



CONSTRUCTION EQUIPMENT

567604 VOLVO A40G 342177 - HYDRAULIC SYSTEM



Sample No: VCP424436
Oil Type: VOLVO SUPER HYDRAULIC OIL 46
Job No: 567604



SAMPLE INFORMATION

Sample Number	VCP424436	VCP358183	VCP336743	VCP316776
Sample Date	29 Jun 2023	12 Sep 2022	02 Mar 2022	31 Aug 2021
Machine Hours	10619	9334	8227	7246
Oil Hours	2000	500	1500	3000
Oil Changed	Not Chngd	Not Chngd	Changed	Not Chngd
Sample Status	ABNORMAL	ATTENTION	ABNORMAL	NORMAL

RIPA AND ASSOCIATES
 10149 FISHER AVENUE
 TAMPA, FL
 US 33619
 Contact: ROBERT TURNER
 rturner@ripatampa.com
 T:
 F:

OIL CONDITION

Visc @ 40°C	cSt	43.6	44.1	41.3	40.8
Acid Number (AN)	mg KOH/g	0.36	0.78	0.38	0.408

CONTAMINATION

Particles >4µm	---	24150	140278	2943	
Particles >6µm	---	329	78589	415	
Particles >14µm	---	8	19608	52	
ISO 4406:1999 (c)	---	22/16/10	24/23/21	19/16/13	
Silicon	ppm	5	15	5	5
Sodium	ppm	0	2	3	3
Potassium	ppm	<1	0	0	<1

Diagnosis
 No corrective action is recommended at this time. The filter change at the time of sampling has been noted. Resample at the next service interval to monitor. 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. High concentration of visible dirt/debris 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	18	18	22	19
Copper	ppm	6	62	9	9
Lead	ppm	3	<1	4	4
Tin	ppm	<1	<1	0	<1
Aluminum	ppm	2	2	2	2
Chromium	ppm	<1	<1	<1	<1
Molybdenum	ppm	<1	<1	<1	<1
Nickel	ppm	0	1	0	<1
Titanium	ppm	<1	<1	<1	<1
Silver	ppm	0	0	0	<1
Manganese	ppm	0	<1	<1	<1
Vanadium	ppm	0	0	0	0

ADDITIVES

Calcium	ppm	93	3951	93	113
Magnesium	ppm	7	11	6	6
Zinc	ppm	461	1470	427	449
Phosphorus	ppm	346	1225	373	325
Barium	ppm	1	0	0	0
Boron	ppm	0	127	0	3

Depot: RIPTAM
Unique No: 10574233
Signed: Don Baldrige
Report Date: 28 Jul 2023

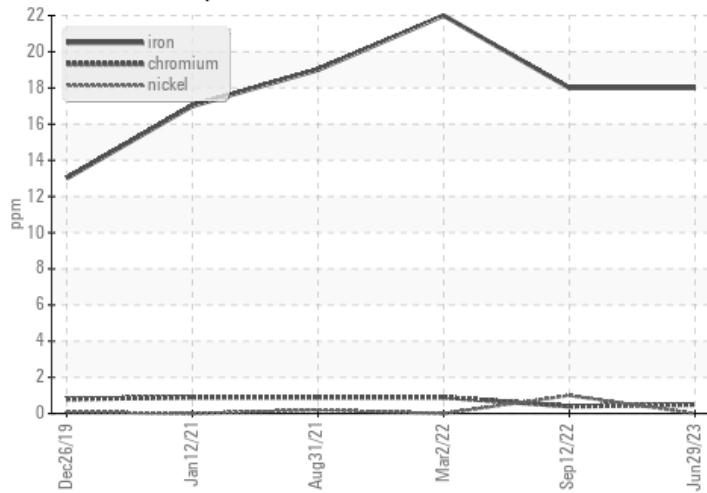


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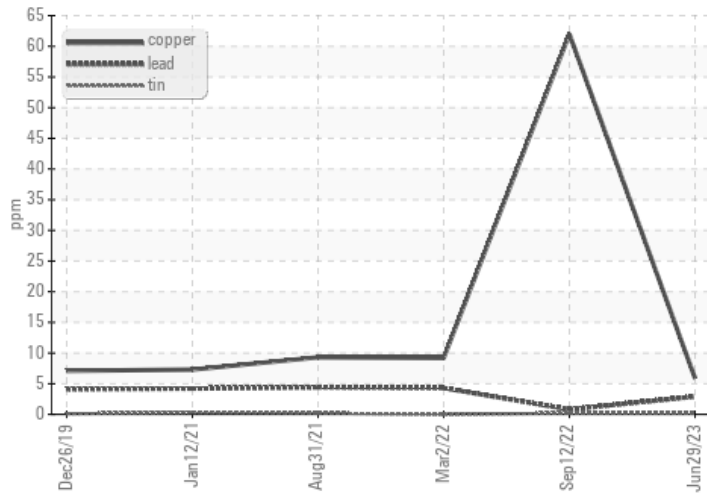


GRAPHS

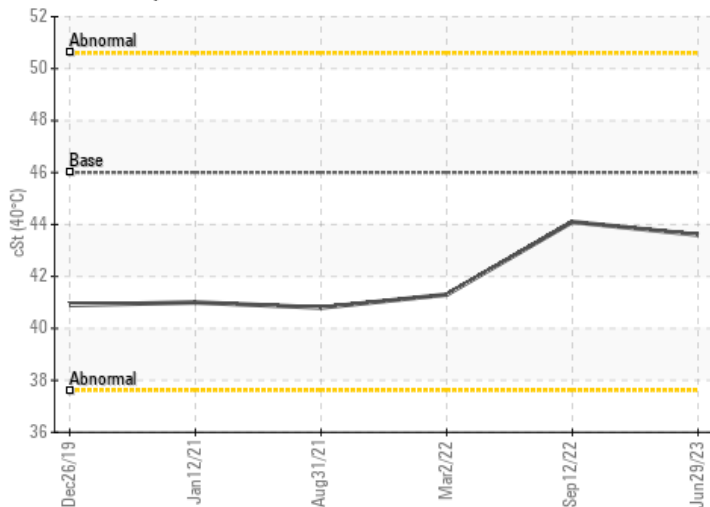
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 40°C



Acid Number

