



CONSTRUCTION EQUIPMENT

SPM453366 VOLVO SD115B 236555 - HYDRAULIC SYSTEM



Sample No: VCP386102
Oil Type: VOLVO SUPER HYDRAULIC OIL 46
Job No: SPM453366



SAMPLE INFORMATION

Sample Number	VCP386102	VCP359055	VCP343524	VCP311959
Sample Date	14 Sep 2022	02 May 2022	30 Nov 2021	12 Jun 2021
Machine Hours	5481	5221	4650	3986
Oil Hours	500	500	2000	3986
Oil Changed	Not Chngd	Not Chngd	Changed	Not Chngd
Sample Status	NORMAL	NORMAL	ABNORMAL	ATTENTION

RIPA AND ASSOCIATES

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



OIL CONDITION

Visc @ 40°C	cSt	39.1	38.3	▲ 29.6	▲ 30.49
Acid Number (AN)	mg KOH/g	0.40	0.46	0.471	0.431



CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Particles >4µm		957	7490	965	2865
Particles >6µm		77	1971	99	318
Particles >14µm		1	160	14	33
ISO 4406:1999 (c)		17/13/7	20/18/14	17/14/11	19/15/12
Silicon	ppm	5	5	13	14
Sodium	ppm	<1	1	3	3
Potassium	ppm	0	<1	<1	<1

Diagnosis

Resample at the next service interval to monitor. All component wear rates are normal. The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



WEAR METALS

Iron	ppm	19	17	▲ 25	16
Copper	ppm	5	4	10	6
Lead	ppm	1	1	2	2
Tin	ppm	<1	<1	<1	0
Aluminum	ppm	1	1	2	<1
Chromium	ppm	0	0	<1	<1
Molybdenum	ppm	2	3	7	7
Nickel	ppm	0	0	0	0
Titanium	ppm	0	0	<1	<1
Silver	ppm	0	<1	<1	0
Manganese	ppm	<1	<1	<1	<1
Vanadium	ppm	0	0	<1	0



ADDITIVES

Calcium	ppm	115	125	264	266
Magnesium	ppm	12	16	43	43
Zinc	ppm	363	392	340	323
Phosphorus	ppm	320	346	310	312
Barium	ppm	0	0	0	0
Boron	ppm	1	5	4	24

Depot: RIPTAM
Unique No: 10141044
Signed: Wes Davis
Report Date: 21 Sep 2022

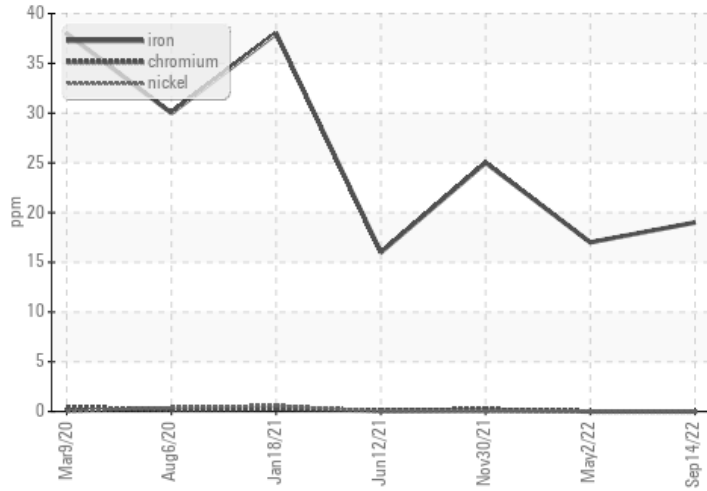


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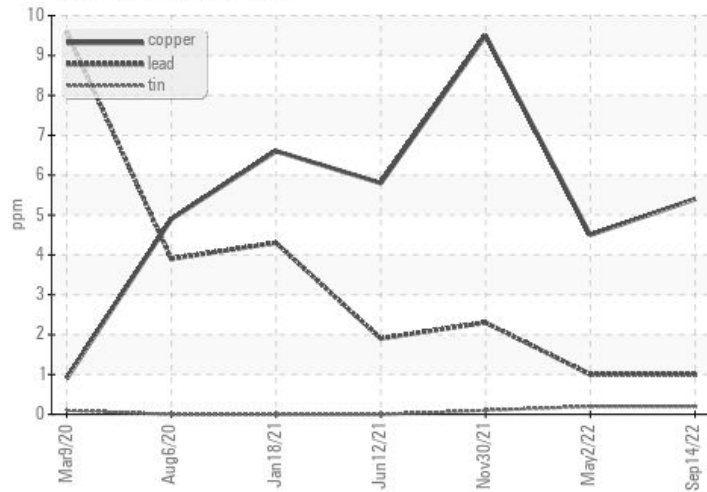


GRAPHS

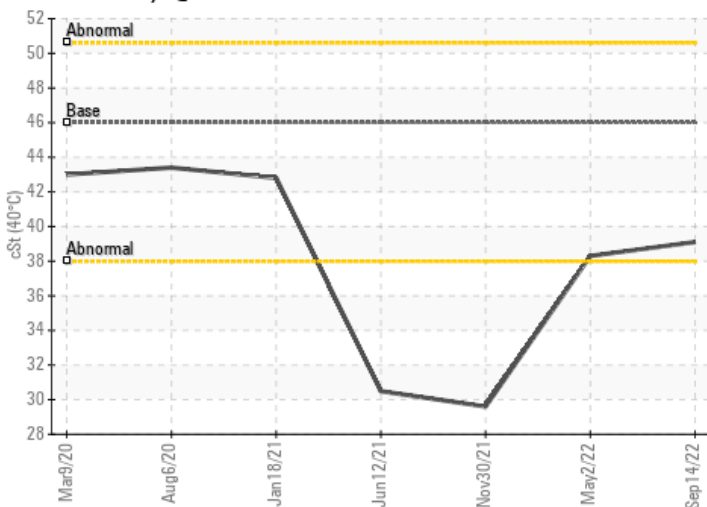
Ferrous Alloys



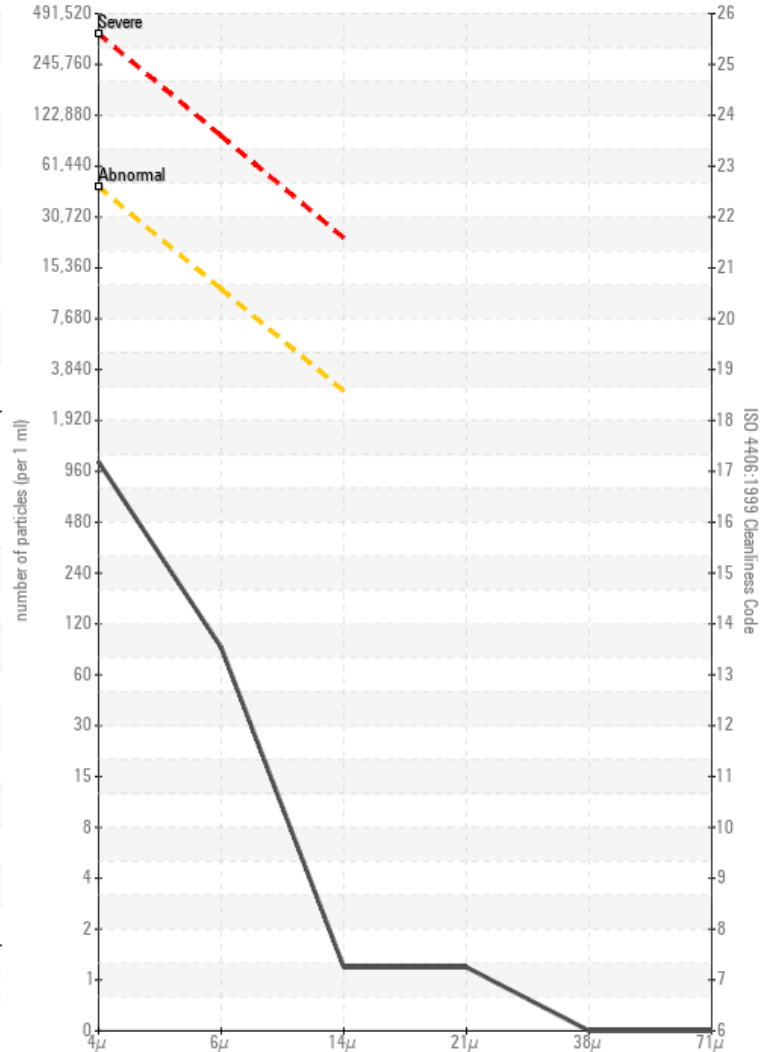
Non-ferrous Metals



Viscosity @ 40°C



Particle Count



Acid Number

