



CONSTRUCTION EQUIPMENT

SPM595205 VOLVO EC160D 2 10090 - HYDRAULIC SYSTEM



Sample No: VCP415257
Oil Type: VOLVO SUPER HYDRAULIC OIL 46
Job No: SPM595205



SAMPLE INFORMATION

Sample Number	VCP415257	VCP422725	VCP404364	VCP373541
Sample Date	28 Aug 2023	26 Apr 2023	10 Jan 2023	10 Jun 2022
Machine Hours	8565	7910	7275	6016
Oil Hours	0	0	0	0
Oil Changed	Not Chngd	Not Chngd	Not Chngd	Changed
Sample Status	ABNORMAL	ABNORMAL	SEVERE	ABNORMAL

CALUMET CITY AUTO WRECKERS
 630 E STATE ST
 CALUMET CITY, IL
 US 60409
 Contact: GARY

OIL CONDITION

Visc @ 40°C	cSt	34.8	36.1	37.5	39.8
Acid Number (AN)	mg KOH/g	0.46	0.41	0.42	0.52

T: (815)600-9027
 F:

CONTAMINATION

Particles >4µm	29374	62945	2602	145973	
Particles >6µm	6805	13694	562	34931	
Particles >14µm	363	998	40	1787	
ISO 4406:1999 (c)	22/20/16	23/21/17	19/16/12	24/22/18	
Silicon	ppm	80	97	127	68
Sodium	ppm	0	<1	0	3
Potassium	ppm	1	0	3	2

Diagnosis

We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. We recommend you service the filters on this component. We recommend an early resample to monitor this condition. All component wear rates are normal. Elemental level of silicon (Si) above normal. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid.

WEAR METALS

Iron	ppm	13	11	10	23
Copper	ppm	24	19	24	53
Lead	ppm	<1	0	0	<1
Tin	ppm	3	3	5	15
Aluminum	ppm	<1	1	0	3
Chromium	ppm	1	<1	<1	<1
Molybdenum	ppm	2	2	4	7
Nickel	ppm	<1	0	0	0
Titanium	ppm	0	0	0	0
Silver	ppm	0	0	0	0
Manganese	ppm	0	<1	0	<1
Vanadium	ppm	0	0	0	0

ADDITIVES

Calcium	ppm	148	174	238	617
Magnesium	ppm	4	4	8	12
Zinc	ppm	392	375	398	484
Phosphorus	ppm	333	335	334	445
Barium	ppm	2	0	0	<1
Boron	ppm	2	3	7	24

Depot: CALCALIL
Unique No: 10631305
Signed: Don Baldrige
Report Date: 05 Sep 2023

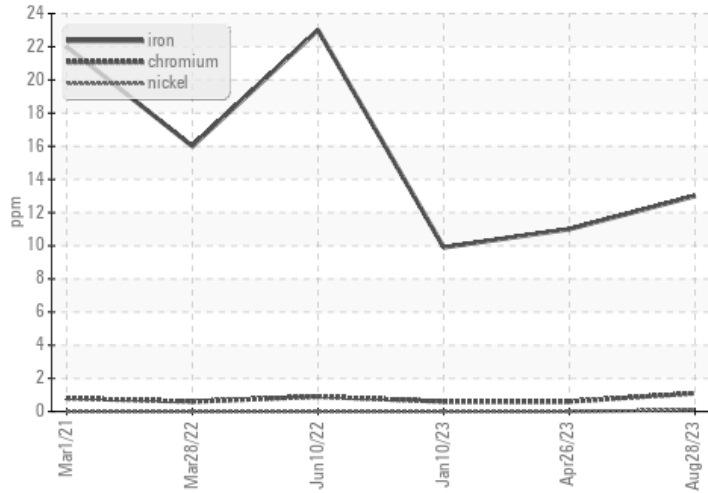


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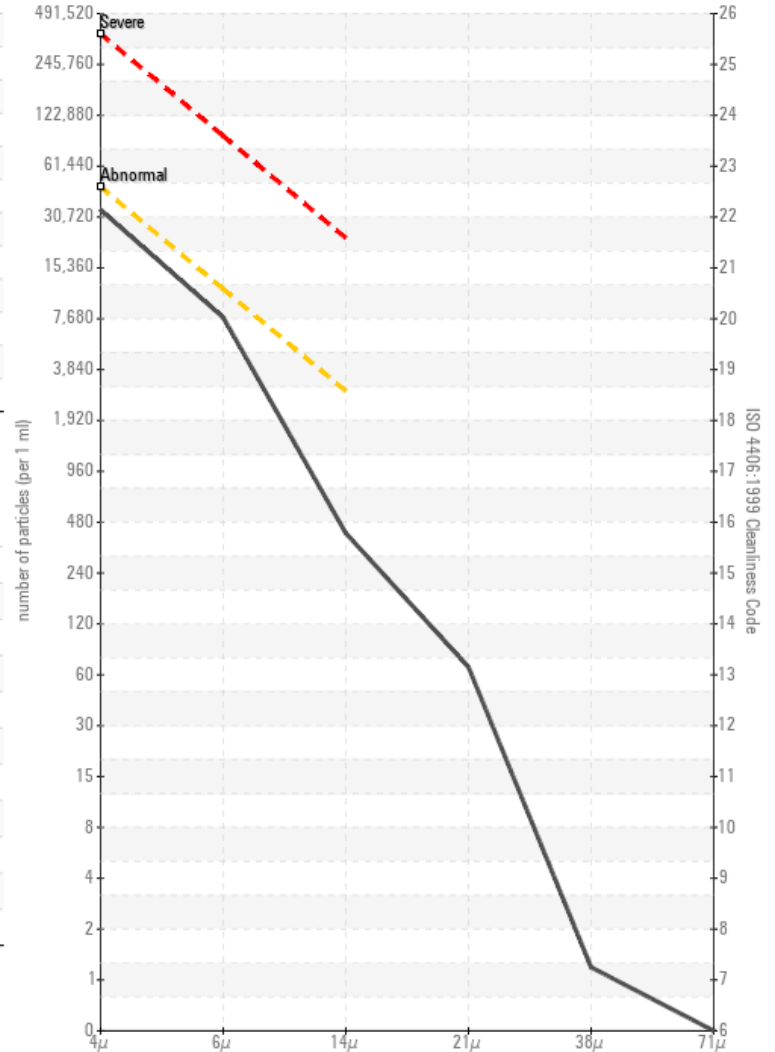


VOLVO GRAPHS

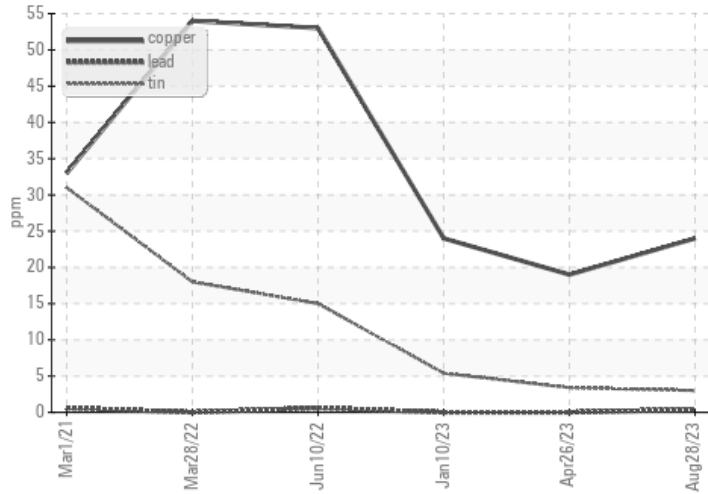
Ferrous Alloys



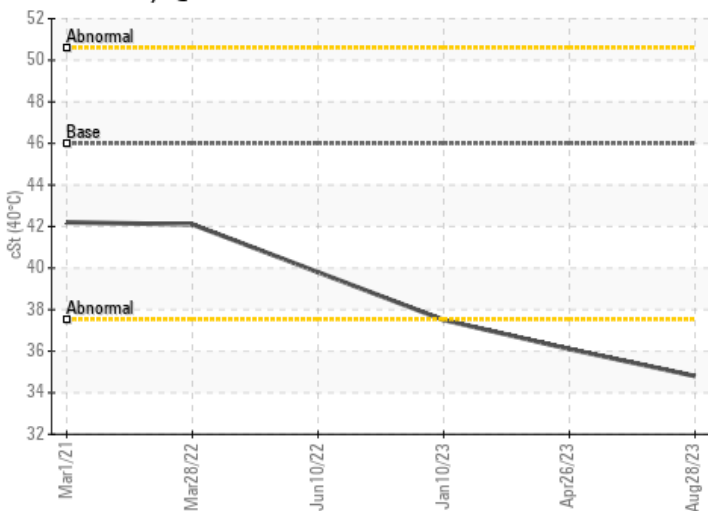
Particle Count



Non-ferrous Metals



Viscosity @ 40°C



Acid Number

