



CONSTRUCTION EQUIPMENT

ASCENDUM MACHINERY 500HR CSA/TRIANGLE GRADING 19006



VOLVO EC220E 1877(S/N 310351) - HYDRAULIC S

Sample No: VCP408297
Oil Type: VOLVO SUPER HYDRAULIC OIL 46
Job No: 19006



SAMPLE INFORMATION

Sample Number	VCP408297	VCP382648	VCP387534	VCP0000498
Sample Date	03 Jul 2023	20 Feb 2023	06 Sep 2022	08 Feb 2022
Machine Hours	6473	6088	5535	4978
Oil Hours	1518	0	0	4978
Oil Changed	Not Chngd	Not Chngd	Not Chngd	Changed
Sample Status	ABNORMAL	NORMAL	NORMAL	NORMAL



TRIANGLE GRADING AND PAVING INC
 1521 Huffman Mill Rd
 BURLINGTON, NC
 US 27216
 Contact: KAREN HILLIARD
 khilliard@trianglegradingpaving.com
 T: (336)584-1745
 F: (336)584-0145



OIL CONDITION

Visc @ 40°C	cSt	40.9	40.6	40.8	41.1
Acid Number (AN)	mg KOH/g	0.43	0.41	0.46	0.18



CONTAMINATION

Particles >4µm		---	16471	8371	6873
Particles >6µm		---	2516	934	148
Particles >14µm		---	170	48	10
ISO 4406:1999 (c)		---	21/19/15	20/17/13	20/14/10
Silicon	ppm	12	11	10	8
Sodium	ppm	2	1	0	2
Potassium	ppm	0	0	2	0



WEAR METALS

Iron	ppm	24	21	18	16
Copper	ppm	45	44	46	46
Lead	ppm	0	0	<1	<1
Tin	ppm	<1	0	<1	1
Aluminum	ppm	5	4	4	3
Chromium	ppm	0	<1	<1	<1
Molybdenum	ppm	0	<1	<1	<1
Nickel	ppm	0	0	0	0
Titanium	ppm	0	<1	<1	<1
Silver	ppm	0	0	<1	0
Manganese	ppm	<1	<1	<1	<1
Vanadium	ppm	<1	0	0	0



ADDITIVES

Calcium	ppm	313	310	321	312
Magnesium	ppm	132	125	128	180
Zinc	ppm	576	556	597	668
Phosphorus	ppm	495	463	414	571
Barium	ppm	0	0	0	0
Boron	ppm	0	0	<1	2

Diagnosis

We recommend you service the filters on this component. 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. Moderate 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.

Depot: TRIBUR
Unique No: 10552616
Signed: Don Baldrige
Report Date: 14 Jul 2023

Submitted By: CHRISTOPHER CANIPE

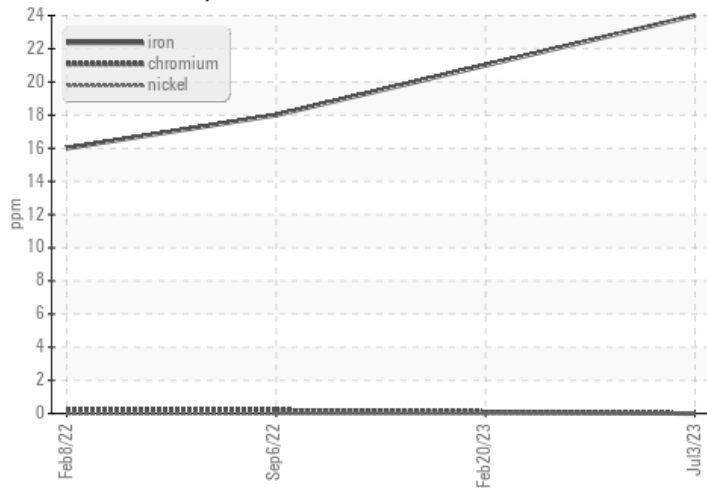


CONSTRUCTION EQUIPMENT

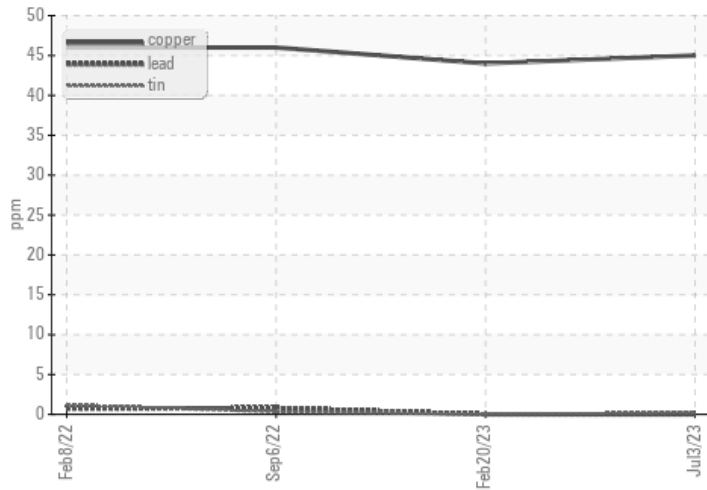


GRAPHS

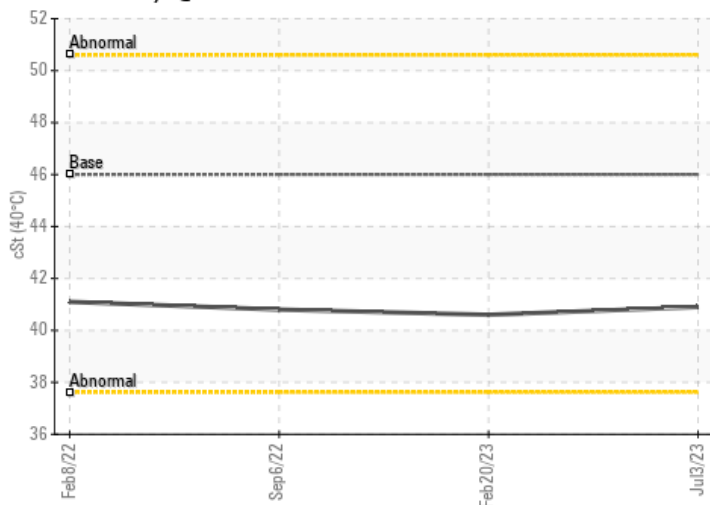
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 40°C



Acid Number

