



CONSTRUCTION EQUIPMENT

SWA350714-10 VOLVO EC220E 314443 - REAR LEFT FINAL DRIVE



Sample No: VCP417383
Oil Type: VOLVO PREMIUM GEAR OIL 80W-90 GL-5
Job No: SWA350714-10



SAMPLE INFORMATION

Sample Number	VCP417383	VCP405685	VCP347804	VCP327587
Sample Date	08 Sep 2023	25 Apr 2023	12 Jan 2022	27 Sep 2021
Machine Hours	4261	3763	1501	1027
Oil Hours	0	0	0	0
Oil Changed	Changed	Not Chngd	Not Chngd	Changed
Sample Status	ABNORMAL	ABNORMAL	ABNORMAL	NORMAL

ALTA EQUIPMENT

5985 COURT STREET ROAD
 SYRACUSE, NY
 US 13206
 Contact: JIM STRIGLE
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 F: (315)434-9471



OIL CONDITION

Visc @ 40°C	cSt	194	151	147	143
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CONTAMINATION

Water	%	---	▲ 0.133	---	---
Silicon	ppm	▲ 3138	▲ 2291	▲ 395	■ 19
Sodium	ppm	■ 61	■ 44	■ 8	■ 3
Potassium	ppm	■ 224	■ 163	■ 34	■ 4



WEAR METALS

Iron	ppm	▲ 6598	▲ 4607	▲ 747	■ 161
Copper	ppm	■ 6	■ 5	■ <1	■ <1
Lead	ppm	■ <1	■ 0	■ 0	■ 0
Tin	ppm	■ 2	■ <1	■ 0	■ 0
Aluminum	ppm	▲ 534	▲ 448	▲ 103	■ 5
Chromium	ppm	■ 53	■ 37	▲ 10	■ 3
Molybdenum	ppm	■ 7	■ 5	■ <1	■ 1
Nickel	ppm	■ 20	■ 15	3	<1
Titanium	ppm	■ 54	■ 40	7	<1
Silver	ppm	■ 0	0	0	<1
Manganese	ppm	■ 65	■ 43	■ 10	■ 4
Vanadium	ppm	■ 2	1	<1	<1



ADDITIVES

Calcium	ppm	■ 161	■ 127	■ 20	■ 4
Magnesium	ppm	■ 101	■ 76	■ 16	■ 2
Zinc	ppm	■ 19	■ 21	0	■ 7
Phosphorus	ppm	■ 1037	■ 996	■ 913	■ 306
Barium	ppm	■ 4	■ 2	■ <1	■ 0
Boron	ppm	■ 165	■ 170	■ 170	■ 9

Diagnosis

We advise that you check all areas where dirt can enter the system. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition. Gear wear is indicated. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. The condition of the oil is acceptable for the time in service.

Depot: VOLVO0142
Unique No: 10647680
Signed: Don Baldrige
Report Date: 19 Sep 2023

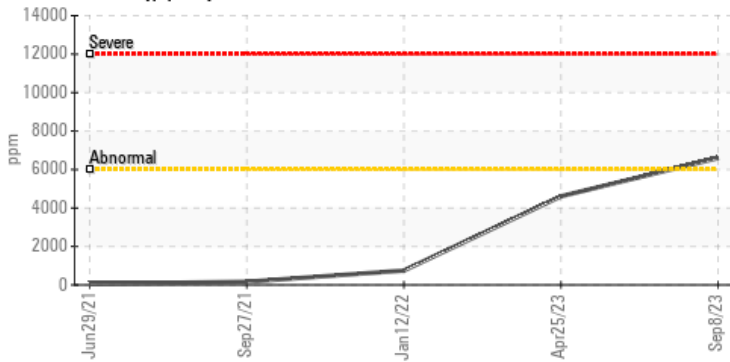


CONSTRUCTION EQUIPMENT

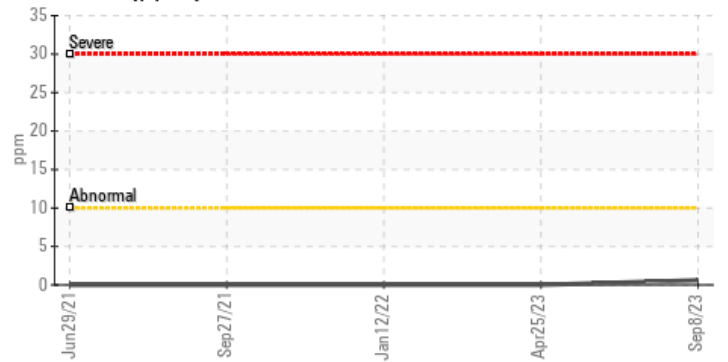


GRAPHS

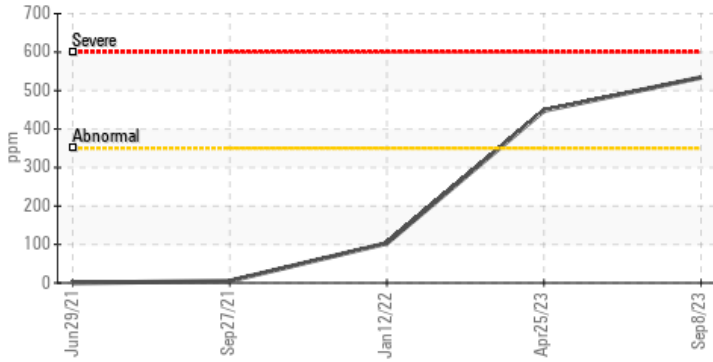
▲ Iron (ppm)



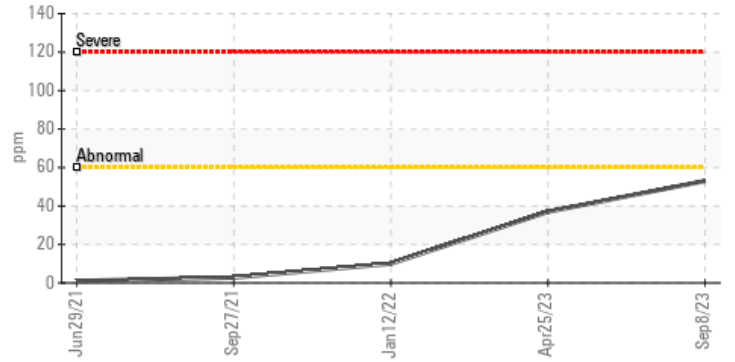
Lead (ppm)



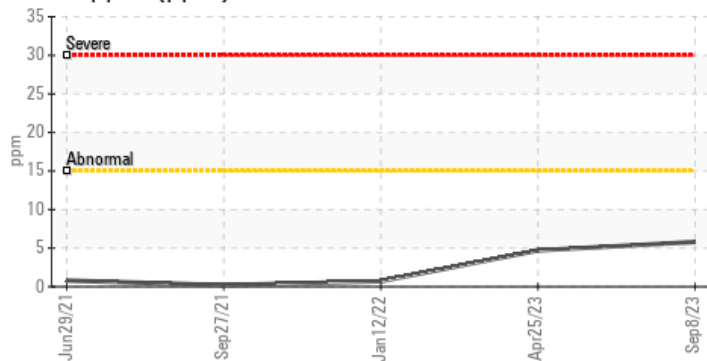
▲ Aluminum (ppm)



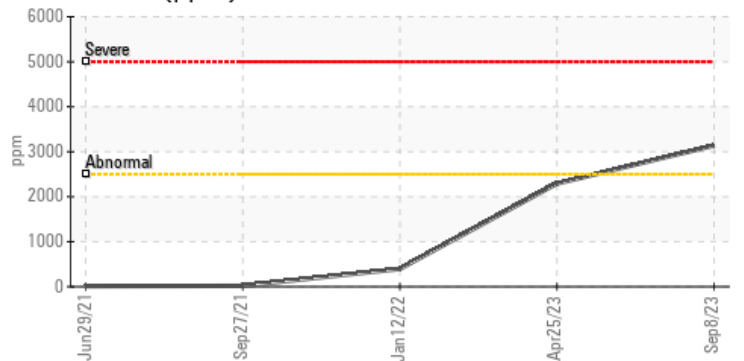
Chromium (ppm)



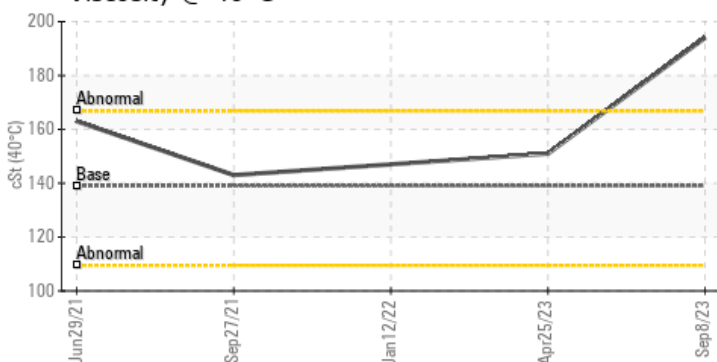
Copper (ppm)



▲ Silicon (ppm)



Viscosity @ 40°C



Additives

