

CONSTRUCTION EQUIPMENT SENNEBOGEN 830 830.0.3516 - COOLANT



Sample No: VCP434979

Oil Type: CONVENTIONAL COOLANT

Job No:

SAMPLE IN	FORMATION			
Sample Number	-	VCP434979	 	
Sample Date		12 Apr 2024	 	
Machine Hours		2053	 	
Sample Status		NORMAL	 	
COOLANT	CONDITION			
рН	Scale 0-14	■8.36	 	
Reserve Alkalinity	Scale 0-20		 	
Nitrites	ppm	1616	 	
Percentage Glycol	%	49.1	 	
Freezing Point	°C	□ -33	 	
CONTAMIN	IATION			
Coolant Appearance		normal	 	
Coolant Color		Green	 	



ALTA EQUIPMENT COMPANY

1035 WYLIE DRIVE BLOOMINGTON, IL US 61705 Contact: MIKE MARTIN mike.martin@altaequipment.com T: F:

Diagnosis

The fluid is suitable for further service. There is no indication of any contamination in the coolant. The carboxylate level of this fluid is acceptable. The glycol level is acceptable. The pH level of this fluid is within the acceptable limits.

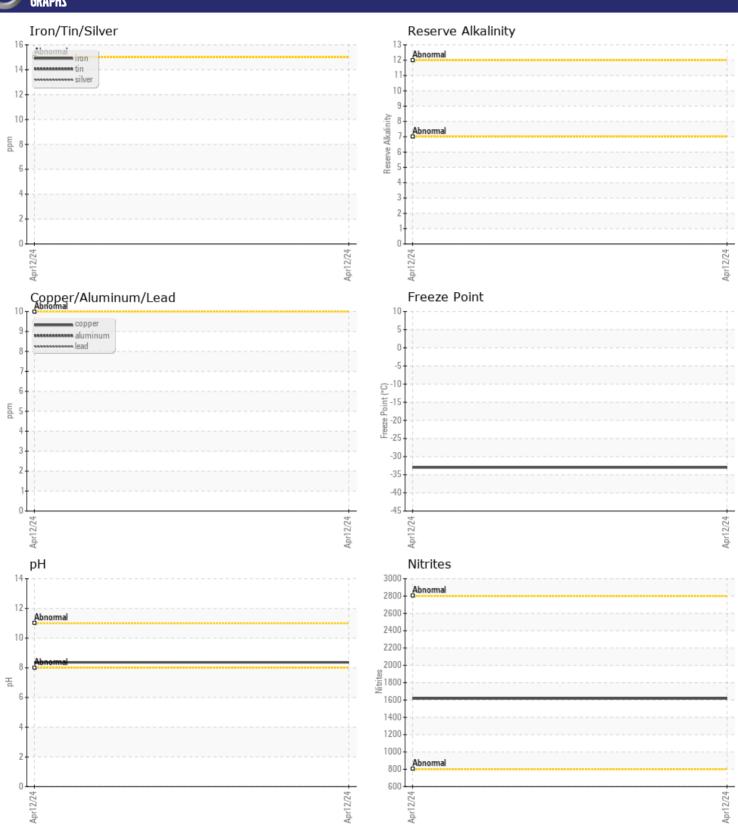
Depot:VOLVO5054Unique No:10983650Signed:Doug BogartReport Date:22 Apr 2024







GRAPHS





SWA473401-1 ALTER BA SENNEBOGEN 830 830.0.3516 - DIESEL ENG

Sample No: VCP434993

Silicon

Sodium

Potassium

Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3

Job No: SWA473401-1 ALTER BA

ppm

ppm

ppm

■6

-<1

1

NFORMATION				
-	VCP434993	VCP434960		
	12 Apr 2024	04 Dec 2023		
	2053	1514		
	500	500		
	Changed	Changed		
	NORMAL	NORMAL		
TION				
cSt	13.1	12.6		
mg KOH/g	■8.4	9.9		
%	64	85		
NATION				
%	NEG	NEG		
%	■ 0.2	□ 0.2		
%	58	57		
%	54	64		
%	NEG	NEG		
%	<1.0	<1.0		
	TION cSt mg KOH/g % MATION % % % %	VCP434993 12 Apr 2024 2053 500 Changed NORMAL TION cSt	VCP434993 VCP434960 12 Apr 2024 04 Dec 2023 2053 1514 500 500 Changed Changed NORMAL NORMAL TION cSt	VCP434993 VCP434960 12 Apr 2024 04 Dec 2023 2053 1514 500 500 Changed Changed NORMAL NORMAL St 13.1 12.6 mg KOH/g 8.4 9.9 % 64 85 MATION NEG NEG % 0.2 0.2 % 58 57 % 54 64 % NEG NEG

WEAR	METALS			
Iron	ppm	13	1 9	
Copper	ppm	1	<1	
Lead	ppm	1	□0	
Tin	ppm	1	- <1	
Aluminum	ppm	1	1	
Chromium	ppm	1	- <1	
Molybdenum	ppm	55	■ 38	
Nickel	ppm	1	0	
Titanium	ppm	<1	0	
Silver	ppm	■<1	0	
Manganese	ppm	1	- <1	
Vanadium	ppm	<1	0	

7

3

- < 1

ADDITI	VES			
Calcium	ppm	1039	■1581	
Magnesium	ppm	■842	488	
Zinc	ppm	1127	■1084	
Phosphorus	ppm	■996	■905	
Barium	ppm	■0	0	
Boron	ppm	■ 3	5 5	



ALTA EQUIPMENT COMPANY

1035 WYLIE DRIVE
BLOOMINGTON, IL
US 61705
Contact: JUSTIN PERRY
justin.perry@altg.com
T: (309)533-9285

Diagnosis

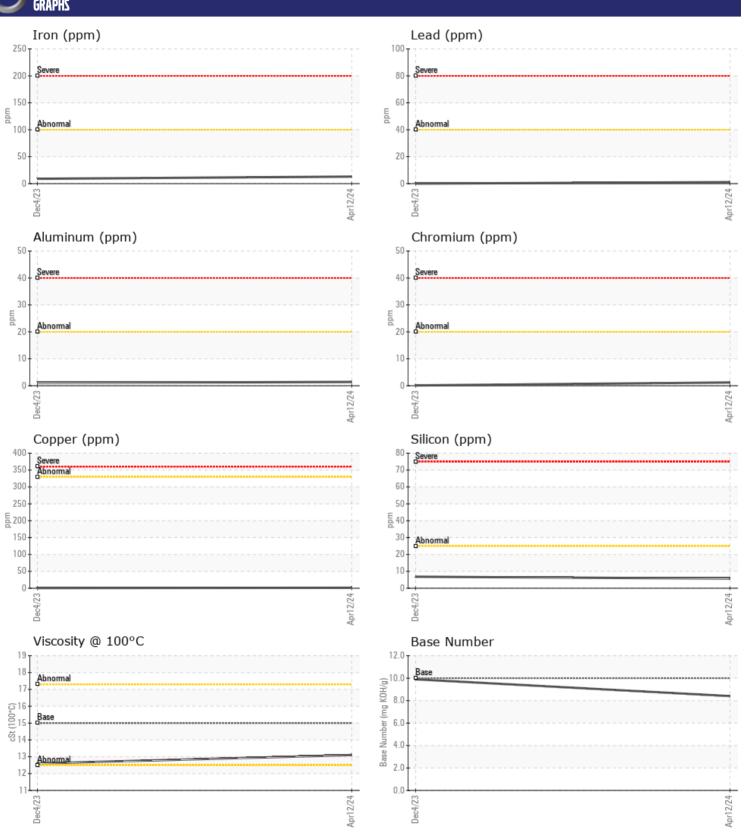
Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

Depot:VOLVO5054Unique No:10982932Signed:Sean FeltonReport Date:22 Apr 2024











CONSTRUCTION EQUIPMENT
473401 SENNEBOGEN 830 830.0.3516 - TRANSMISSION (MANUAL

Sample No: VCP434631

Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3

Job No: 473401

Potassium

ppm

SAMPLE II	NFORMATION						
Sample Number		VCP434631					
Sample Date		12 Apr 2024					
Machine Hours		2053					
Oil Hours		1000					
Oil Changed		Changed					
Sample Status		NORMAL					
VOLVO							
OIL CONDI	TION						
Visc @ 40°C	cSt	62.8					
CONTAMINATION							
Water	%	NEG					
Silicon	ppm	17					
Sodium	ppm	■30					

WEAR I	METALS			
WEAR	11 L L L L L L			
Iron	ppm	133	 	
Copper	ppm	■36	 	
Lead	ppm	1	 	
Tin	ppm	2	 	
Aluminum	ppm	2	 	
Chromium	ppm	1	 	
Molybdenum	ppm	20	 	
Nickel	ppm	1	 	
Titanium	ppm	<1	 	
Silver	ppm	■0	 	
Manganese	ppm	23	 	
Vanadium	ppm	<1	 	

ADDITI	VES			
Calcium	ppm	2384	 	
Magnesium	ppm	231	 	
Zinc	ppm	1085	 	
Phosphorus	ppm	1102	 	
Barium	ppm	2	 	
Boron	ppm	52	 	



ALTA EQUIPMENT COMPANY

1035 WYLIE DRIVE BLOOMINGTON, IL US 61705 Contact: MIKE MARTIN mike.martin@altaequipment.com F:

Diagnosis

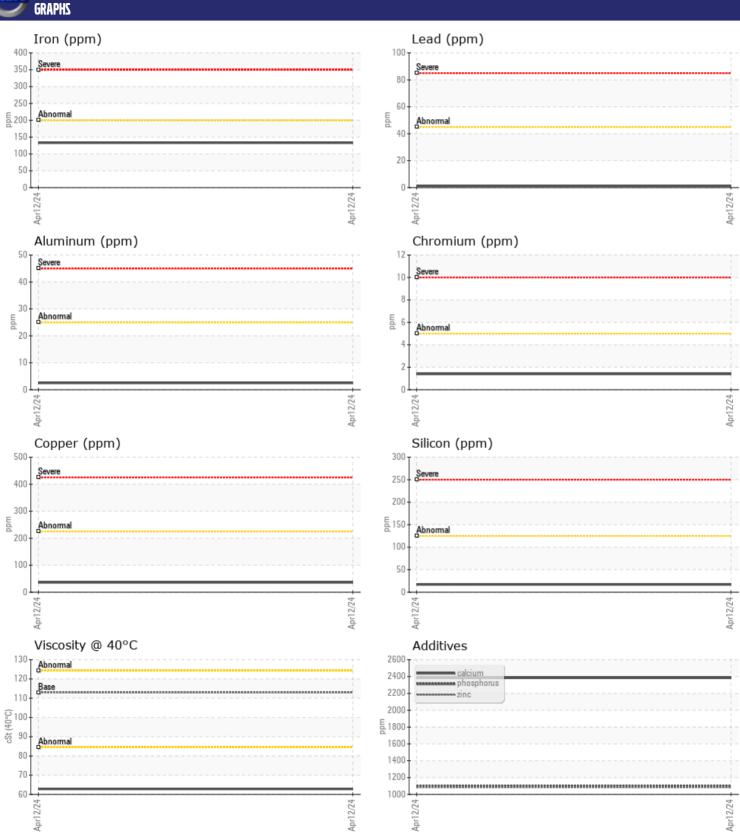
Resample at the next service interval to monitor.All component wear rates are normal. There is no indication of any contamination in the fluid. The condition of the fluid is acceptable for the time in service.

Depot: VOLVO5054 **Unique No:** 10983618 Signed: Sean Felton Report Date: 22 Apr 2024











CONSTRUCTION EQUIPMENT
473401 ALTER BARTONV SENNEBOGEN 830 830.0.3516 - HYDRAU

Sample No: VCP434750

Oil Type: **VOLVO/SHELL ISO 46** Job No: 473401 ALTER BARTONV

VOLVO			
SAMPLE INFORMAT	ION		
Sample Number	VCP434750	 	
Sample Date	12 Apr 2024	 	
Machine Hours	2053	 	
Oil Hours	2000	 	
Oil Changed	Changed	 	
Sample Status	ATTENTION	 	
OII CONDITION			

OIL CONDI	TION			
Visc @ 40°C	cSt	36.5	 	
Acid Number (AN)	mg KOH/g	■1.02	 	

VOLVO				
CONTAI	MINATION			
Water	%	NEG	 	
Particles >4µm		1968	 	
Particles >6µm		■356	 	
Particles >14µm		■ 29	 	
ISO 4406:1999 (c	:)	18/16/12	 	
Silicon	ppm	1	 	
Sodium	ppm	■5	 	
Potassium	ppm	■<1	 	

WEAR N	METALS			
Iron	ppm	6	 	
Copper	ppm	■ 3	 	
Lead	ppm	2	 	
Tin	ppm	■<1	 	
Aluminum	ppm	0	 	
Chromium	ppm	■ 0	 	
Molybdenum	ppm	0	 	
Nickel	ppm	■ 0	 	
Titanium	ppm	0	 	
Silver	ppm	<1	 	
Manganese	ppm	<1	 	
Vanadium	ppm	0	 	

ADDITIV	VES			
Calcium	ppm	1041	 	
Magnesium	ppm	4	 	
Zinc	ppm	657	 	
Phosphorus	ppm	541	 	
Barium	ppm	0	 	
Boron	ppm	0	 	



ALTA EQUIPMENT COMPANY

1035 WYLIE DRIVE BLOOMINGTON, IL US 61705 Contact: JUSTIN PERRY justin.perry@altg.com T: (309)533-9285

Diagnosis

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.All component wear rates are normal. There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable. The oil viscosity is lower than normal. Confirm oil type. The AN level is acceptable for this fluid.

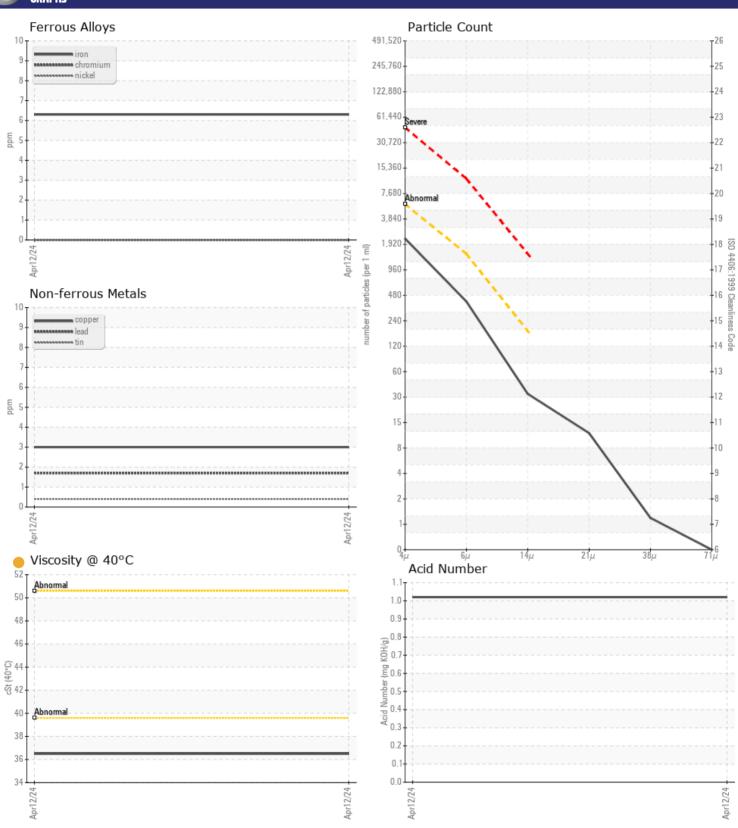
Depot: VOLVO5054 **Unique No:** 10983087 Signed: Jonathan Hester Report Date: 24 Apr 2024







GRAPHS





CONSTRUCTION EQUIPMENT 473401 SENNEBOGEN 830 830.0.3516 - SWING DRIVE

Sample No: VCP432726

Oil Type: SHELL OMALA S4 GX 220

Job No: 473401

SAMPLE	INFORMATIO	N		
Sample Number		VCP432726	 	
Sample Date		12 Apr 2024	 	
Machine Hours		2053	 	
Oil Hours		1000	 	
Oil Changed		Changed	 	
Sample Status		ABNORMAL	 	
VOLVO				
OIL CON	DITION			
Visc @ 40°C	cSt	229	 	
CONTAN	IINATION			
	IINATION			
Water	%	△ 0.526	 	
Silicon	ppm	■7	 	
Sodium	ppm	■1	 	
Potassium	ppm	■3	 	
WEAR M	IFTAI S			
_		A 746		
Iron	ppm	▲ 716	 	
Copper	ppm	<u> 140</u>	 	
Lead	ppm	1	 	
Tin	ppm	<u> </u>	 	
Aluminum	ppm	2	 	
Chromium	ppm	4	 	
Molybdenum	ppm	1	 	
Nickel	ppm	■1	 	
Titanium	ppm	<1	 	
Silver	ppm	0	 	
Manganese	ppm	■8	 	
Vanadium	ppm	<1	 	
VOLVO			 	
ADDITIV	Z			
Calcium		21	 	
Magnesium	ppm	■ 4	 	
Zinc	ppm	□ 4	 	
Phosphorus	ppm	435	 	
Barium	ppm	3	 	
	ppm		 	
Boron	ppm	■ 31	 	



ALTA EQUIPMENT COMPANY

1035 WYLIE DRIVE BLOOMINGTON, IL US 61705 Contact: JUSTIN PERRY justin.perry@altg.com T: (309)533-9285 F:

Diagnosis

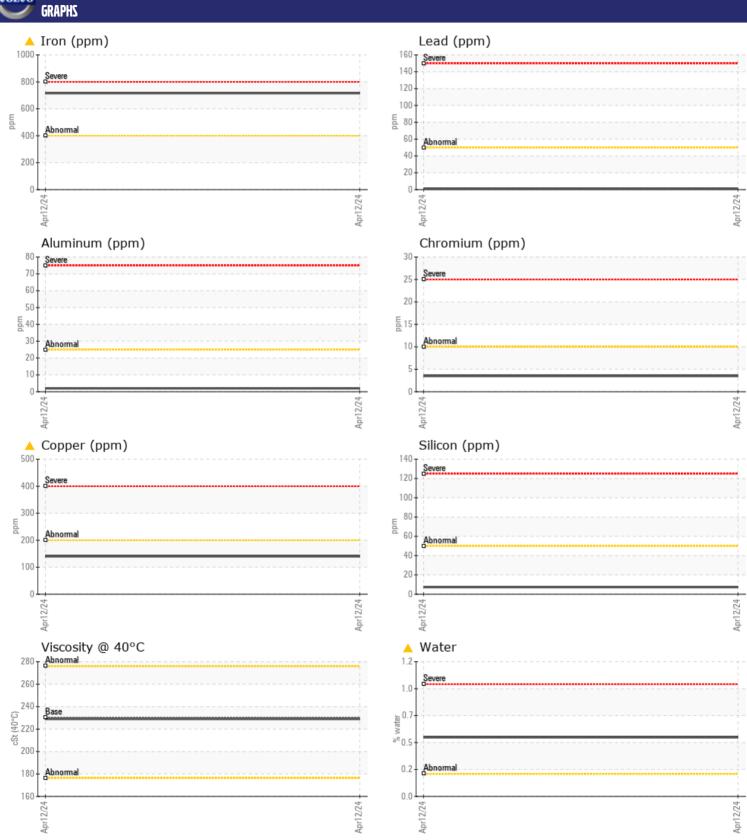
We advise that you check for the source of water entry. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition. Bearing and/or gear wear is indicated. Appearance is hazy. There is a moderate concentration of water present in the oil. The condition of the oil is acceptable for the time in service.

Depot:VOLVO5054Unique No:10983587Signed:Sean FeltonReport Date:22 Apr 2024











73401 SENNEBOGEN 830 830.0.3516 - FRONT LEFT FINAL DRIVE

Sample No: VCP434623

Oil Type: VOLVO PREMIUM GEAR OIL 80W-90 GL-5

Job No: 473401





ALTA EQUIPMENT COMPANY

1035 WYLIE DRIVE BLOOMINGTON, IL US 61705 Contact: JUSTIN PERRY justin.perry@altg.com T: (309)533-9285 F:

Diagnosis

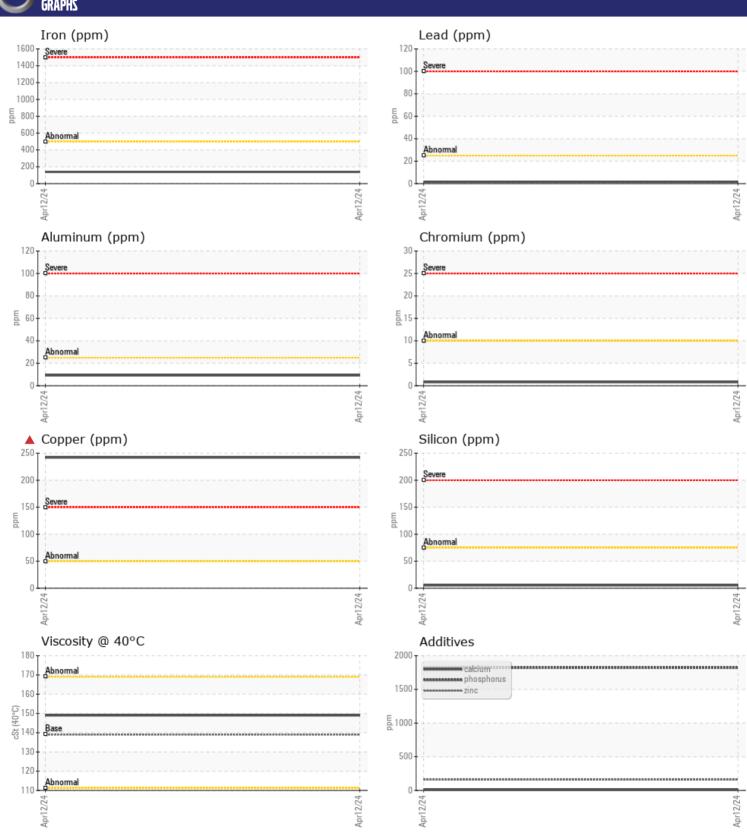
The oil change at the time of sampling has been noted. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition. The copper level is severe. There is no indication of any contamination in the oil. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

Depot:VOLVO5054Unique No:10983581Signed:Sean FeltonReport Date:22 Apr 2024











CONSTRUCTION EQUIPMENT 473401 SENNEBOGEN 830 830.0.3516 - FRONT AXLE



Sample No: VCP434634

Oil Type: VOLVO PREMIUM GEAR OIL 80W-90 GL-5

Job No: 473401

CAMDIE	INFORMATION			
	INFURMATION			
Sample Number		VCP434634	 	
Sample Date		12 Apr 2024	 	
Machine Hours		2053	 	
Oil Hours		1000	 	
Oil Changed		Changed	 	
Sample Status		NORMAL	 	
OIL CON	NITION			
Visc @ 40°C	cSt	140	 	
VOLVO				
CONTAN	MINATION			
Water	%	NEG	 	
Silicon	ppm	■ 4	 	
Sodium		2	 	
Potassium	ppm	1	 	
Potassium	ppm		 	
VOLVO				
WEAR N	METALS			
Iron	ppm	12	 	
Copper	ppm	23	 	
Lead	ppm	1	 	
Tin	ppm	■<1	 	
Aluminum	ppm	2	 	
Chromium	ppm	- <1	 	
Molybdenum	ppm	- <1	 	
Nickel	ppm	1 <1	 	
Titanium	ppm	<1	 	
Silver	ppm	0	 	
Manganese	ppm	1	 	
Vanadium	ppm	<1	 	
Variadiditi	ррпп	,,		
VOLVO				
ADDITI\	/EZ			
Calcium	ppm	1 3	 	
Magnesium	ppm	<u> </u>	 	
Zinc	ppm	<u> </u>	 	
Phosphorus	ppm	1745	 	
Barium	ppm	17	 	
5	l- l	= 100		



ALTA EQUIPMENT COMPANY

1035 WYLIE DRIVE BLOOMINGTON, IL US 61705 Contact: JUSTIN PERRY justin.perry@altg.com T: (309)533-9285 F:

Diagnosis

Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.

 Depot:
 VOLVO5054

 Unique No:
 10983582

 Signed:
 Wes Davis

 Report Date:
 19 Apr 2024

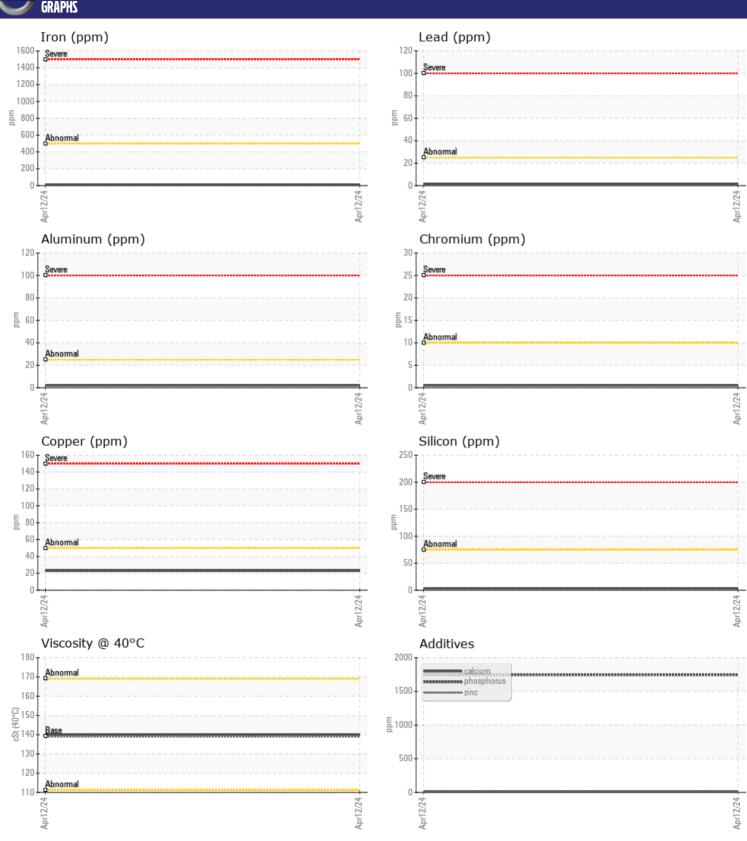
182

Boron











173401 SENNEBOGEN 830 830.0.3516 - FRONT RIGHT FINAL DRIVI

Sample No: VCP434958

Oil Type: VOLVO PREMIUM GEAR OIL 80W-90 GL-5

Job No: 473401





ALTA EQUIPMENT COMPANY

1035 WYLIE DRIVE BLOOMINGTON, IL US 61705 Contact: MIKE MARTIN mike.martin@altaequipment.com T:

Diagnosis

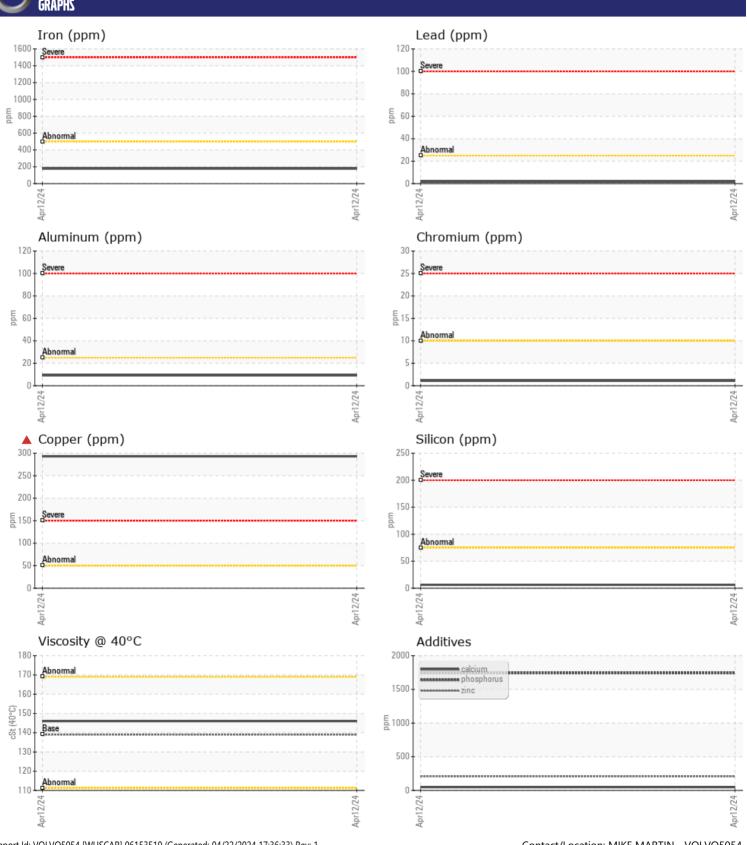
The oil change at the time of sampling has been noted. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition. The copper level is severe. There is no indication of any contamination in the oil. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

Depot:VOLVO5054Unique No:10983588Signed:Sean FeltonReport Date:22 Apr 2024











73401 SENNEBOGEN 830 830.0.3516 - REAR LEFT FINAL DRIVE

Sample No: VCP438110

Oil Type: VOLVO PREMIUM GEAR OIL 80W-90 GL-5

Job No: 473401

Molybdenum

Nickel

Silver

Titanium

Manganese

Vanadium

Calcium

Zinc

Barium

Boron

Magnesium

Phosphorus

ppm

ADDITIVES

-<1

-<1

<1

0

<1

■16 ■2

34

31

167

1737

3





ALTA EQUIPMENT COMPANY

1035 WYLIE DRIVE BLOOMINGTON, IL US 61705 Contact: MIKE MARTIN mike.martin@altaequipment.com T:

Diagnosis

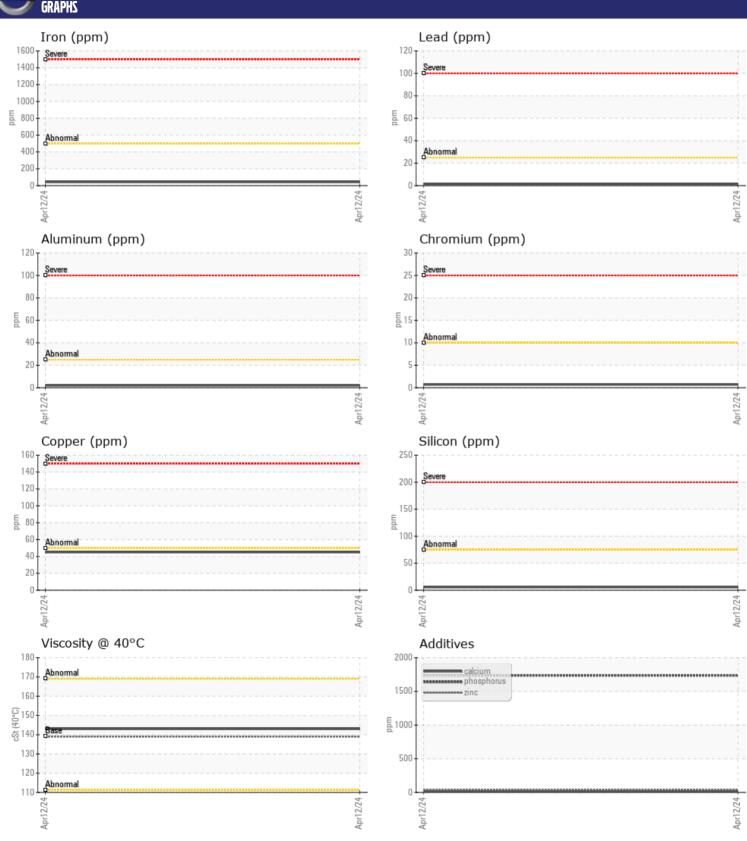
Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.

Depot:VOLVO5054Unique No:10983589Signed:Sean FeltonReport Date:22 Apr 2024











CONSTRUCTION EQUIPMENT 473401 SENNEBOGEN 830 830.0.3516 - REAR AXLE



Sample No: VCP434982

Oil Type: VOLVO PREMIUM GEAR OIL 80W-90 GL-5

Job No: 473401

SAMPLE	INFORMATIO	N		
Sample Number	_	VCP434982	 	
Sample Date		12 Apr 2024	 	
Machine Hours		2053	 	
Oil Hours		1000	 	
Oil Changed		Changed	 	
Sample Status		NORMAL	 	
Sumple Status		HORWAL		
VOLVO				
OIL CON	DITION			
Visc @ 40°C	cSt	143	 	
LUNTAN	MINATION			
_				
Water	%	NEG	 	
Silicon	ppm	■5	 	
Sodium	ppm	■4	 	
Potassium	ppm	■1	 	
VOLVO				
WEAR M	AFTALS			
Iron		□ 37	 	
Copper	ppm	38	 	
Lead	ppm	<u> </u>	 	
Tin	ppm	■ · ■ <1	 	
Aluminum	ppm	2	 	
Chromium	ppm	<u> </u>	 	
Molybdenum	ppm	1 <1	 	
Nickel	ppm	1 <1	 	
Titanium	ppm	<1	 	
Silver	ppm	0	 	
Manganese	ppm	2	 	
Vanadium	ppm	<1	 	
variaulum	ppm	<1	 	
VOLVO			 	
ADDITIV	ES			
Calcium	ppm	1 5	 	
Magnesium	ppm	2	 	
Zinc	ppm	■29	 	
Phosphorus	ppm	1714	 	
Barium	ppm	■31	 	
Boron	ppm	■ 167	 	
	P P			



ALTA EQUIPMENT COMPANY

1035 WYLIE DRIVE BLOOMINGTON, IL US 61705 Contact: MIKE MARTIN mike.martin@altaequipment.com T: F:

Diagnosis

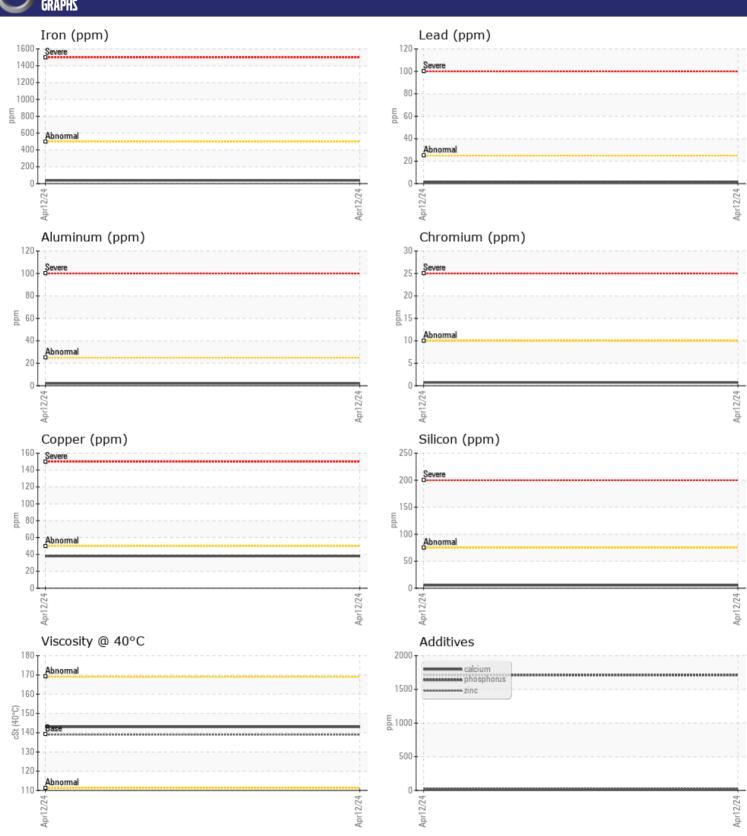
Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.

Depot:VOLVO5054Unique No:10983583Signed:Sean FeltonReport Date:22 Apr 2024











473401 SENNEBOGEN 830 830.0.3516 - REAR RIGHT FINAL DRIVE

Sample No: VCP433775

Oil Type: VOLVO PREMIUM GEAR OIL 80W-90 GL-5

Job No: 473401





ALTA EQUIPMENT COMPANY

1035 WYLIE DRIVE BLOOMINGTON, IL US 61705 Contact: MIKE MARTIN mike.martin@altaequipment.com T:

Diagnosis

The oil change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor. The copper level is abnormal. All other component wear rates are normal. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.

Depot:VOLVO5054Unique No:10983586Signed:Sean FeltonReport Date:22 Apr 2024







