

SPM702435 AMG RES SENNEBOGEN 830ME 830.0.2822 - DIESEL EN

Sample No: VCP446187

Oil Type: DIESEL ENGINE OIL SAE 15W40

Job No: SPM702435 AMG RES

ZAMPI F II	NFORMATION				
	W OWNER TON				
Sample Number		VCP446187	VCP427369	VCP423239	VCP382785
Sample Date		23 Apr 2024	19 Oct 2023	17 Oct 2023	10 Jul 2023
Machine Hours		9464	9029	1492	8436
Oil Hours		0	0	0	0
Oil Changed		Changed	Changed	Changed	Changed
Sample Status		NORMAL	NORMAL	NORMAL	NORMAL
OIL CONDI	TION				
Visc @ 100°C	cSt	12.8	■13.5	14.0	■ 13.4
Base Number (BN)	mg KOH/g	■7.8	■7.9	9.9	5.9
Oxidation (PA)	%	65	70	60	85

CULTAN	MINATION					
LUNIAN	AINATION					
Water	%	NEG	NEG	NEG	NEG	
Soot %	%	■ 0.2	0.2	□ 0.2	□ 0.4	
Nitration (PA)	%	65	72	54	83	
Sulfation (PA)	%	56	57	52	64	
Glycol	%	NEG	NEG	NEG	NEG	
Fuel	%	<1.0	<1.0	<1.0	<1.0	
Silicon	ppm	■3	3	6	□ 3	
Sodium	ppm	■ 3	4	1	1 1	
Potassium	ppm	5	2	2	0	

VOLVO					
WEAR M	ETALS				
_		11	□ 12	1 5	□ 19
Iron	ppm		12	<u> </u>	19
Copper	ppm	■ <1	- <1	4	 <1
Lead	ppm	0	0		0
Tin	ppm	■0	- <1		0
Aluminum	ppm	■<1	2	1 4	< 1
Chromium	ppm	■0	- <1	1	 <1
Molybdenum	ppm	59	□ 56	5 5	6 5
Nickel	ppm	■0	- <1	■0	0
Titanium	ppm	0	- <1	- <1	 <1
Silver	ppm	■0	0	< 1	0
Manganese	ppm	0	□ 0	< 1	< 1
Vanadium	ppm	<1	<1	0	<1

ADDIT	IVES					
Calcium	ppm	1149	■996	■ 1019	■1195	
Magnesium	ppm	1026	■926	■835	1121	
Zinc	ppm	1185	■1185	1137	1287	
Phosphorus	ppm	1001	■953	■843	■1089	
Barium	ppm	0	□0	1 2	0	
Boron	ppm	■ 0	- <1	7	0	



ALTA EQUIPMENT CO - ORLAND PARK 5000 INDUSTRIAL HWY GARY, IN US 46406 Contact: DAVE ENG DAVE.ENG@ALTG.COM T: (312)350-2560

: (312)350 ·

Diagnosis

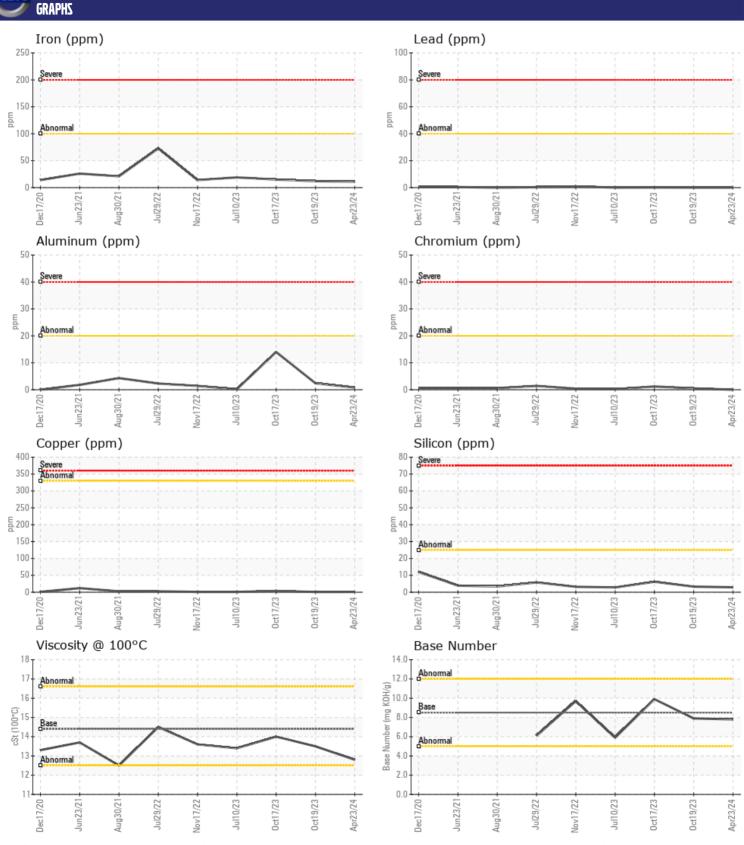
Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Depot:VOLVO8885Unique No:11029613Signed:Wes DavisReport Date:14 May 2024











CONSTRUCTION EQUIPMENT
SPM620969 SENNEBOGEN 830ME 830.0.2822 - TRANSMISSION (A)

Sample No: VCP425300

Oil Type: **ATF**

Job No: SPM620969

VOLVO				
ZAMPLE	E INFORMATION	N		
Sample Number		VCP425300	 	
		17 Oct 2023	 	
Sample Date Machine Hours		1492	 	
		0		
Oil Changed			 	
Oil Changed		Not Changd	 	
Sample Status		NORMAL	 	
VOLVO				
OIL CON	DITION			
Visc @ 40°C	cSt	□ 28.4	 	
		_		
VOLVO	AINATION			
_	MINATION			
Water	%	NEG	 	
Silicon	ppm	13	 	
Sodium	ppm	■0	 	
Potassium	ppm	■ 2	 	
VOLVO				
WEAR N	METALS			
Iron	ppm	□ 45	 	
Copper	ppm	1 7	 	
Lead	ppm	■ <1	 	
Tin	ppm	- <1	 	
Aluminum	ppm	2	 	
Chromium	ppm	- <1	 	
Molybdenum	ppm	2	 	
Nickel	ppm	■<1	 	
Titanium	ppm	<1	 	
Silver	ppm	■<1	 	
Manganese	ppm	6	 	
Vanadium	ppm	<1	 	
ADDITIV	JEC			
_	_			
Calcium	ppm	82	 	
Magnesium	ppm	16	 	
Zinc	ppm	■30	 	
Phosphorus	ppm	169	 	
Barium	ppm	2	 	



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Diagnosis

F:

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: VOLVO8885 **Unique No:** 10884201 Signed: Don Baldridge Report Date: 19 Feb 2024

Contact/Location: DAVE ENG - VOLVO8885

76

ppm

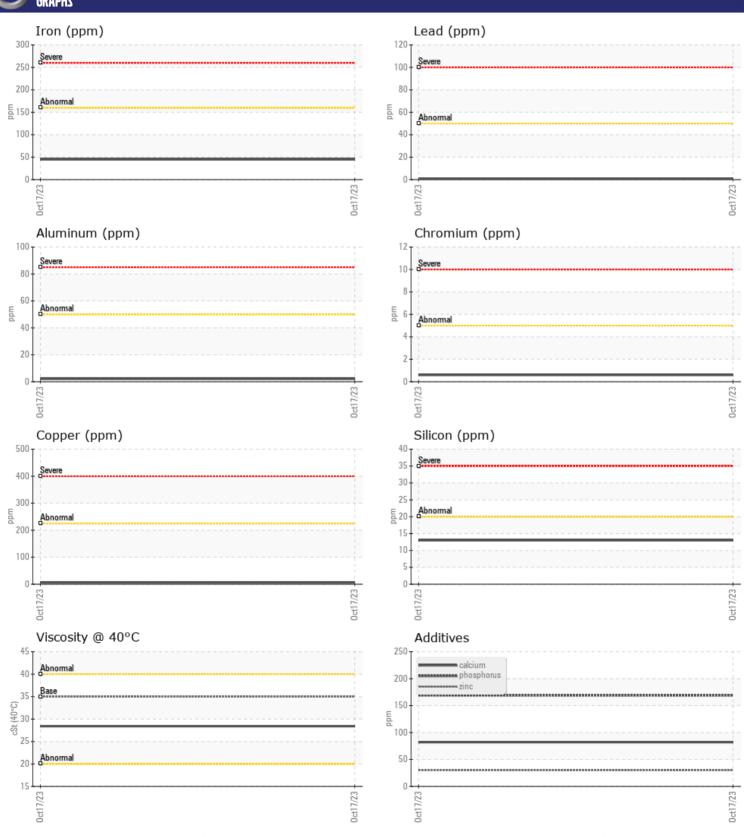
Boron







GRAPHS





SPM702435 AMG RES SENNEBOGEN 830ME 830.0.2822 - HYDRAUL

Sample No: VCP446190

Oil Type: VOLVO SUPER HYDRAULIC OIL 46

Job No: SPM702435 AMG RES

SAMPLE IN	IFORMATION				
Sample Number	-	VCP446190	VCP427365	VCP423274	VCP382783
Sample Date		23 Apr 2024	19 Oct 2023	17 Oct 2023	10 Jul 2023
Machine Hours		9464	9029	1492	8436
Oil Hours		0	0	0	0
Oil Changed		Changed	Not Changd	Not Changd	Not Changd
Sample Status		ATTENTION	ABNORMAL	NORMAL	NORMAL
OIL CONDI	FION				
Visc @ 40°C	cSt	43.5	41.7	42.8	43.3
Acid Number (AN)	mg KOH/g	■ 0.39	□ 0.50	□ 0.26	□ 0.33

CONTAMINATION								
Water	%	NEG	NEG	NEG	NEG			
Particles >4µm		6349	<u>▲</u> 55972	4618	■1335			
Particles >6µm		277	<u>24559</u>	578	237			
Particles > 14µm	1	12	<u>▲</u> 5277	1 9	1 6			
ISO 4406:1999 ((c)	20/15/11	23/22/20	19/16/11	18/15/11			
Silicon	ppm	□ 0	■0	■3	< 1			
Sodium	ppm	-<1	□0	- <1	□0			
Potassium	ppm	■ 0	0	■ 0	- <1			

WEAR M	METALS				
Iron	ppm	2	- <1	2	2
Copper	ppm	■ 0	1 2	1	- <1
Lead	ppm	0	0	0	< 1
Tin	ppm	■<1	0	- <1	0
Aluminum	ppm	0	- <1	0	0
Chromium	ppm	2	2		- <1
Molybdenum	ppm	0	0	- <1	- <1
Nickel	ppm	■ 0	- <1	□0	0
Titanium	ppm	0	0	0	0
Silver	ppm	0	0	0	0
Manganese	ppm	0	- <1	- <1	0
Vanadium	ppm	0	0	0	0

ADDITIV	VES				
Calcium	ppm	67	■93	58	6 5
Magnesium	ppm	■3	1 2	- <1	□4
Zinc	ppm	465	500	■394	477
Phosphorus	ppm	■372	■378	■307	■357
Barium	ppm	■<1	0	0	1
Boron	ppm	■ 0	0	□ 0	□0



ALTA EQUIPMENT CO - ORLAND PARK
5000 INDUSTRIAL HWY
GARY, IN
US 46406
Contact: DAVE ENG
DAVE.ENG@ALTG.COM
T: (312)350-2560

Diagnosis

F:

The 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 a light amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

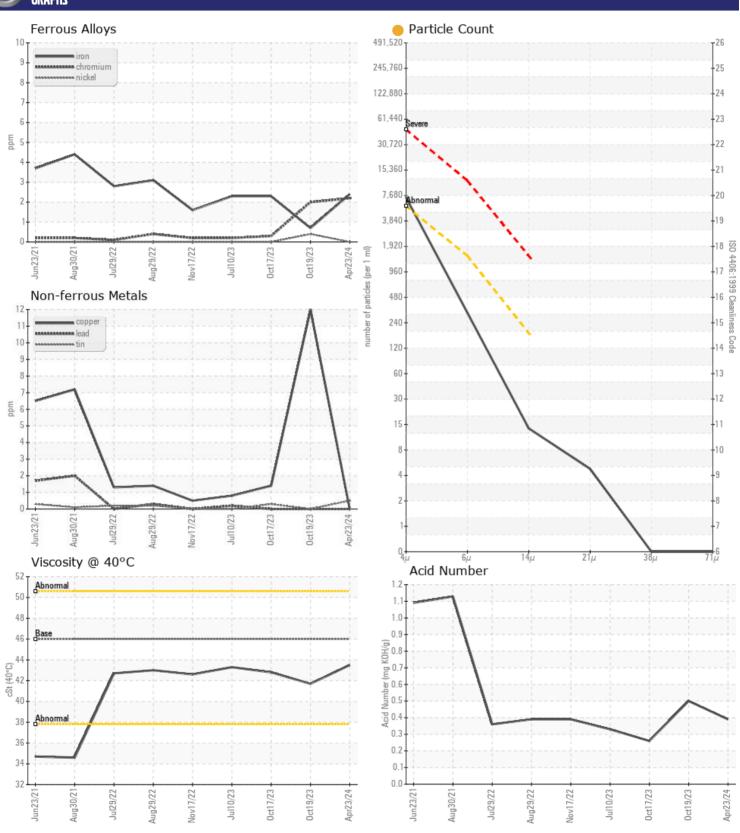
Depot:VOLVO8885Unique No:11029976Signed:Wes DavisReport Date:15 May 2024







GRAPHS



Report Id: VOLVO8885 [WUSCAR] 06178650 (Generated: 05/15/2024 12:57:24) Rev: 1



CONSTRUCTION EQUIPMENT
SPM702435 AMG SENNEBOGEN 830ME 830.0.2822 - SWING DRIVE

Sample No: VCP446183

Oil Type: **GEAR OIL SAE 80W90**

Job No: SPM702435 AMG

VOLVO				
SAMPLE	INFORMATION			
Sample Number		VCP446183	VCP05363127	
Sample Date		23 Apr 2024	30 Aug 2021	
Machine Hours		9464	3431	
Oil Hours		0	0	
Oil Changed		Changed	Changed	
Sample Status		SEVERE	SEVERE	
Sample Status		JE V LIKE	JL V LINL	
VOLVO				
OIL CON	DITION			
Visc @ 40°C	cSt	221	222	
COLVO	IINATION			
Water	%	▲ 6.35	NEG	
Silicon	ppm	21	7	
Sodium	ppm	■ <1	■3	
Potassium	ppm	■0	- <1	
VOLVO				
WEAR M	IFTALS			
Iron		1473	4 945	
Copper	ppm	▲ 586	108	
Lead	ppm	7	■ <1	
Tin		▲ 50	1 4	
Aluminum	ppm ppm	■3	<u>5</u>	
Chromium	ррт	<u> </u>	▲ 10	
Molybdenum	ppm	1 2	= <1	
Nickel			3	
Titanium	ppm	0	0	
Silver	ppm	0	0	
Manganese	ppm	□ 12	8	
Vanadium		<1	0	
vallaululli	ppm	~1	U	
VOLVO				
ADDITIV	EZ			
Calcium	ppm	1206	1 1	
Magnesium	ppm	10	1	
Zinc	ppm	■ 518	7 5	
Phosphorus	ppm	662	■388	
Barium	ppm	O	0	
Boron	ppm	3	32	



ALTA EQUIPMENT CO - ORLAND PARK 5000 INDUSTRIAL HWY GARY, IN US 46406 Contact: DAVE ENG DAVE.ENG@ALTG.COM T: (312)350-2560 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 advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition. Gear wear is indicated. Bearing and/or bushing wear is indicated. There is a very high concentration of water present in the oil. The oil is no longer serviceable.

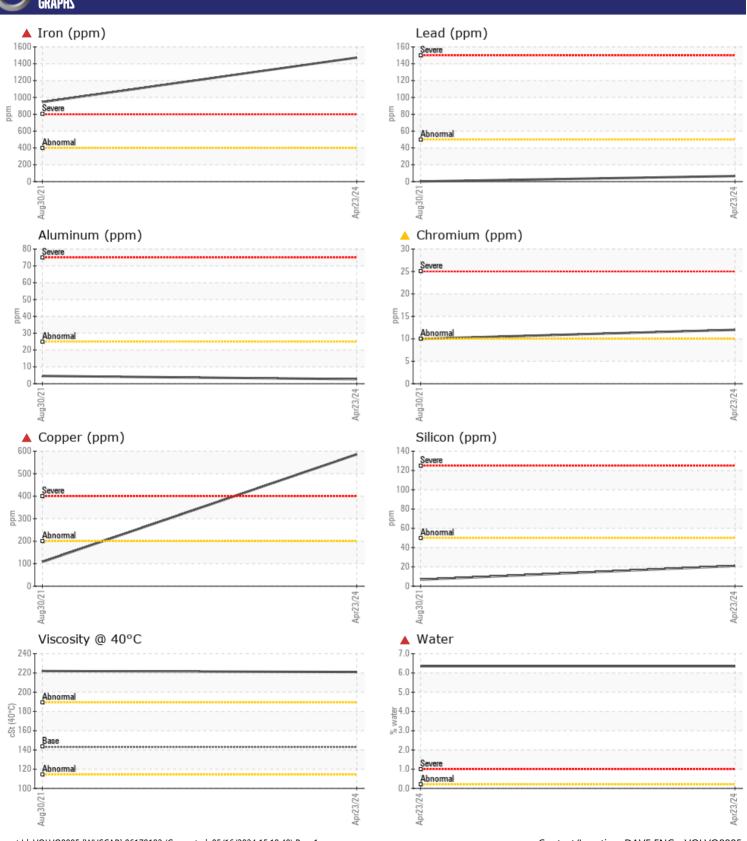
Depot: VOLVO8885 **Unique No:** 11030508 Signed: Don Baldridge Report Date: 16 May 2024







GRAPH





CONSTRUCTION EQUIPMENT
SPM702435 AMG SENNEBOGEN 830ME 830.0.2822 - FRONT LEFT F

Sample No: VCP446171

Calcium

Zinc

Barium

Boron

Magnesium

Phosphorus

ppm

ppm

ppm

ppm

ppm

ppm

Oil Type: **GEAR OIL SAE 80W90**

Job No: SPM702435 AMG

Sample Number		VCP446171	VCP429097	
Sample Date		23 Apr 2024	03 Feb 2024	
Machine Hours		9464	9464	
Oil Hours		0	1000	
Oil Changed		Changed	Changed	
Sample Status		NORMAL	ATTENTION	
OIL CON	DITION			
Visc @ 40°C	cSt	116	54.6	
		_		
VOLVO	AINATION			
_	MINATION			
Water	%	NEG	■0.122	
Silicon	ppm	6	9	
Sodium	ppm	■8	■19	
Potassium	ppm	■0	- <1	
WEAR	METALS			
Iron	ppm	103	■137	
Copper	ppm	18	4 0	
Lead	ppm	0	1	
Tin	ppm	■0	- <1	
Aluminum	ppm	0	1	
Chromium	ppm	■<1	1	
Molybdenum	ppm	0	0	
Nickel	ppm	■ 0	0	
Titanium	ppm	0	<1	
Silver	ppm	0	0	
Manganese	ppm	2	3	
Vanadium	ppm	<1	0	

3130

12

1367

□1064

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ALTA EQUIPMENT CO - ORLAND PARK 5000 INDUSTRIAL HWY GARY, IN US 46406 Contact: DAVE ENG DAVE.ENG@ALTG.COM T: (312)350-2560 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: VOLVO8885 **Unique No:** 11030509 Signed: Don Baldridge Report Date: 16 May 2024

Contact/Location: DAVE ENG - VOLVO8885

1010

3

447

666

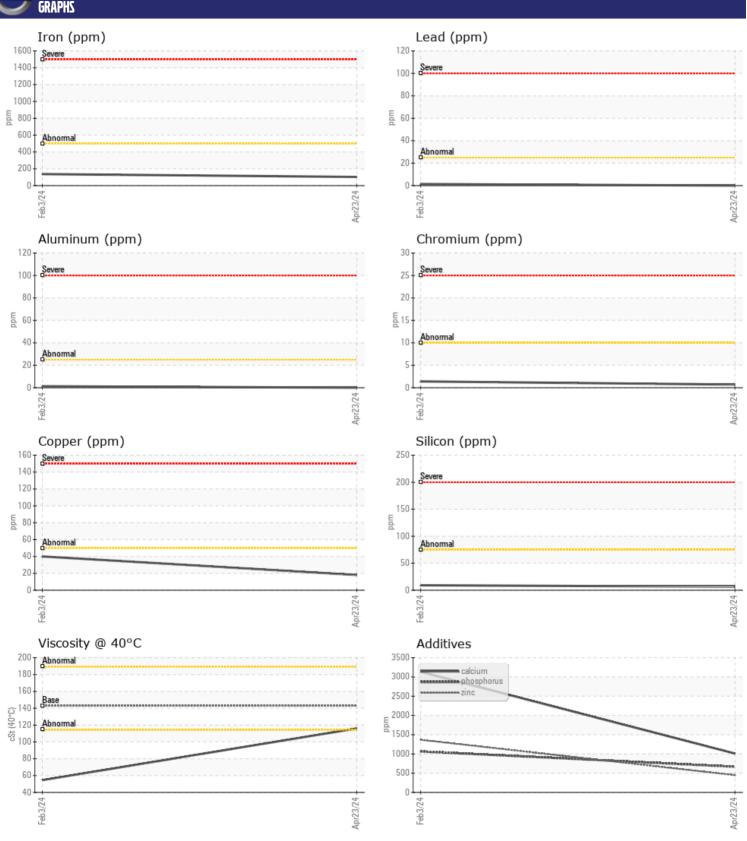
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19











SPM702435 AMG SENNEBOGEN 830ME 830.0.2822 - FRONT AXLE

Sample No: VCP446184

Oil Type: TDTO FLUID SAE 50 **Job No:** SPM702435 AMG





ALTA EQUIPMENT CO - ORLAND PARK 5000 INDUSTRIAL HWY GARY, IN US 46406 Contact: DAVE ENG DAVE.ENG@ALTG.COM T: (312)350-2560 F:

Diagnosis

The oil 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 oil viscosity is lower than normal. Confirm oil type.

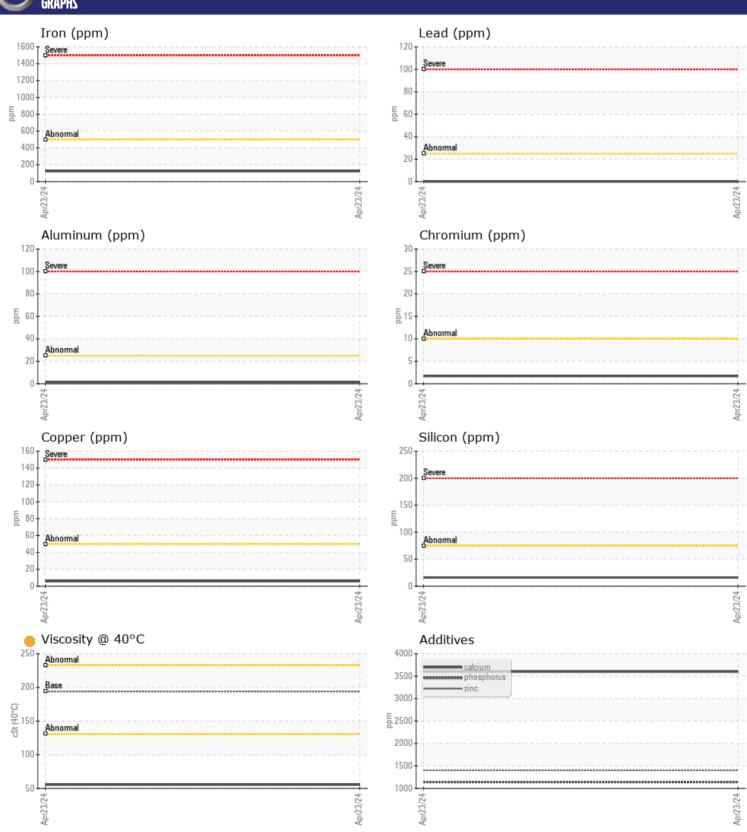
Depot:VOLVO8885Unique No:11030499Signed:Don BaldridgeReport Date:16 May 2024







GRAPH





CONSTRUCTION EQUIPMENT
SPM702435 AMG SENNEBOGEN 830ME 830.0.2822 - FRONT RIGHT FINA

Sample No: VCP446186

Oil Type: **GEAR OIL SAE 80W90**

Job No: SPM702435 AMG

VOLVO				
SAMPLE	INFORMATION			
Sample Number		VCP446186	 	
Sample Date		23 Apr 2024	 	
Machine Hours		9464	 	
Oil Hours		0	 	
Oil Changed		Changed	 	
Sample Status		ATTENTION	 	
OIL COND	ITION			
Visc @ 40°C	cSt	102	 	
VISC @ 40 C	CSt	102	 	
VOLVO				
CONTAM	INATION			
Water	%	NEG	 	
Silicon	ppm	■8	 	
Sodium	ppm	■10	 	
Potassium	ppm	■<1	 	
WEAR M	FTAIC			
_				
Iron	ppm	■92	 	
Copper	ppm	■17	 	
Lead	ppm	 <1	 	
Tin	ppm	- <1	 	
Aluminum	ppm	■ <1	 	
Chromium	ppm	■ <1	 	
Molybdenum	ppm	0	 	
Nickel	ppm	0	 	
Titanium	ppm	0	 	
Silver	ppm	0	 	
Manganese	ppm	2	 	
Vanadium	ppm	<1	 	
VOLVO				
ADDITIV	23			
Calcium	ppm	1362	 	
Magnesium	ppm	6	 	
Zinc	ppm	■ 568	 	
Phosphorus	ppm	698	 	
Barium	ppm	■ <1	 	
Boron	ppm	48	 	



ALTA EQUIPMENT CO - ORLAND PARK 5000 INDUSTRIAL HWY GARY, IN US 46406 Contact: DAVE ENG DAVE.ENG@ALTG.COM T: (312)350-2560 F:

Diagnosis

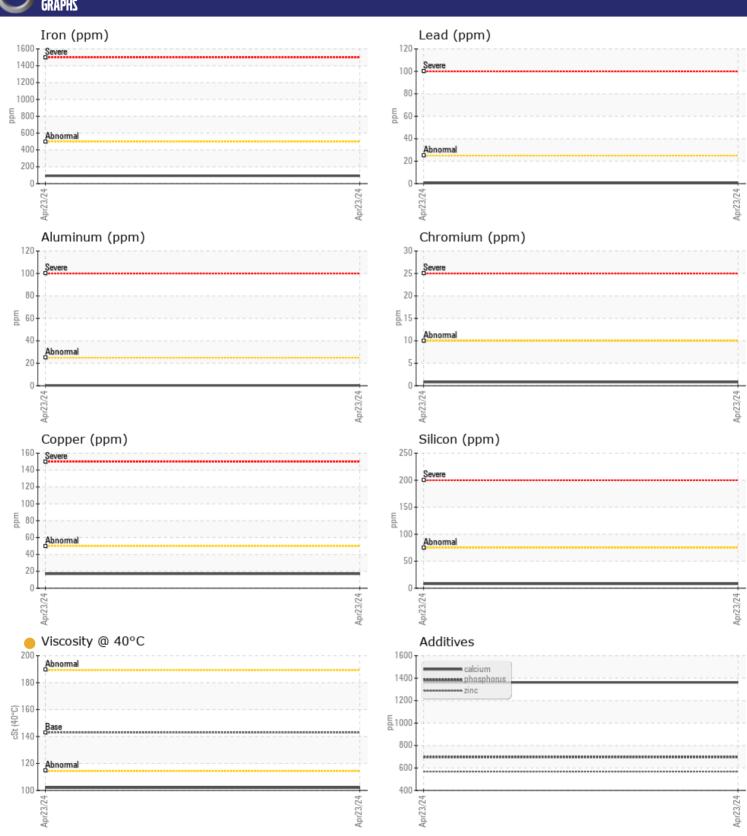
The oil change at the time of sampling has been noted. Resample at the next service interval to monitor.All component wear rates are normal. There is no indication of any contamination in the oil. The oil viscosity is lower than normal.

Depot: VOLVO8885 **Unique No:** 11030513 Signed: Don Baldridge Report Date: 16 May 2024











CONSTRUCTION EQUIPMENT
SPM702435 AMG SENNEBOGEN 830ME 830.0.2822 - REAR LEFT FILE

Sample No: VCP446179

Oil Type: **GEAR OIL SAE 80W90**

Job No: SPM702435 AMG

SAMPLI	E INFORMATION	l		
Sample Number	_	VCP446179	 	
Sample Date		23 Apr 2024	 	
Machine Hours		9464	 	
Oil Hours		0	 	
Oil Changed		Changed	 	
Sample Status		ATTENTION	 	
OIL CON	IDITION			
Visc @ 40°C	cSt	67.1	 	
VOLVO				
CONTAR	MINATION			
Water	%	NEG	 	
Silicon	ppm	™8	 	
Sodium	ppm	■14	 	
Potassium	ppm	 <1	 	
VOLVO WEAD	METALC			
WEAR N	METAL2			
Iron	ppm	■55	 	
Copper	ppm	■ 9	 	
Lead	ppm	■ <1	 	
Tin	ppm	■ <1	 	
Aluminum	ppm	■ <1	 	
Chromium	ppm	■ <1	 	
Molybdenum	ppm		 	
Nickel	ppm	0	 	
Titanium	ppm	0	 	
Silver	ppm	0	 	
Manganese	ppm	■2	 	
Vanadium	ppm	<1	 	
VOLVO				
ADDITIV	VEZ			
Calcium	ppm	2535	 	
Magnesium	ppm	■ 9	 	
Zinc	ppm	1092	 	
Phosphorus	ppm	■969	 	
Barium	ppm		 	
Boron	ppm	104	 	



ALTA EQUIPMENT CO - ORLAND PARK 5000 INDUSTRIAL HWY GARY, IN US 46406 Contact: DAVE ENG DAVE.ENG@ALTG.COM T: (312)350-2560 F:

Diagnosis

The oil 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 oil viscosity is lower than normal. This plus the additive levels indicates the addition of a different brand, or type of oil. Confirm oil type.

Depot: VOLVO8885 **Unique No:** 11030514 Signed: Don Baldridge Report Date: 16 May 2024











CONSTRUCTION EQUIPMENT SPM702435 SENNEBOGEN 830ME 830.0.2822 - REAR AXLE

Sample No: VCP446178

Oil Type: **TDTO FLUID SAE 50**

Job No: SPM702435

ADDITIVES

ppm

ppm

ppm

ppm

ppm

ppm

Calcium

Zinc

Barium

Boron

Magnesium

Phosphorus

VOLVO				
SAMPLE	INFORMATION			
Sample Number		VCP446178	-	
Sample Date		23 Apr 2024		
Machine Hours		9464		
Oil Hours		0		
Oil Changed		Changed		
Sample Status		NORMAL		
Sample Status		NORIVIAL		
VOLVO				
OIL COND	ITION			
Visc @ 40°C	cSt	66.9		
VOLVO	INATION			
CONTAM				
Water	%	NEG		
Silicon	ppm	■8		
Sodium	ppm	16		
Potassium	ppm	■0		
WEAR M	FTAI S			
_				
Iron	ppm	■ 65		
Copper	ppm	■10		
Lead	ppm	0		
Tin	ppm	0		
Aluminum	ppm	0		
Chromium	ppm	■ <1		
Molybdenum	ppm	0		
Nickel	ppm	■0		
Titanium	ppm	0		
Silver	ppm	0		
Manganese	ppm	2		
Vanadium	ppm	0		



ALTA EQUIPMENT CO - ORLAND PARK 5000 INDUSTRIAL HWY GARY, IN US 46406 Contact: DAVE ENG DAVE.ENG@ALTG.COM T: (312)350-2560 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: VOLVO8885 **Unique No:** 11030493 Signed: Sean Felton Report Date: 16 May 2024

Contact/Location: DAVE ENG - VOLVO8885

2778

1144

1020

■8

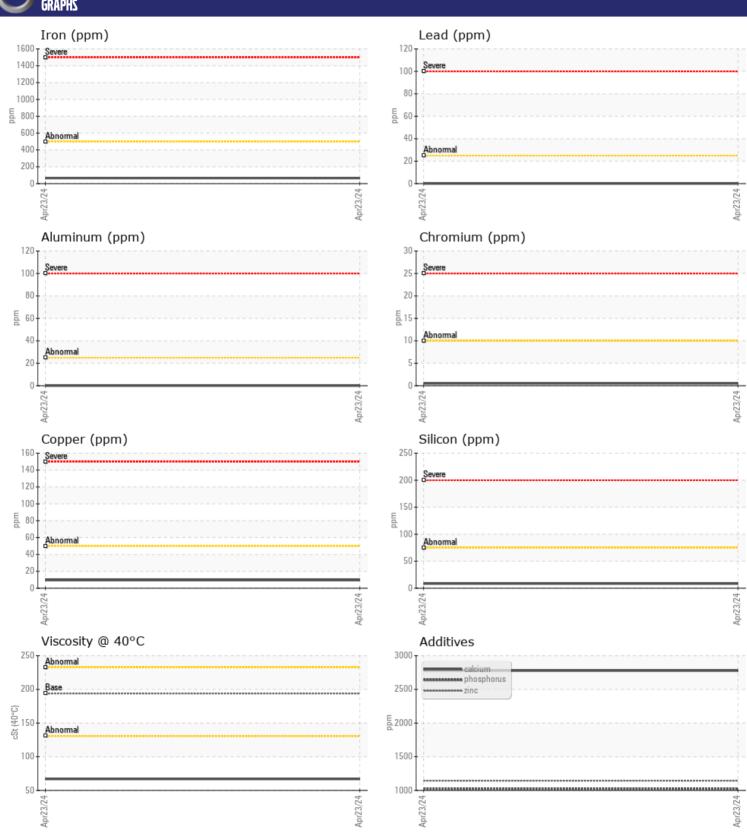
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90











CONSTRUCTION EQUIPMENT
SPM702435 AMG SENNEBOGEN 830ME 830.0.2822 - REAR RIGHT F

Sample No: VCP446177

Oil Type: **GEAR OIL SAE 80W90**

Job No: SPM702435 AMG

CAMPI	E INFORMATIO	7		
		VCP446177		
Sample Number			 	
Sample Date		23 Apr 2024	 	
Machine Hours		9464	 	
Oil Hours		0	 	
Oil Changed		Changed	 	
Sample Status		ATTENTION	 	
VOLVO				
OIL CON	IDITION			
Visc @ 40°C	cSt	66.9	 	
VOLVO	MINATION			
	MINATION			
Water	%	NEG	 	
Silicon	ppm	□ 7	 	
Sodium	ppm	16	 	
Potassium	ppm	■0	 	
WEAR	METALS			
_		= 50		
Iron	ppm	■ 59	 	
Copper	ppm	9	 	
Lead	ppm	0	 	
Tin	ppm	■ 0	 	
Aluminum	ppm	0	 	
Chromium	ppm	■<1	 	
Molybdenum	ppm	0		
Nickel	ppm	0	 	
Titanium	ppm	0	 	
Silver	ppm	■2	 	
Manganese	ppm	0		
Vanadium	ppm	U	 	
VOLVO				
ADDITI	VES			
Calcium	ppm	2771	 	
Magnesium	ppm	■8	 	
Zinc	ppm	1126	 	
Phosphorus	ppm	■989	 	
Barium	ppm	0	 	
Boron	ppm	■88	 	



ALTA EQUIPMENT CO - ORLAND PARK 5000 INDUSTRIAL HWY GARY, IN US 46406 Contact: DAVE ENG DAVE.ENG@ALTG.COM T: (312)350-2560 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 oil viscosity is lower than normal. This plus the additive levels indicates the addition of a different brand, or type of oil. Confirm oil type.

Depot: VOLVO8885 **Unique No:** 11030483 Signed: Sean Felton Report Date: 16 May 2024







