



# CONSTRUCTION EQUIPMENT

SWA474120-1 SENNEBOGEN 835 835.0.2487 - COOLANT



**Sample No:** VCP434753  
**Oil Type:** VOLVO COOLANT VCS (YELLOW)  
**Job No:** SWA474120-1



## SAMPLE INFORMATION

Sample Number	VCP434753	---	---	---
Sample Date	05 Feb 2024	---	---	---
Machine Hours	11725	---	---	---
Sample Status	NORMAL	---	---	---

### ALTA EQUIPMENT COMPANY

1035 WYLIE DRIVE  
BLOOMINGTON, IL  
US 61705

Contact: JUSTIN PERRY  
justin.perry@altg.com  
T: (309)533-9285

F:



## COOLANT CONDITION

pH	Scale 0-14	■ 8.08	---	---	---
Reserve Alkalinity	Scale 0-20	---	---	---	---
Nitrites	ppm	■ NT	---	---	---
Percentage Glycol	%	■ 56.5	---	---	---
Freezing Point	°C	■ -50	---	---	---

### Diagnosis

No corrective action is recommended at this time. The fluid is suitable for further service. There is no indication of any contamination in the coolant. Carboxylate test failed. The glycol level is acceptable. The pH level of this fluid is within the acceptable limits.



## CONTAMINATION

Coolant Appearance	normal	---	---	---
Coolant Color	Yllow	---	---	---

**Depot:** VOLVO5054  
**Unique No:** 10888823  
**Signed:** Jonathan Hester  
**Report Date:** 26 Feb 2024



# CONSTRUCTION EQUIPMENT

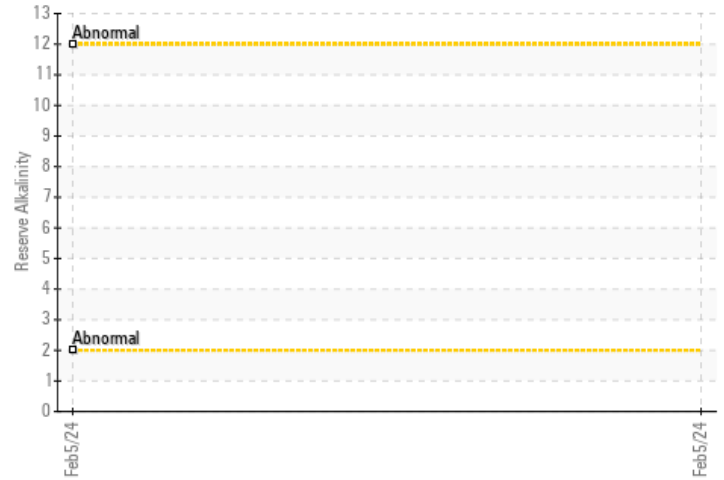


## GRAPHS

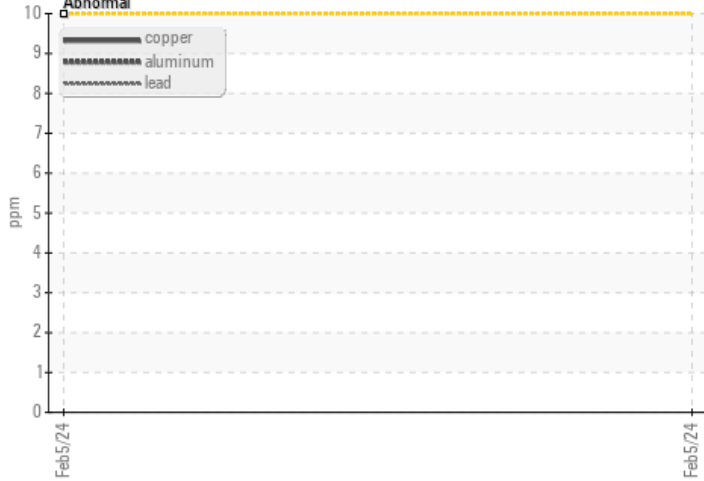
### Iron/Tin/Silver



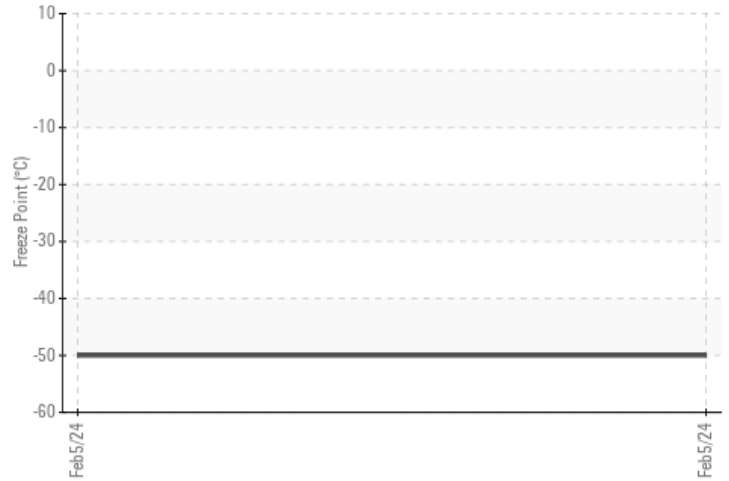
### Reserve Alkalinity



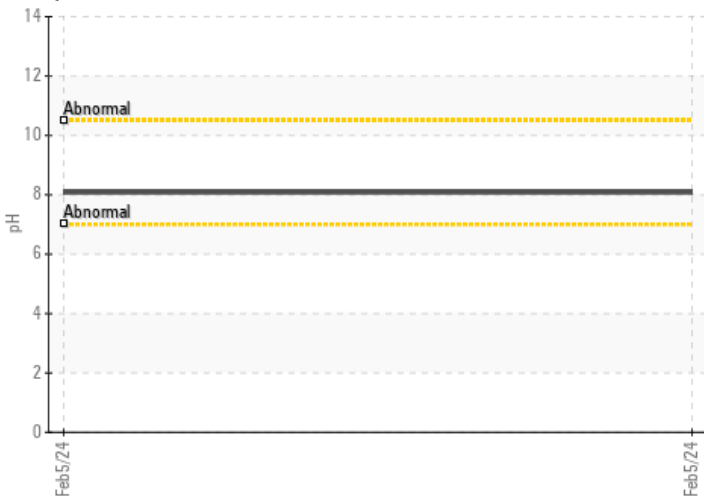
### Copper/Aluminum/Lead



### Freeze Point



### pH



### Nitrites





# CONSTRUCTION EQUIPMENT

SWA474120-10 ALTER SENNEBOGEN 835 835.0.2487 - DIESEL ENGINE



**Sample No:** VCP432719  
**Oil Type:** VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3  
**Job No:** SWA474120-10 ALTER



## SAMPLE INFORMATION

Sample Number	VCP432719	VCP363689	---	---
Sample Date	05 Feb 2024	25 Oct 2022	---	---
Machine Hours	11725	8905	---	---
Oil Hours	500	500	---	---
Oil Changed	Changed	N/A	---	---
Sample Status	NORMAL	NORMAL	---	---

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

## OIL CONDITION

Visc @ 100°C	cSt	█ 12.9	█ 13.0	---	---
Base Number (BN)	mg KOH/g	█ 6.5	█ 8.1	---	---
Oxidation (PA)	%	108	108	---	---

## 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.

## CONTAMINATION

Water	%	NEG	NEG	---	---
Soot %	%	█ 0.2	█ 0.3	---	---
Nitration (PA)	%	93	106	---	---
Sulfation (PA)	%	68	71	---	---
Glycol	%	NEG	NEG	---	---
Fuel	%	<1.0	<1.0	---	---
Silicon	ppm	█ 6	█ 6	---	---
Sodium	ppm	█ 0	█ 1	---	---
Potassium	ppm	█ 6	█ 9	---	---

## WEAR METALS

Iron	ppm	█ 19	█ 18	---	---
Copper	ppm	█ 2	█ 2	---	---
Lead	ppm	█ 0	█ <1	---	---
Tin	ppm	█ 0	█ <1	---	---
Aluminum	ppm	█ 2	█ 5	---	---
Chromium	ppm	█ <1	█ <1	---	---
Molybdenum	ppm	█ 88	█ 51	---	---
Nickel	ppm	█ 0	█ 0	---	---
Titanium	ppm	0	<1	---	---
Silver	ppm	█ 0	█ 2	---	---
Manganese	ppm	█ 0	█ <1	---	---
Vanadium	ppm	0	<1	---	---

## ADDITIVES

Calcium	ppm	█ 1505	█ 1658	---	---
Magnesium	ppm	█ 1235	█ 587	---	---
Zinc	ppm	█ 1701	█ 1230	---	---
Phosphorus	ppm	█ 1262	█ 987	---	---
Barium	ppm	█ <1	█ 0	---	---
Boron	ppm	█ 3	█ 24	---	---

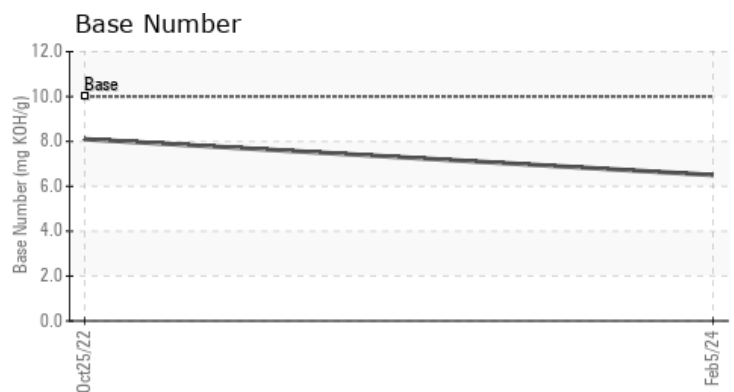
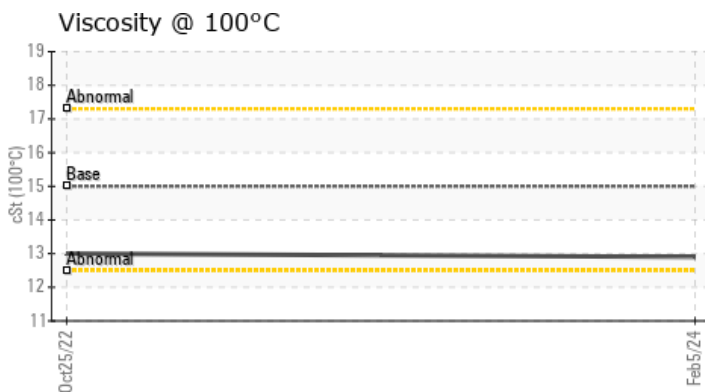
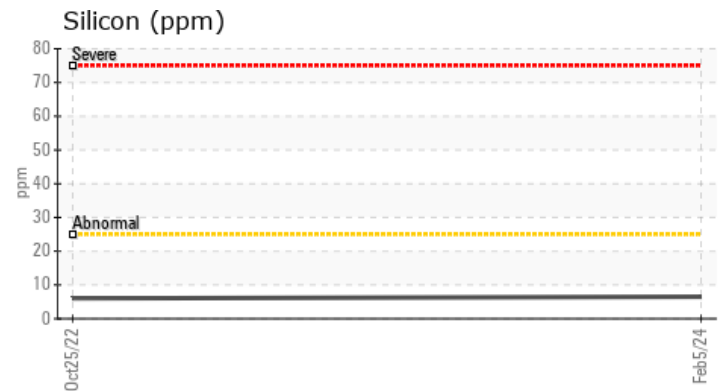
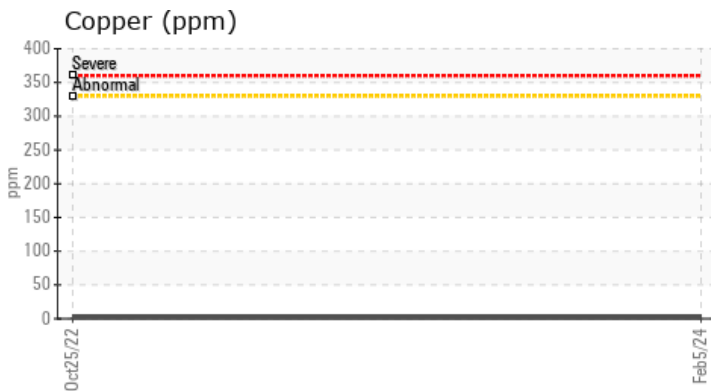
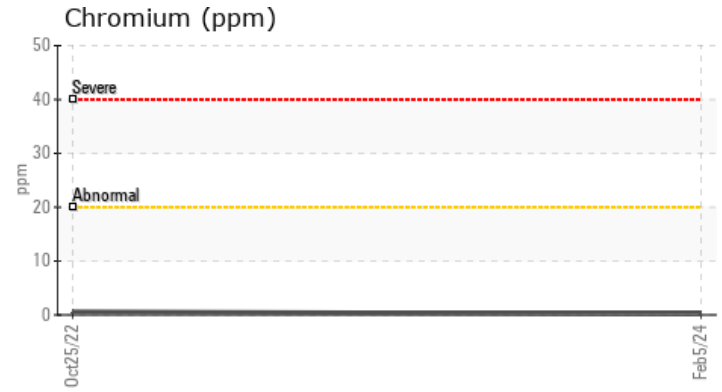
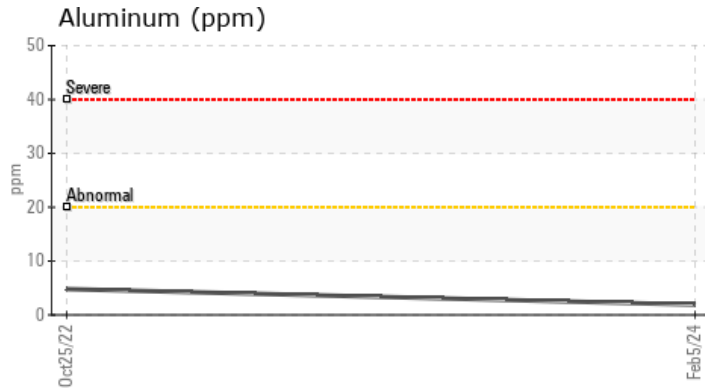
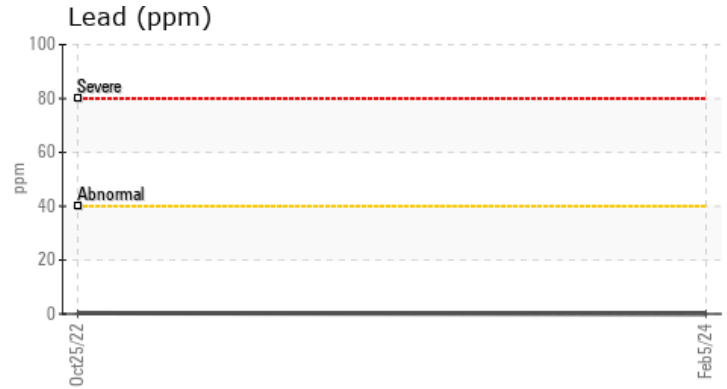
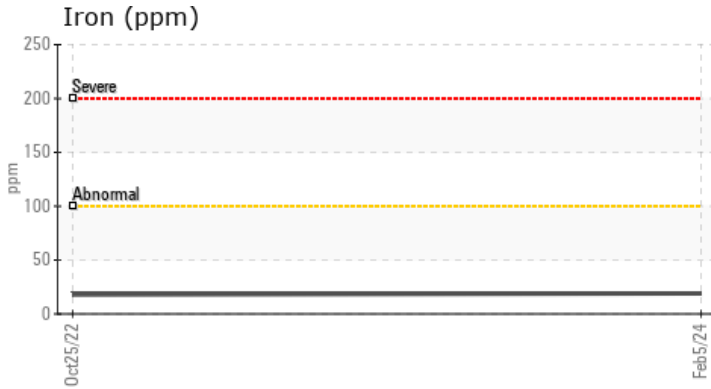
**Depot:** VOLVO5054  
**Unique No:** 10888096  
**Signed:** Sean Felton  
**Report Date:** 22 Feb 2024



# CONSTRUCTION EQUIPMENT



## GRAPHS



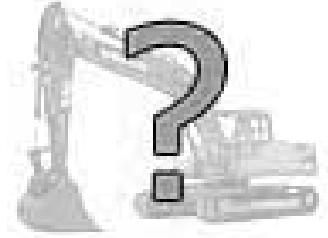


# CONSTRUCTION EQUIPMENT

SWA474120-1 SENNEBOGEN 835 835.0.2487 - TRANSMISSION



**Sample No:** VCP431476  
**Oil Type:** VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3  
**Job No:** SWA474120-1



## SAMPLE INFORMATION

Sample Number	<b>VCP431476</b>	VCP396379	---	---
Sample Date	<b>05 Feb 2024</b>	09 Oct 2023	---	---
Machine Hours	<b>11725</b>	11163	---	---
Oil Hours	<b>500</b>	2000	---	---
Oil Changed	<b>Not Chngd</b>	Changed	---	---
Sample Status	<b>NORMAL</b>	NORMAL	---	---

### ALTA EQUIPMENT COMPANY

1035 WYLIE DRIVE  
 BLOOMINGTON, IL  
 US 61705

Contact: JUSTIN PERRY  
 justin.perry@altg.com  
 T: (309)533-9285  
 F:



## OIL CONDITION

Visc @ 40°C	cSt	<b>83.4</b>	85.7	---	---
-------------	-----	-------------	------	-----	-----



## CONTAMINATION

Water	%	<b>NEG</b>	NEG	---	---
Silicon	ppm	<b>7</b>	6	---	---
Sodium	ppm	<b>0</b>	3	---	---
Potassium	ppm	<b>2</b>	0	---	---

### 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.



## WEAR METALS

Iron	ppm	<b>21</b>	11	---	---
Copper	ppm	<b>32</b>	29	---	---
Lead	ppm	<b>0</b>	0	---	---
Tin	ppm	<b>0</b>	<1	---	---
Aluminum	ppm	<b>2</b>	<1	---	---
Chromium	ppm	<b>&lt;1</b>	0	---	---
Molybdenum	ppm	<b>44</b>	38	---	---
Nickel	ppm	<b>0</b>	0	---	---
Titanium	ppm	<b>0</b>	0	---	---
Silver	ppm	<b>0</b>	0	---	---
Manganese	ppm	<b>2</b>	3	---	---
Vanadium	ppm	<b>0</b>	0	---	---



## ADDITIVES

Calcium	ppm	<b>1307</b>	1356	---	---
Magnesium	ppm	<b>522</b>	473	---	---
Zinc	ppm	<b>953</b>	893	---	---
Phosphorus	ppm	<b>840</b>	874	---	---
Barium	ppm	<b>&lt;1</b>	<1	---	---
Boron	ppm	<b>109</b>	105	---	---

**Depot:** VOLVO5054  
**Unique No:** 10888787  
**Signed:** Sean Felton  
**Report Date:** 23 Feb 2024

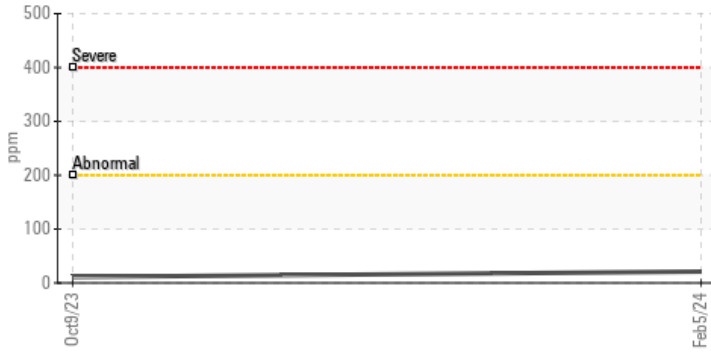


# CONSTRUCTION EQUIPMENT



## GRAPHS

### Iron (ppm)



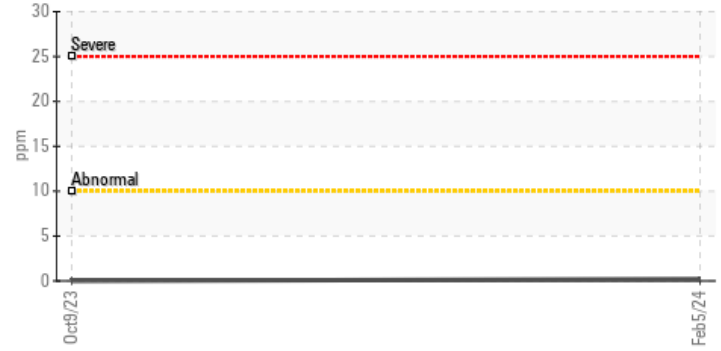
### Lead (ppm)



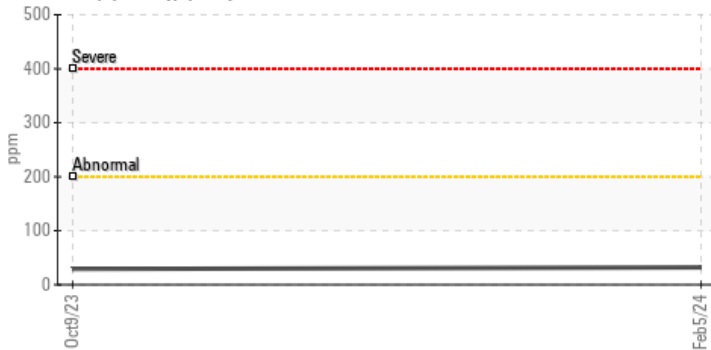
### Aluminum (ppm)



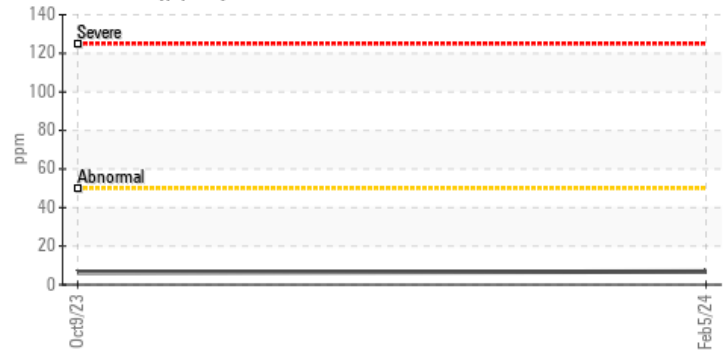
### Chromium (ppm)



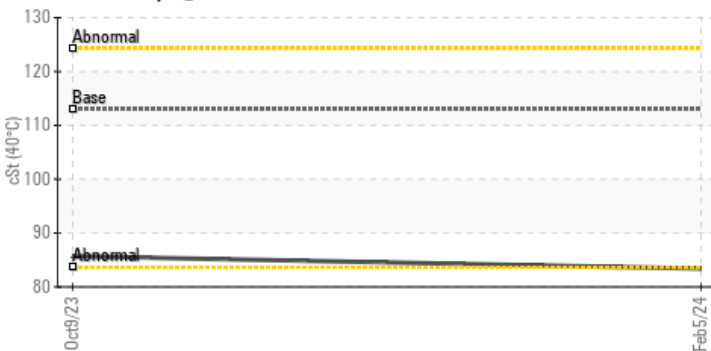
### Copper (ppm)



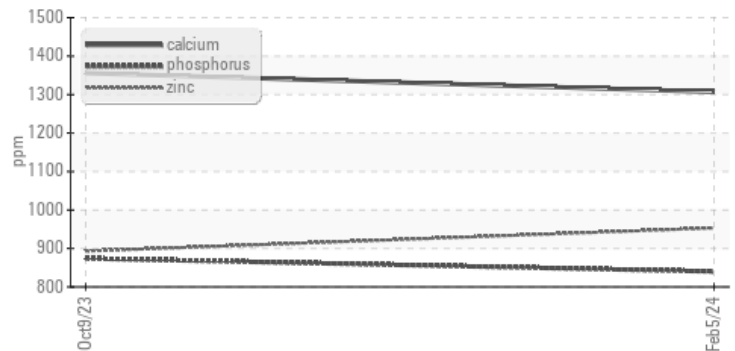
### Silicon (ppm)



### Viscosity @ 40°C



### Additives





# CONSTRUCTION EQUIPMENT

SWA474120-10 ALTER SENNEBOGEN 835 835.0.2487 - HYDRAULIC SYSTEM



**Sample No:** VCP434189  
**Oil Type:** VOLVO SUPER HYDRAULIC OIL 46  
**Job No:** SWA474120-10 ALTER



## SAMPLE INFORMATION

Sample Number	VCP434189	---	---	---
Sample Date	05 Feb 2024	---	---	---
Machine Hours	11725	---	---	---
Oil Hours	500	---	---	---
Oil Changed	Not Chngd	---	---	---
Sample Status	ABNORMAL	---	---	---

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

## OIL CONDITION

Visc @ 40°C	cSt	█ 43.7	---	---	---
Acid Number (AN)	mg KOH/g	█ 0.38	---	---	---

## CONTAMINATION

Water	%	NEG	---	---	---
Particles >4µm		▲ 18339	---	---	---
Particles >6µm		▲ 4428	---	---	---
Particles >14µm		▲ 326	---	---	---
ISO 4406:1999 (c)		21/19/16	---	---	---
Silicon	ppm	█ <1	---	---	---
Sodium	ppm	█ 1	---	---	---
Potassium	ppm	█ <1	---	---	---

### Diagnosis

We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. We recommend an early resample to monitor this condition. All component wear rates are normal. There is a moderate amount of particulates (2 to 100 microns in size) present in the oil. The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

## WEAR METALS

Iron	ppm	█ <1	---	---	---
Copper	ppm	█ 0	---	---	---
Lead	ppm	█ 0	---	---	---
Tin	ppm	█ <1	---	---	---
Aluminum	ppm	█ <1	---	---	---
Chromium	ppm	█ <1	---	---	---
Molybdenum	ppm	█ 0	---	---	---
Nickel	ppm	█ <1	---	---	---
Titanium	ppm	0	---	---	---
Silver	ppm	0	---	---	---
Manganese	ppm	█ 0	---	---	---
Vanadium	ppm	0	---	---	---

## ADDITIVES

Calcium	ppm	█ 131	---	---	---
Magnesium	ppm	█ 1	---	---	---
Zinc	ppm	█ 464	---	---	---
Phosphorus	ppm	█ 360	---	---	---
Barium	ppm	█ 0	---	---	---
Boron	ppm	█ 0	---	---	---

**Depot:** VOLVO5054  
**Unique No:** 10888320  
**Signed:** Wes Davis  
**Report Date:** 22 Feb 2024



# CONSTRUCTION EQUIPMENT

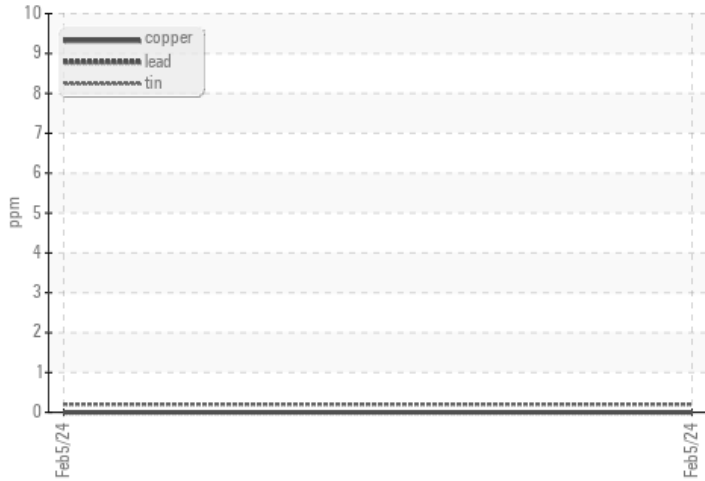


## VOLVO GRAPHS

### Ferrous Alloys



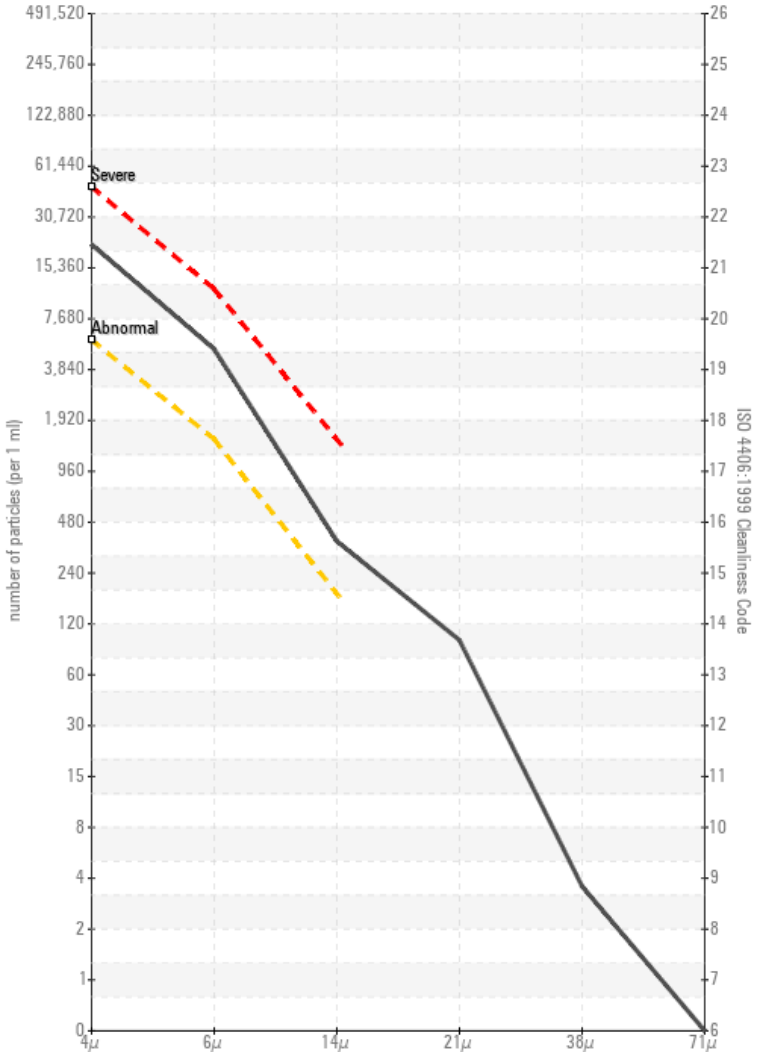
### Non-ferrous Metals



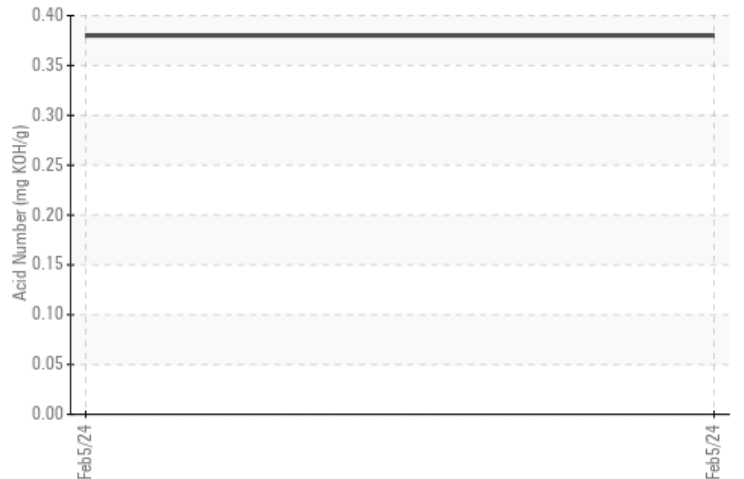
### Viscosity @ 40°C



### Particle Count



### Acid Number





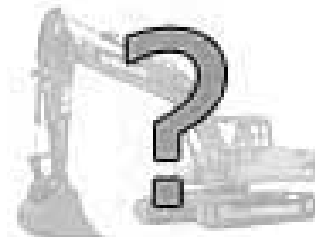


# CONSTRUCTION EQUIPMENT

SWA474120-1 SENNEBOGEN 835 835.0.2487 - LEFT SWING DRIVE



**Sample No:** VCP431477  
**Oil Type:** SHELL OMALA S4 GX 220  
**Job No:** SWA474120-1



## SAMPLE INFORMATION

Sample Number	VCP431477	VCP396377	---	---
Sample Date	05 Feb 2024	09 Oct 2023	---	---
Machine Hours	11725	11163	---	---
Oil Hours	500	2000	---	---
Oil Changed	Not Chngd	Changed	---	---
Sample Status	NORMAL	NORMAL	---	---

## ALTA EQUIPMENT COMPANY

1035 WYLIE DRIVE  
BLOOMINGTON, IL  
US 61705

Contact: JUSTIN PERRY  
justin.perry@altg.com  
T: (309)533-9285  
F:



## OIL CONDITION

Visc @ 40°C	cSt	█ 235	█ 229	---	---
-------------	-----	-------	-------	-----	-----



## CONTAMINATION

Water	%	NEG	NEG	---	---
Silicon	ppm	█ 6	█ 10	---	---
Sodium	ppm	█ 0	█ 0	---	---
Potassium	ppm	█ 1	█ 0	---	---

## 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.



## WEAR METALS

Iron	ppm	█ 324	█ 362	---	---
Copper	ppm	█ 62	█ 176	---	---
Lead	ppm	█ 0	█ 0	---	---
Tin	ppm	█ 1	█ 2	---	---
Aluminum	ppm	█ 2	█ 0	---	---
Chromium	ppm	█ 3	█ 4	---	---
Molybdenum	ppm	█ 0	█ 0	---	---
Nickel	ppm	█ 0	█ 2	---	---
Titanium	ppm	0	0	---	---
Silver	ppm	0	0	---	---
Manganese	ppm	█ 2	█ 3	---	---
Vanadium	ppm	0	0	---	---



## ADDITIVES

Calcium	ppm	█ <1	█ 3	---	---
Magnesium	ppm	█ 0	█ 3	---	---
Zinc	ppm	█ 31	█ 77	---	---
Phosphorus	ppm	█ 400	█ 400	---	---
Barium	ppm	█ 0	█ <1	---	---
Boron	ppm	█ 23	█ 18	---	---

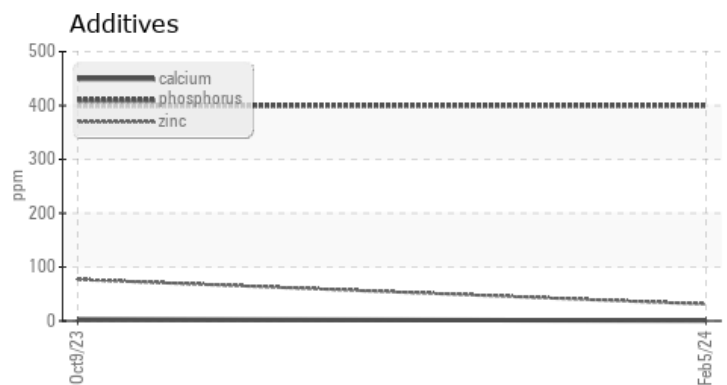
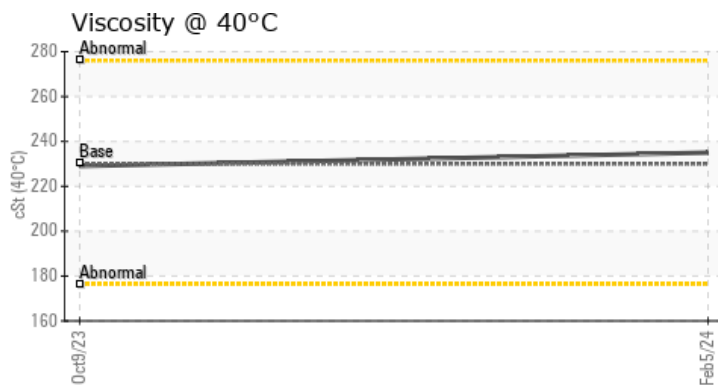
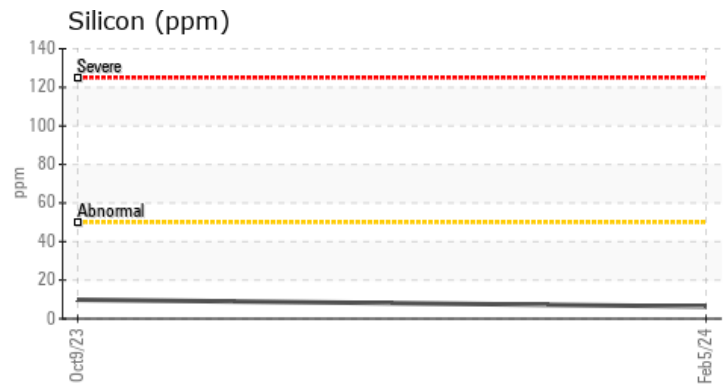
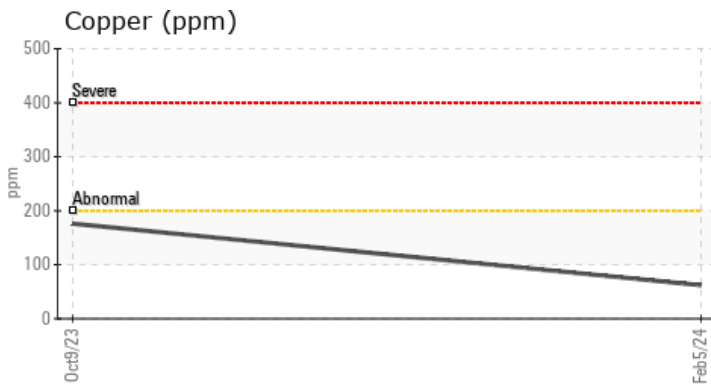
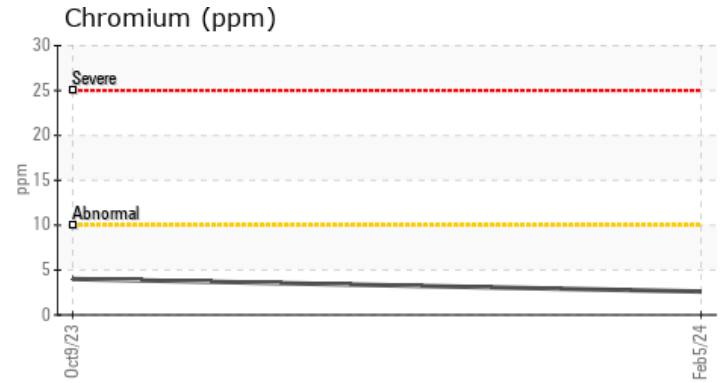
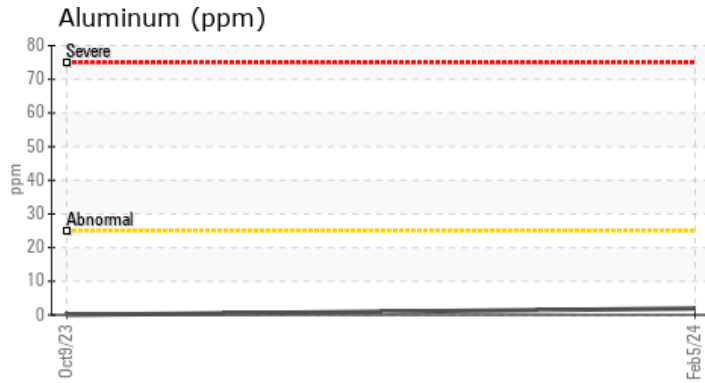
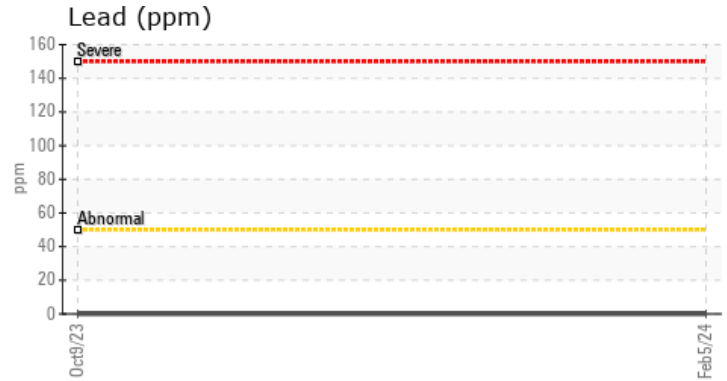
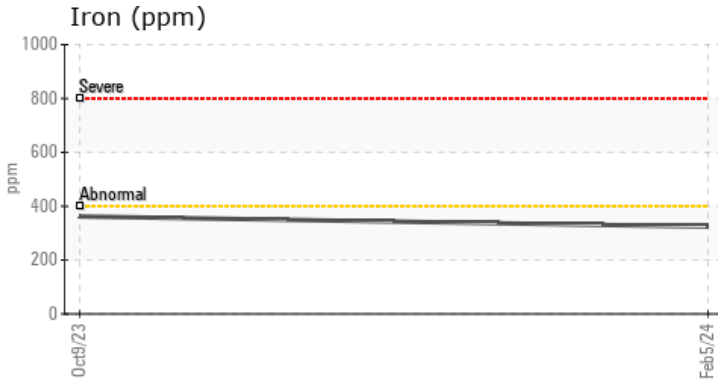
**Depot:** VOLVO5054  
**Unique No:** 10888736  
**Signed:** Sean Felton  
**Report Date:** 23 Feb 2024



# CONSTRUCTION EQUIPMENT



## GRAPHS





# CONSTRUCTION EQUIPMENT

SWA474120-10 SENNEBOGEN 835 835.0.2487 - RIGHT SWING DRIVE



**Sample No:** VCP434188  
**Oil Type:** SHELL OMALA S4 GX 220  
**Job No:** SWA474120-10



## SAMPLE INFORMATION

Sample Number	VCP434188	VCP396381	---	---
Sample Date	05 Feb 2024	09 Oct 2023	---	---
Machine Hours	11725	11163	---	---
Oil Hours	500	2000	---	---
Oil Changed	Not Chngd	Changed	---	---
Sample Status	ABNORMAL	ABNORMAL	---	---

### ALTA EQUIPMENT COMPANY

1035 WYLIE DRIVE  
BLOOMINGTON, IL  
US 61705

Contact: JUSTIN PERRY  
justin.perry@altg.com  
T: (309)533-9285  
F:



## OIL CONDITION

Visc @ 40°C	cSt	█ 231	█ 225	---	---
-------------	-----	-------	-------	-----	-----



## CONTAMINATION

Water	%	NEG	▲ 0.142	---	---
Silicon	ppm	█ 6	█ 9	---	---
Sodium	ppm	█ 0	█ 0	---	---
Potassium	ppm	█ 1	█ 0	---	---

### Diagnosis

No corrective action is recommended at this time. Resample at the next service interval to monitor. Gear wear is indicated. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.



## WEAR METALS

Iron	ppm	▲ 582	▲ 585	---	---
Copper	ppm	█ 108	▲ 259	---	---
Lead	ppm	█ 0	█ 0	---	---
Tin	ppm	█ 5	▲ 11	---	---
Aluminum	ppm	█ 2	█ 0	---	---
Chromium	ppm	█ 6	█ 7	---	---
Molybdenum	ppm	█ 0	█ 0	---	---
Nickel	ppm	█ 0	█ 1	---	---
Titanium	ppm	0	0	---	---
Silver	ppm	0	0	---	---
Manganese	ppm	█ 4	█ 5	---	---
Vanadium	ppm	0	0	---	---



## ADDITIVES

Calcium	ppm	█ 2	█ 3	---	---
Magnesium	ppm	█ <1	█ 3	---	---
Zinc	ppm	█ 23	█ 88	---	---
Phosphorus	ppm	█ 417	█ 403	---	---
Barium	ppm	█ 0	█ <1	---	---
Boron	ppm	█ 25	█ 17	---	---

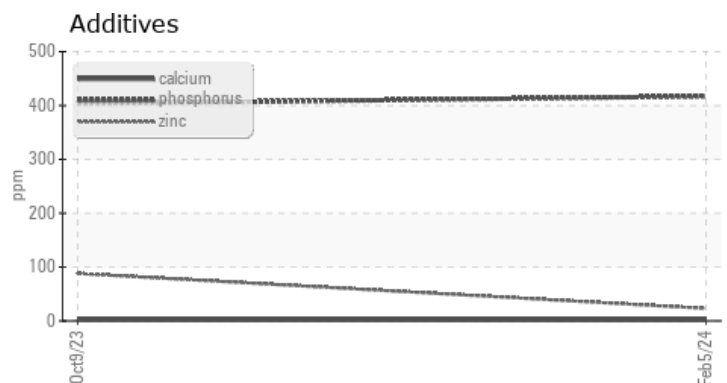
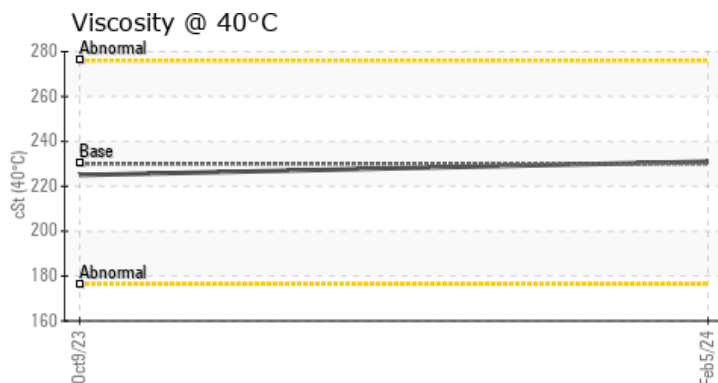
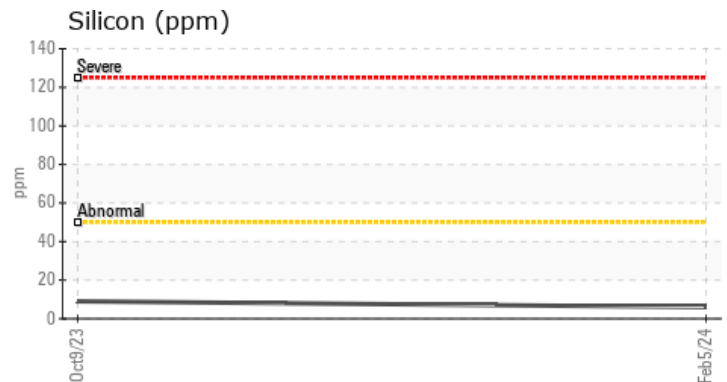
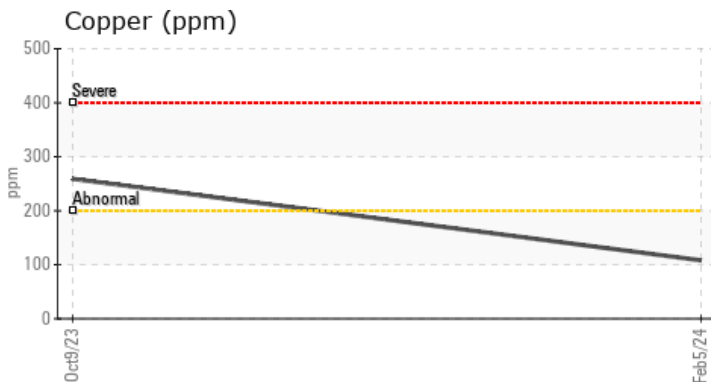
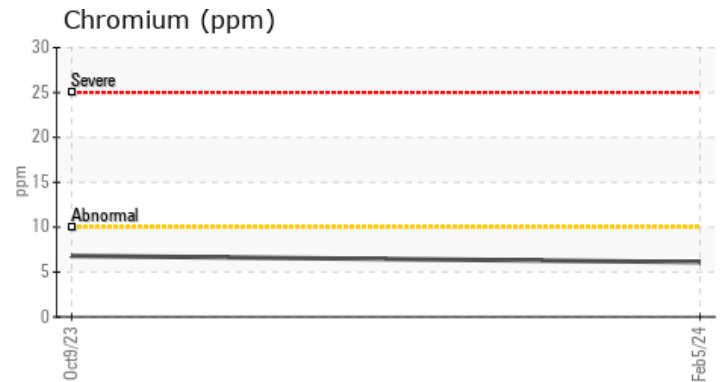
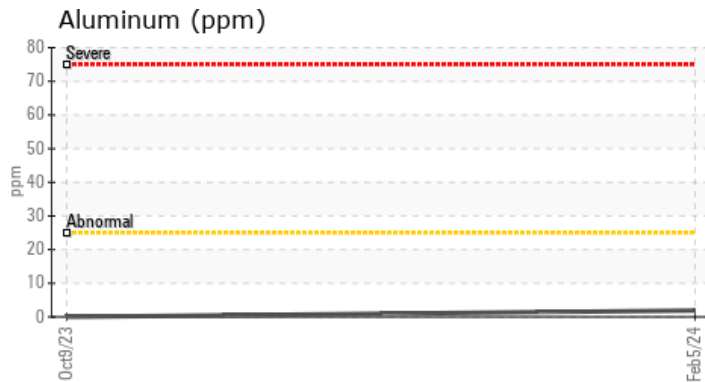
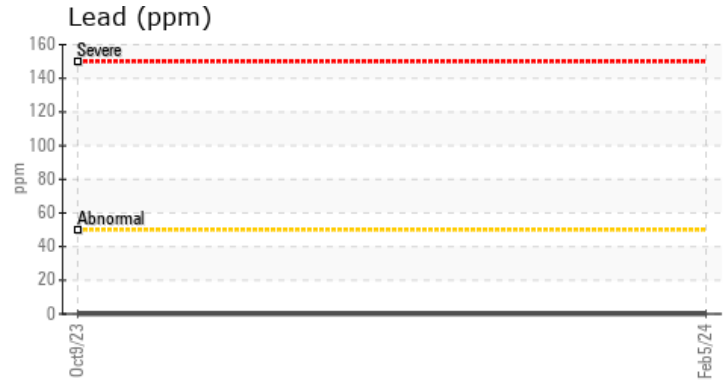
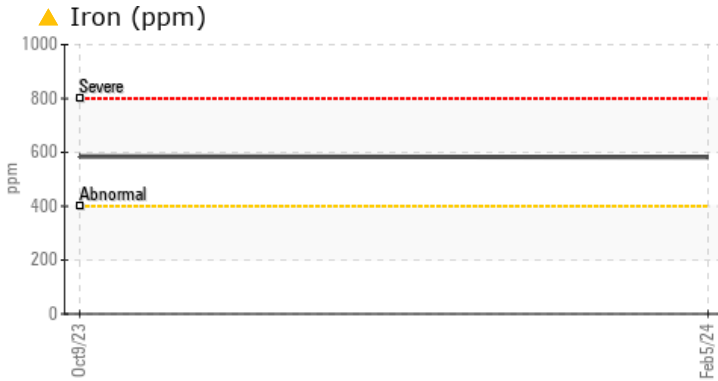
**Depot:** VOLVO5054  
**Unique No:** 10888735  
**Signed:** Sean Felton  
**Report Date:** 23 Feb 2024



# CONSTRUCTION EQUIPMENT



## GRAPHS



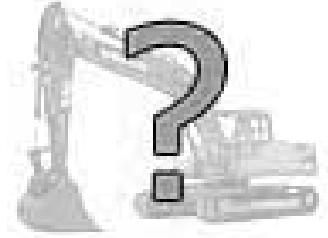


# CONSTRUCTION EQUIPMENT

SWA474120-1 SENNEBOGEN 835 835.0.2487 - FRONT LEFT FINAL DRIVE



**Sample No:** VCP431478  
**Oil Type:** VOLVO PREMIUM GEAR OIL 80W-90 GL-5  
**Job No:** SWA474120-1



## SAMPLE INFORMATION

Sample Number	<b>VCP431478</b>	VCP415318	---	---
Sample Date	<b>05 Feb 2024</b>	09 Oct 2023	---	---
Machine Hours	<b>11725</b>	11163	---	---
Oil Hours	<b>500</b>	2000	---	---
Oil Changed	<b>Not Chngd</b>	Changed	---	---
Sample Status	<b>NORMAL</b>	ABNORMAL	---	---

### ALTA EQUIPMENT COMPANY

1035 WYLIE DRIVE  
 BLOOMINGTON, IL  
 US 61705

Contact: JUSTIN PERRY  
 justin.perry@altg.com  
 T: (309)533-9285

F:



## OIL CONDITION

Visc @ 40°C	cSt	<b>143</b>	144	---	---
-------------	-----	------------	-----	-----	-----



## CONTAMINATION

Water	%	<b>NEG</b>	NEG	---	---
Silicon	ppm	<b>3</b>	4	---	---
Sodium	ppm	<b>0</b>	<1	---	---
Potassium	ppm	<b>1</b>	0	---	---



## WEAR METALS

Iron	ppm	<b>55</b>	49	---	---
Copper	ppm	<b>6</b>	5	---	---
Lead	ppm	<b>0</b>	0	---	---
Tin	ppm	<b>0</b>	0	---	---
Aluminum	ppm	<b>2</b>	0	---	---
Chromium	ppm	<b>&lt;1</b>	0	---	---
Molybdenum	ppm	<b>0</b>	0	---	---
Nickel	ppm	<b>0</b>	0	---	---
Titanium	ppm	<b>0</b>	0	---	---
Silver	ppm	<b>0</b>	0	---	---
Manganese	ppm	<b>&lt;1</b>	<1	---	---
Vanadium	ppm	<b>0</b>	0	---	---



## ADDITIVES

Calcium	ppm	<b>28</b>	38	---	---
Magnesium	ppm	<b>17</b>	27	---	---
Zinc	ppm	<b>32</b>	40	---	---
Phosphorus	ppm	<b>1649</b>	1828	---	---
Barium	ppm	<b>&lt;1</b>	2	---	---
Boron	ppm	<b>177</b>	137	---	---

### 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.

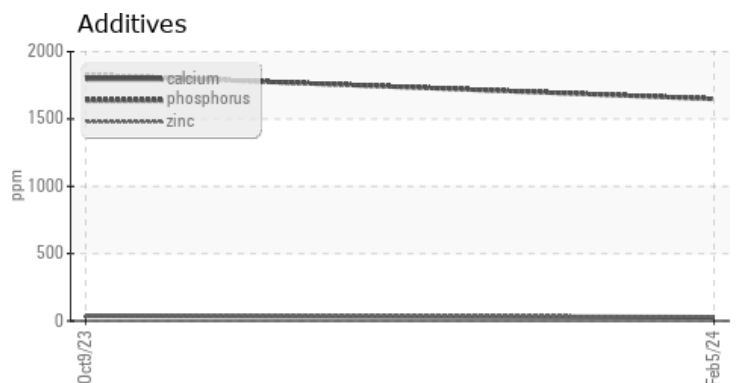
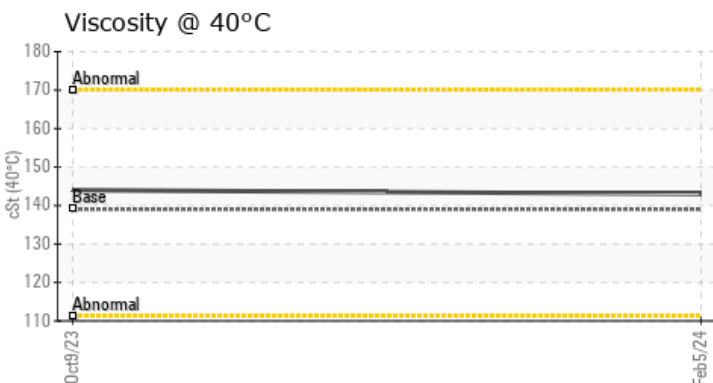
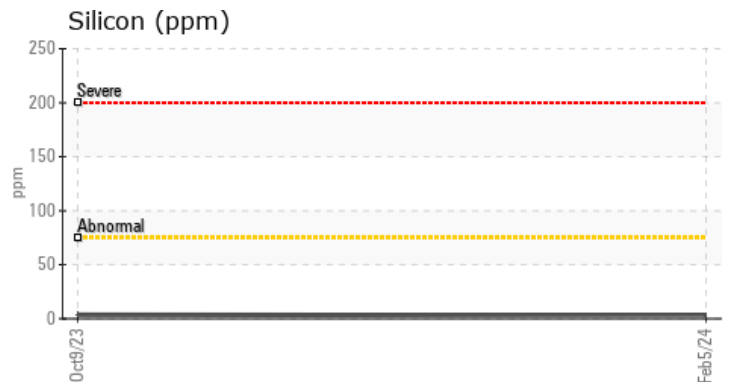
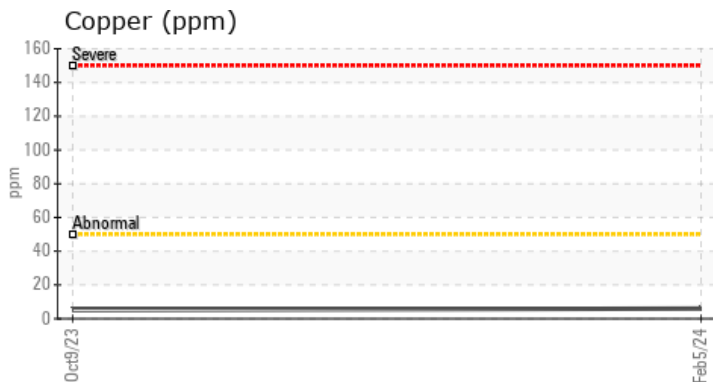
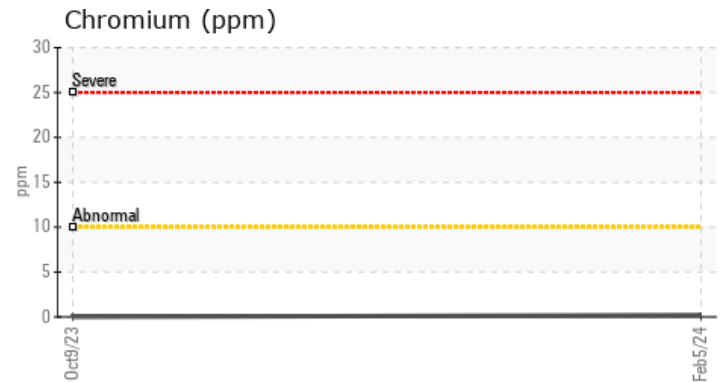
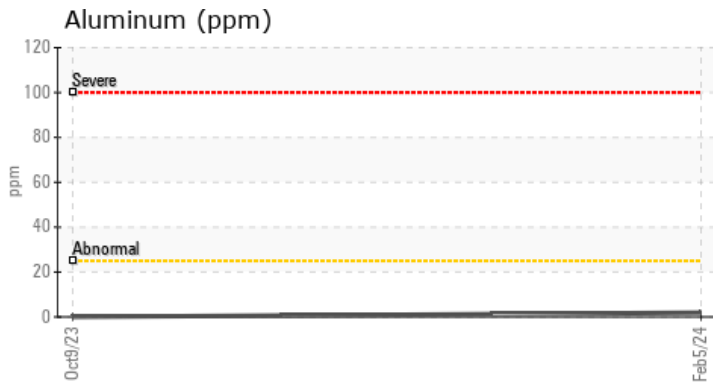
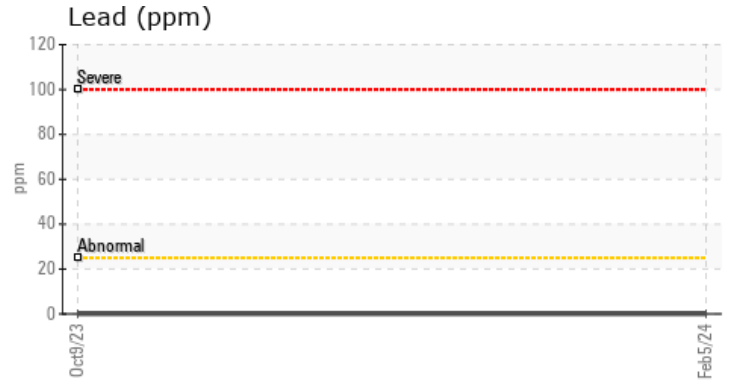
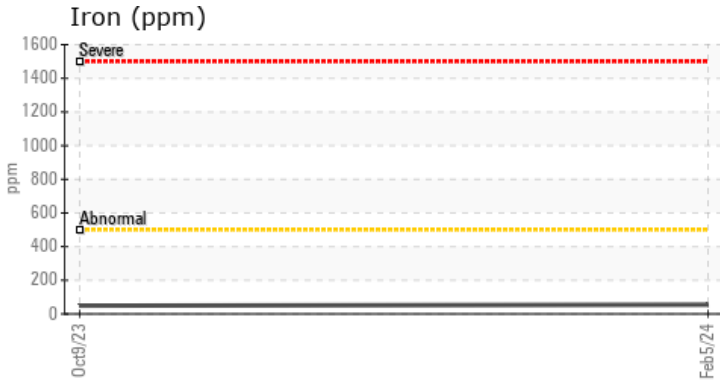
**Depot:** VOLVO5054  
**Unique No:** 10888738  
**Signed:** Wes Davis  
**Report Date:** 22 Feb 2024



# CONSTRUCTION EQUIPMENT



## GRAPHS





# CONSTRUCTION EQUIPMENT

SWA474120-1 SENNEBOGEN 835 835.0.2487 - FRONT AXLE



**Sample No:** VCP431482  
**Oil Type:** VOLVO PREMIUM GEAR OIL 80W-90 GL-5  
**Job No:** SWA474120-1



## SAMPLE INFORMATION

Sample Number	<b>VCP431482</b>	VCP396383	---	---
Sample Date	<b>05 Feb 2024</b>	09 Oct 2023	---	---
Machine Hours	<b>11725</b>	11163	---	---
Oil Hours	<b>500</b>	2000	---	---
Oil Changed	<b>Not Chngd</b>	Changed	---	---
Sample Status	<b>NORMAL</b>	NORMAL	---	---

### ALTA EQUIPMENT COMPANY

1035 WYLIE DRIVE  
 BLOOMINGTON, IL  
 US 61705

Contact: JUSTIN PERRY  
 justin.perry@altg.com  
 T: (309)533-9285  
 F:



## OIL CONDITION

Visc @ 40°C	cSt	<b>145</b>	146	---	---
-------------	-----	------------	-----	-----	-----



## CONTAMINATION

Water	%	<b>NEG</b>	NEG	---	---
Silicon	ppm	<b>2</b>	2	---	---
Sodium	ppm	<b>0</b>	0	---	---
Potassium	ppm	<b>1</b>	0	---	---



## WEAR METALS

Iron	ppm	<b>2</b>	<1	---	---
Copper	ppm	<b>4</b>	4	---	---
Lead	ppm	<b>0</b>	0	---	---
Tin	ppm	<b>0</b>	0	---	---
Aluminum	ppm	<b>2</b>	0	---	---
Chromium	ppm	<b>&lt;1</b>	0	---	---
Molybdenum	ppm	<b>0</b>	0	---	---
Nickel	ppm	<b>0</b>	0	---	---
Titanium	ppm	<b>0</b>	0	---	---
Silver	ppm	<b>0</b>	0	---	---
Manganese	ppm	<b>0</b>	0	---	---
Vanadium	ppm	<b>0</b>	0	---	---



## ADDITIVES

Calcium	ppm	<b>6</b>	7	---	---
Magnesium	ppm	<b>2</b>	3	---	---
Zinc	ppm	<b>8</b>	9	---	---
Phosphorus	ppm	<b>1826</b>	1996	---	---
Barium	ppm	<b>&lt;1</b>	<1	---	---
Boron	ppm	<b>193</b>	149	---	---

### 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.

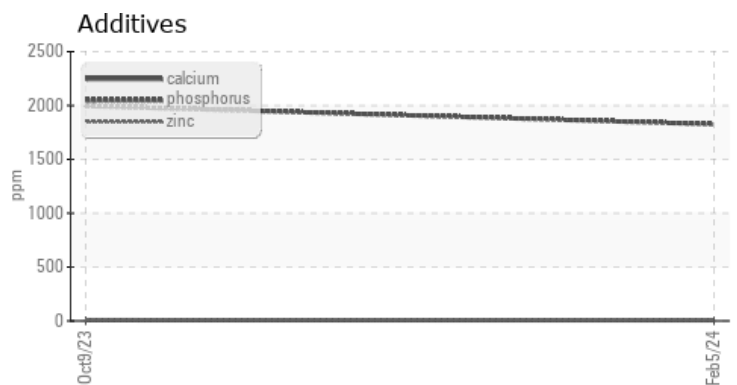
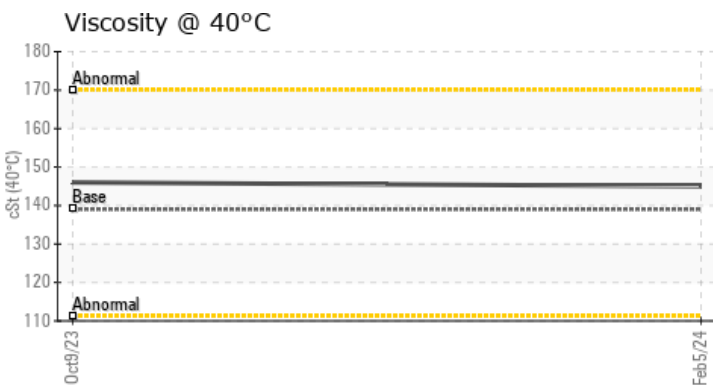
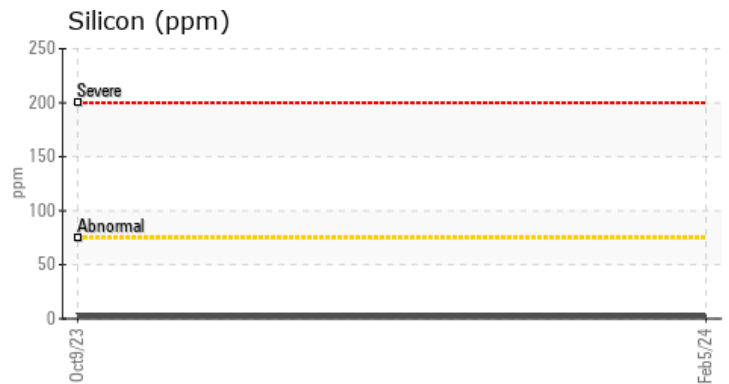
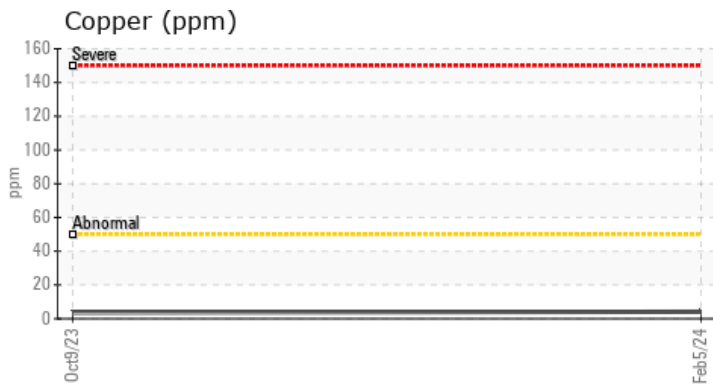
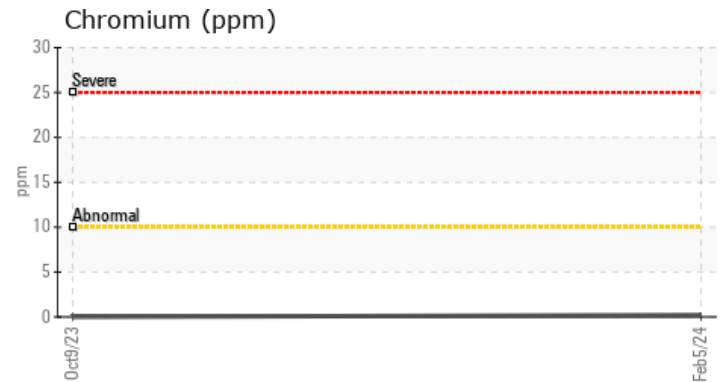
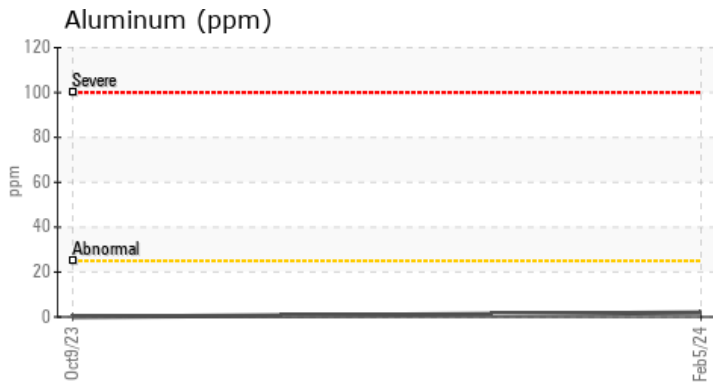
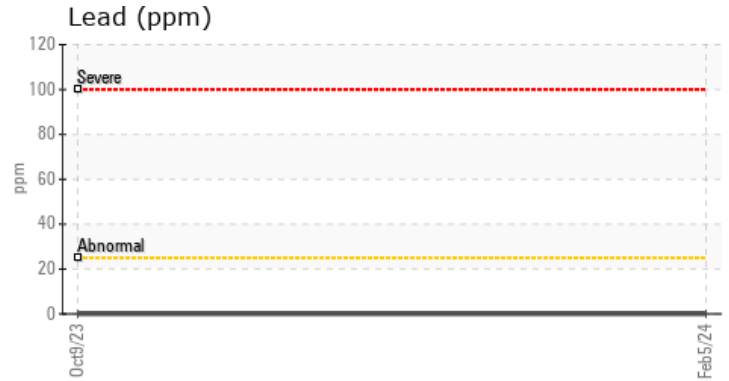
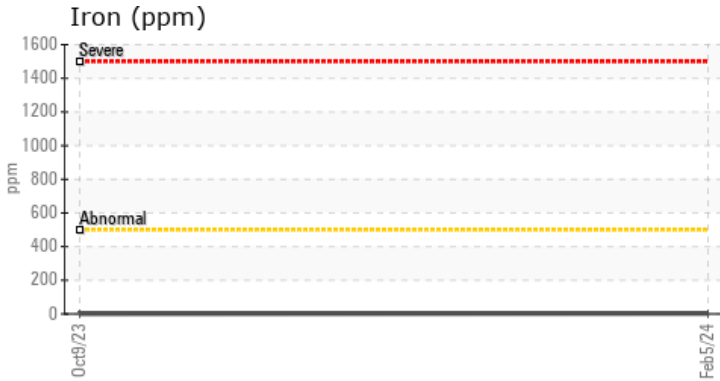
**Depot:** VOLVO5054  
**Unique No:** 10888742  
**Signed:** Sean Felton  
**Report Date:** 23 Feb 2024



# CONSTRUCTION EQUIPMENT



## GRAPHS







# CONSTRUCTION EQUIPMENT

SWA474120-1 SENNEBOGEN 835 835.0.2487 - FRONT RIGHT FINAL DRIVE



**Sample No:** VCP434187  
**Oil Type:** VOLVO PREMIUM GEAR OIL 80W-90 GL-5  
**Job No:** SWA474120-1



## SAMPLE INFORMATION

Sample Number	VCP434187	VCP396382	---	---
Sample Date	05 Feb 2024	09 Oct 2023	---	---
Machine Hours	11725	11163	---	---
Oil Hours	500	2000	---	---
Oil Changed	Not Chngd	Changed	---	---
Sample Status	NORMAL	NORMAL	---	---

## ALTA EQUIPMENT COMPANY

1035 WYLIE DRIVE  
BLOOMINGTON, IL  
US 61705

Contact: JUSTIN PERRY  
justin.perry@altg.com  
T: (309)533-9285

F:



## OIL CONDITION

Visc @ 40°C	cSt	█ 142	█ 148	---	---
-------------	-----	-------	-------	-----	-----



## CONTAMINATION

Water	%	NEG	NEG	---	---
Silicon	ppm	█ 5	█ 3	---	---
Sodium	ppm	█ 0	█ 0	---	---
Potassium	ppm	█ <1	█ 0	---	---

## 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.



## WEAR METALS

Iron	ppm	█ 63	█ 19	---	---
Copper	ppm	█ 6	█ 25	---	---
Lead	ppm	█ 0	█ 0	---	---
Tin	ppm	█ 0	█ 0	---	---
Aluminum	ppm	█ 2	█ 0	---	---
Chromium	ppm	█ <1	█ 0	---	---
Molybdenum	ppm	█ 0	█ 0	---	---
Nickel	ppm	█ 0	█ 0	---	---
Titanium	ppm	0	0	---	---
Silver	ppm	0	0	---	---
Manganese	ppm	█ <1	█ <1	---	---
Vanadium	ppm	0	0	---	---



## ADDITIVES

Calcium	ppm	█ 20	█ 18	---	---
Magnesium	ppm	█ 16	█ 9	---	---
Zinc	ppm	█ 29	█ 26	---	---
Phosphorus	ppm	1685	1889	---	---
Barium	ppm	█ 1	█ <1	---	---
Boron	ppm	█ 186	█ 110	---	---

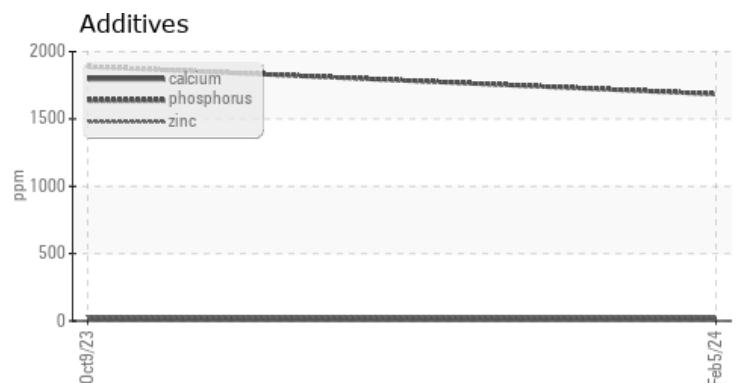
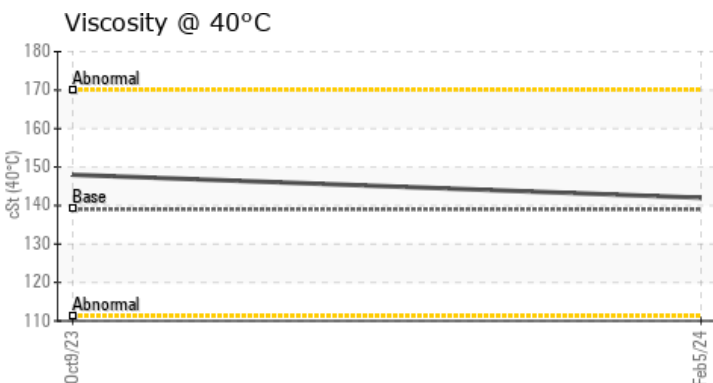
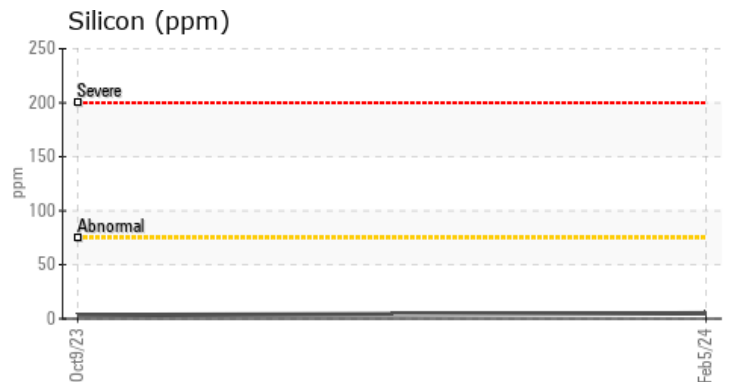
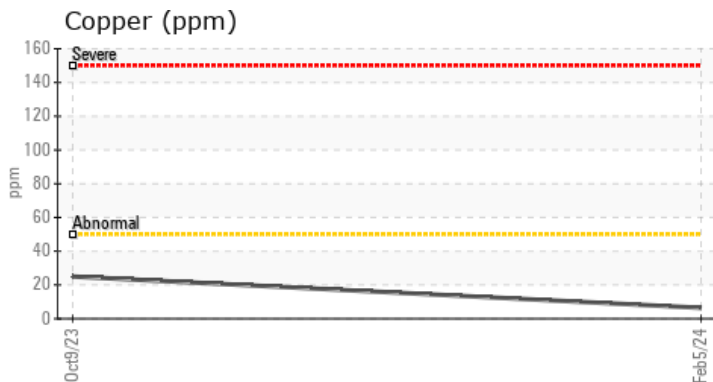
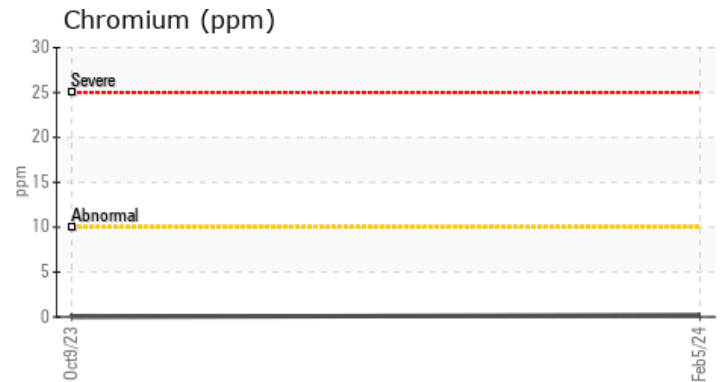
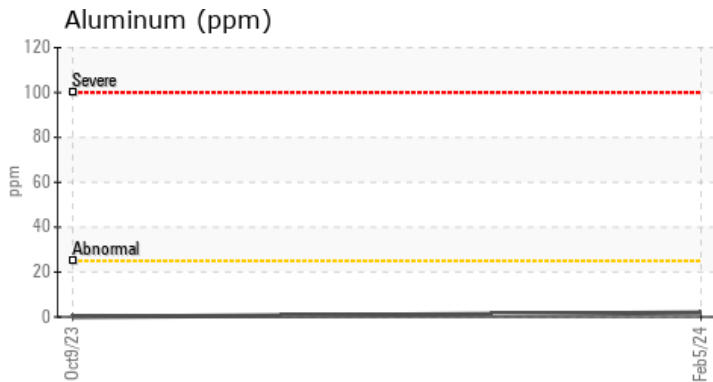
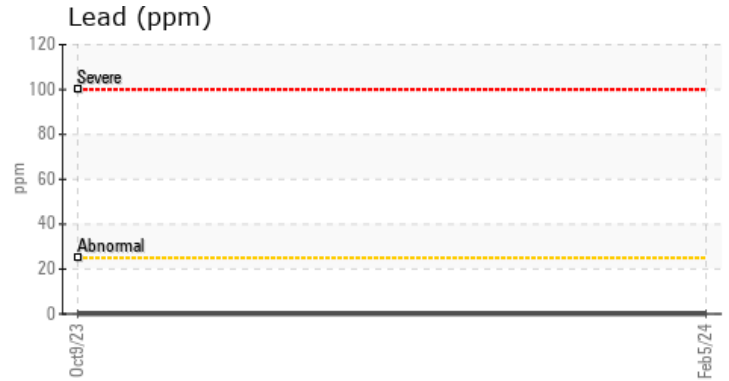
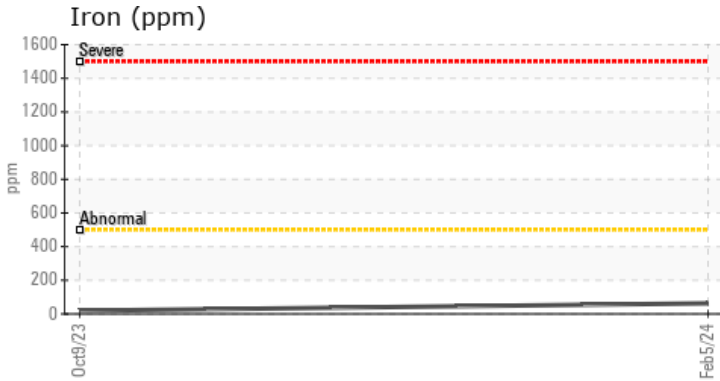
**Depot:** VOLVO5054  
**Unique No:** 10888737  
**Signed:** Wes Davis  
**Report Date:** 22 Feb 2024



# CONSTRUCTION EQUIPMENT



## GRAPHS





# CONSTRUCTION EQUIPMENT

SWA474720-1 SENNEBOGEN 835 835.0.2487 - REAR LEFT FINAL DRIVE



**Sample No:** VCP431479  
**Oil Type:** VOLVO PREMIUM GEAR OIL 80W-90 GL-5  
**Job No:** SWA474720-1



## SAMPLE INFORMATION

Sample Number	VCP431479	VCP396376	---	---
Sample Date	05 Feb 2024	09 Oct 2023	---	---
Machine Hours	11725	11163	---	---
Oil Hours	500	2000	---	---
Oil Changed	Not Chngd	Changed	---	---
Sample Status	NORMAL	NORMAL	---	---

## ALTA EQUIPMENT COMPANY

1035 WYLIE DRIVE  
BLOOMINGTON, IL  
US 61705

Contact: JUSTIN PERRY  
justin.perry@altg.com  
T: (309)533-9285

F:



## OIL CONDITION

Visc @ 40°C	cSt	█ 148	█ 148	---	---
-------------	-----	-------	-------	-----	-----



## CONTAMINATION

Water	%	NEG	NEG	---	---
Silicon	ppm	█ 4	█ 3	---	---
Sodium	ppm	█ 0	█ 0	---	---
Potassium	ppm	█ <1	█ 0	---	---

## 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.



## WEAR METALS

Iron	ppm	█ 31	█ 20	---	---
Copper	ppm	█ 31	█ 24	---	---
Lead	ppm	█ 0	█ 0	---	---
Tin	ppm	█ 0	█ 0	---	---
Aluminum	ppm	█ 2	█ 0	---	---
Chromium	ppm	█ <1	█ 0	---	---
Molybdenum	ppm	█ 0	█ 0	---	---
Nickel	ppm	█ 0	█ 0	---	---
Titanium	ppm	0	0	---	---
Silver	ppm	0	0	---	---
Manganese	ppm	█ 0	█ <1	---	---
Vanadium	ppm	0	0	---	---



## ADDITIVES

Calcium	ppm	█ 16	█ 18	---	---
Magnesium	ppm	█ 8	█ 10	---	---
Zinc	ppm	█ 29	█ 26	---	---
Phosphorus	ppm	1644	1871	---	---
Barium	ppm	█ <1	█ <1	---	---
Boron	ppm	█ 147	█ 106	---	---

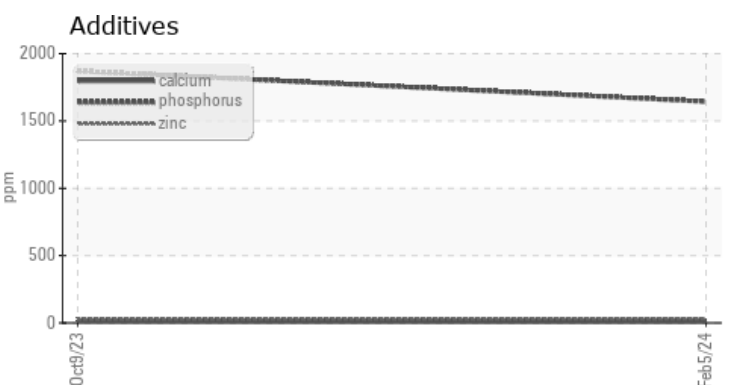
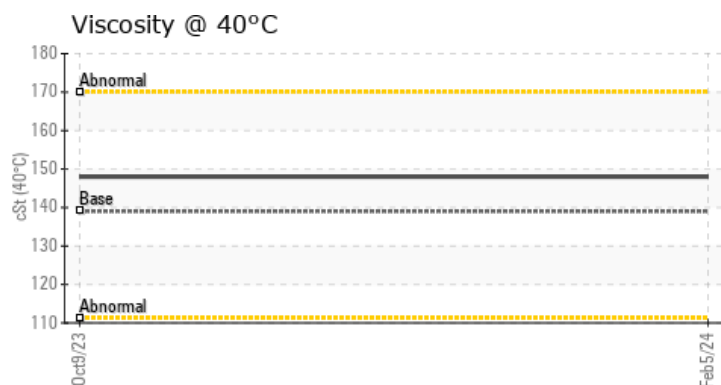
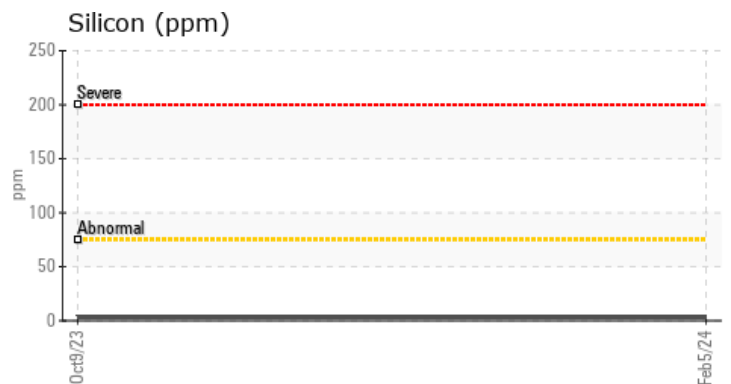
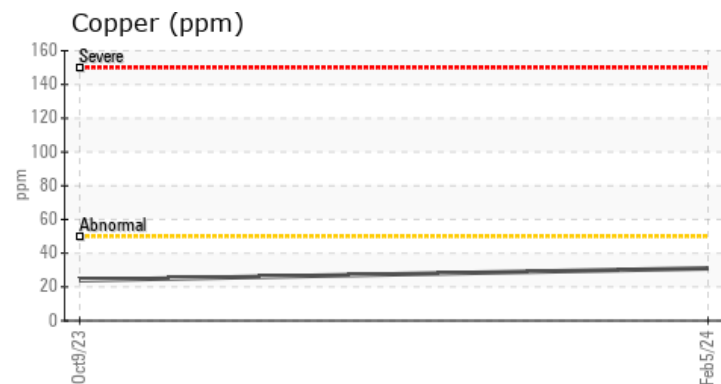
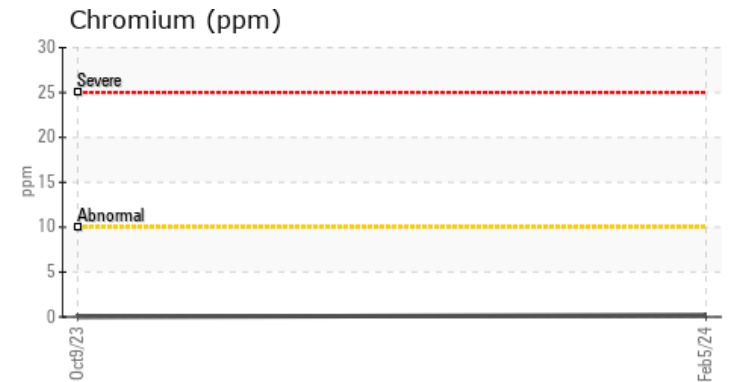
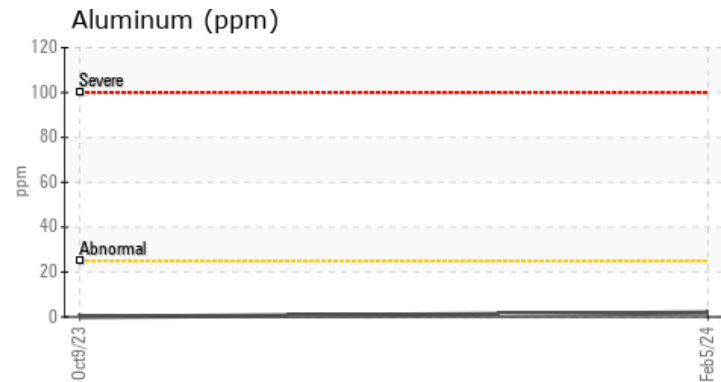
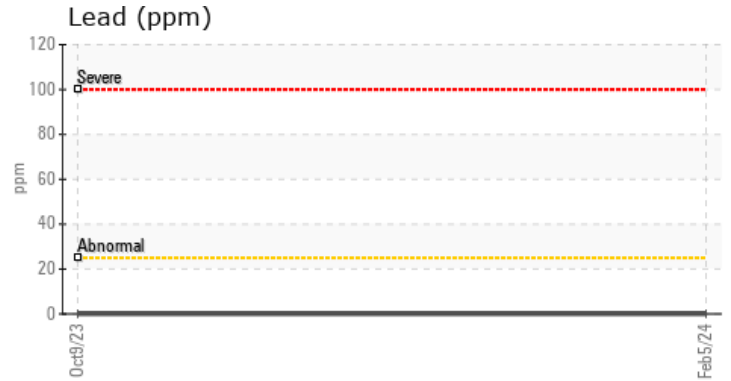
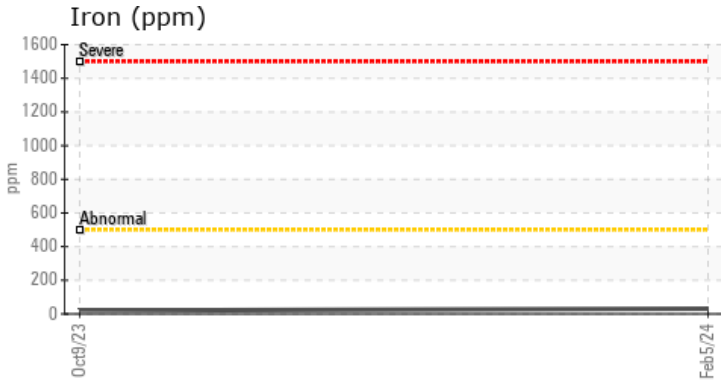
**Depot:** VOLVO5054  
**Unique No:** 10888741  
**Signed:** Wes Davis  
**Report Date:** 22 Feb 2024



# CONSTRUCTION EQUIPMENT



## GRAPHS



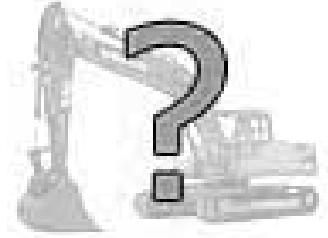


# CONSTRUCTION EQUIPMENT

SWA474120-1 SENNEBOGEN 835 835.0.2487 - REAR AXLE



**Sample No:** VCP431480  
**Oil Type:** VOLVO PREMIUM GEAR OIL 80W-90 GL-5  
**Job No:** SWA474120-1



## SAMPLE INFORMATION

Sample Number	<b>VCP431480</b>	VCP396384	---	---
Sample Date	<b>05 Feb 2024</b>	09 Oct 2023	---	---
Machine Hours	<b>11725</b>	11163	---	---
Oil Hours	<b>500</b>	2000	---	---
Oil Changed	<b>Not Chngd</b>	Changed	---	---
Sample Status	<b>NORMAL</b>	NORMAL	---	---

### ALTA EQUIPMENT COMPANY

1035 WYLIE DRIVE  
 BLOOMINGTON, IL  
 US 61705

Contact: JUSTIN PERRY  
 justin.perry@altg.com  
 T: (309)533-9285  
 F:



## OIL CONDITION

Visc @ 40°C	cSt	<b>148</b>	149	---	---
-------------	-----	------------	-----	-----	-----



## CONTAMINATION

Water	%	<b>NEG</b>	NEG	---	---
Silicon	ppm	<b>3</b>	4	---	---
Sodium	ppm	<b>0</b>	0	---	---
Potassium	ppm	<b>1</b>	0	---	---



## WEAR METALS

Iron	ppm	<b>25</b>	21	---	---
Copper	ppm	<b>33</b>	28	---	---
Lead	ppm	<b>0</b>	0	---	---
Tin	ppm	<b>0</b>	0	---	---
Aluminum	ppm	<b>2</b>	0	---	---
Chromium	ppm	<b>&lt;1</b>	0	---	---
Molybdenum	ppm	<b>0</b>	0	---	---
Nickel	ppm	<b>0</b>	0	---	---
Titanium	ppm	<b>0</b>	0	---	---
Silver	ppm	<b>0</b>	0	---	---
Manganese	ppm	<b>0</b>	<1	---	---
Vanadium	ppm	<b>0</b>	0	---	---



## ADDITIVES

Calcium	ppm	<b>19</b>	21	---	---
Magnesium	ppm	<b>8</b>	11	---	---
Zinc	ppm	<b>30</b>	31	---	---
Phosphorus	ppm	<b>1694</b>	1991	---	---
Barium	ppm	<b>&lt;1</b>	<1	---	---
Boron	ppm	<b>146</b>	120	---	---

### 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.

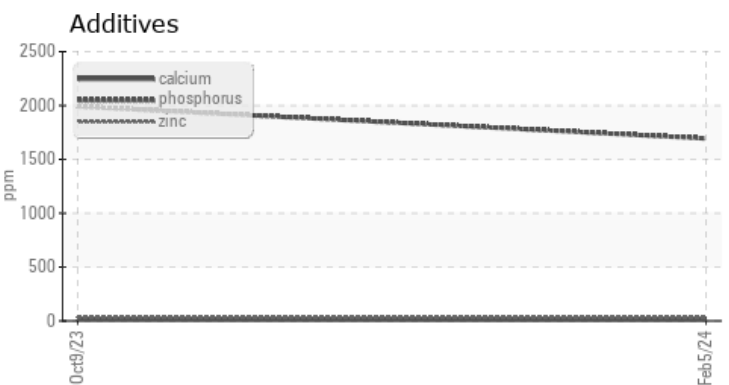
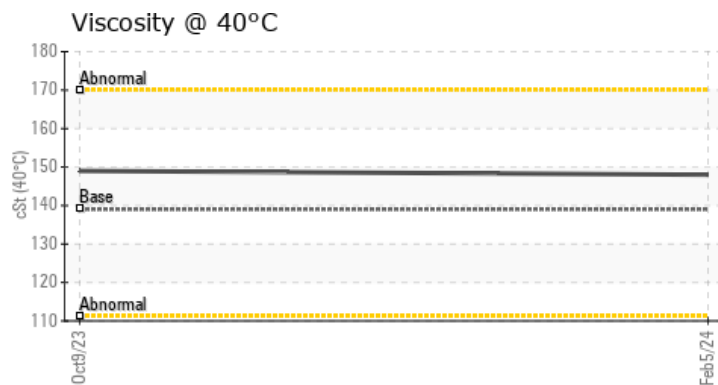
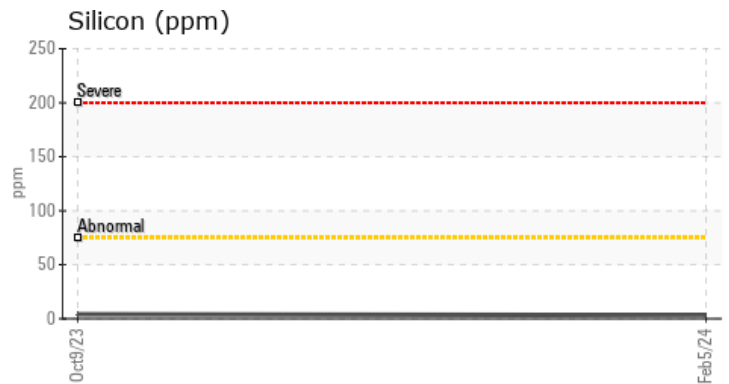
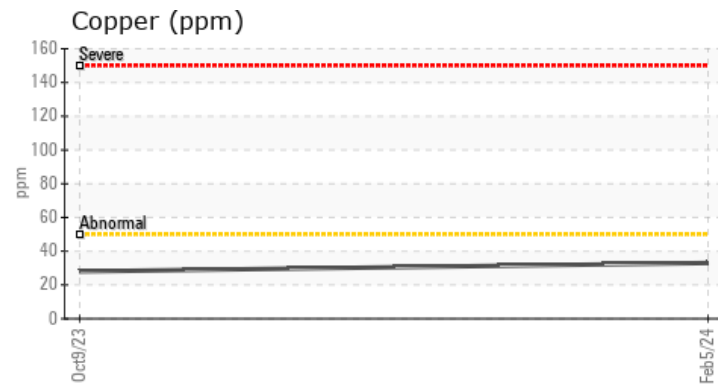
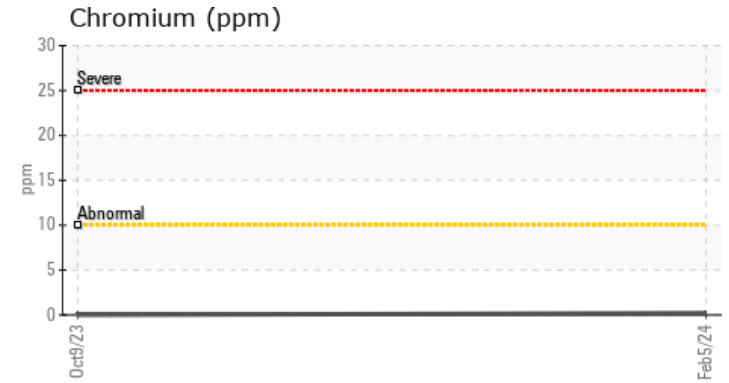
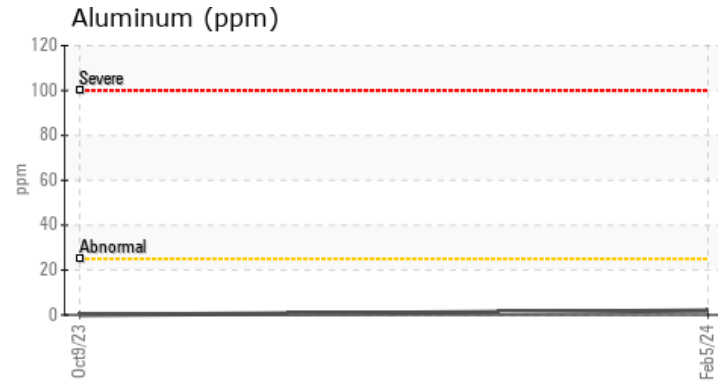
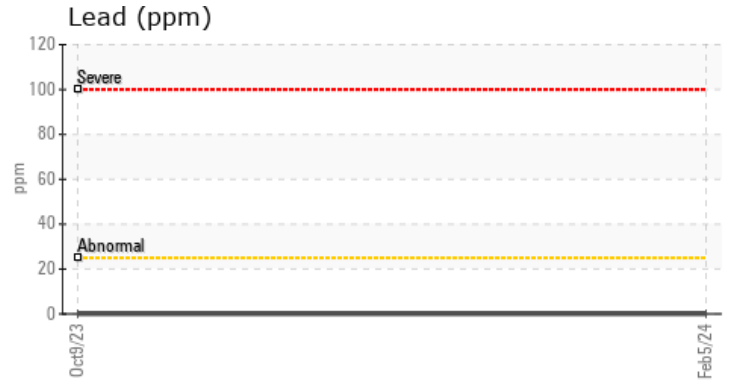
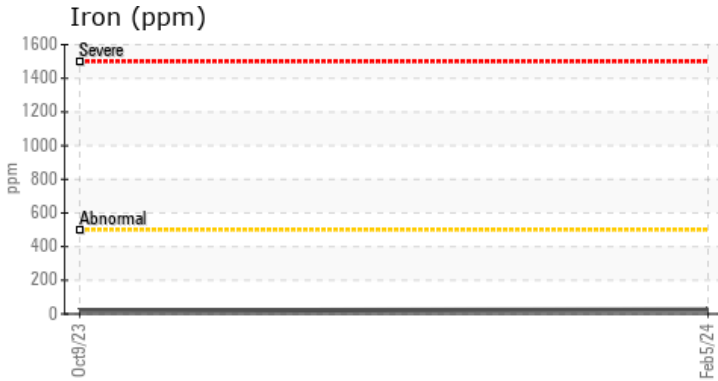
**Depot:** VOLVO5054  
**Unique No:** 10888740  
**Signed:** Wes Davis  
**Report Date:** 22 Feb 2024



# CONSTRUCTION EQUIPMENT



## GRAPHS



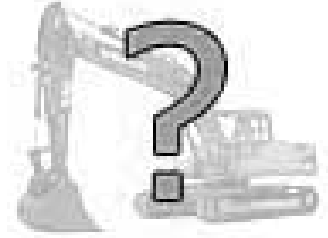


# CONSTRUCTION EQUIPMENT

SWA474120-1 SENNEBOGEN 835 835.0.2487 - REAR RIGHT FINAL DRIVE



**Sample No:** VCP434190  
**Oil Type:** VOLVO PREMIUM GEAR OIL 80W-90 GL-5  
**Job No:** SWA474120-1



## SAMPLE INFORMATION

Sample Number	<b>VCP434190</b>	VCP396364	---	---
Sample Date	<b>05 Feb 2024</b>	09 Oct 2023	---	---
Machine Hours	<b>11725</b>	11163	---	---
Oil Hours	<b>500</b>	2000	---	---
Oil Changed	<b>Not Chngd</b>	Changed	---	---
Sample Status	<b>NORMAL</b>	NORMAL	---	---

### ALTA EQUIPMENT COMPANY

1035 WYLIE DRIVE  
 BLOOMINGTON, IL  
 US 61705

Contact: JUSTIN PERRY  
 justin.perry@altg.com  
 T: (309)533-9285  
 F:



## OIL CONDITION

Visc @ 40°C	cSt	<b>149</b>	143	---	---
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## CONTAMINATION

Water	%	<b>NEG</b>	NEG	---	---
Silicon	ppm	<b>4</b>	5	---	---
Sodium	ppm	<b>0</b>	0	---	---
Potassium	ppm	<b>&lt;1</b>	0	---	---



## WEAR METALS

Iron	ppm	<b>28</b>	62	---	---
Copper	ppm	<b>32</b>	5	---	---
Lead	ppm	<b>0</b>	0	---	---
Tin	ppm	<b>0</b>	0	---	---
Aluminum	ppm	<b>2</b>	<1	---	---
Chromium	ppm	<b>&lt;1</b>	<1	---	---
Molybdenum	ppm	<b>0</b>	0	---	---
Nickel	ppm	<b>0</b>	0	---	---
Titanium	ppm	<b>0</b>	0	---	---
Silver	ppm	<b>0</b>	0	---	---
Manganese	ppm	<b>0</b>	1	---	---
Vanadium	ppm	<b>0</b>	0	---	---



## ADDITIVES

Calcium	ppm	<b>17</b>	29	---	---
Magnesium	ppm	<b>8</b>	27	---	---
Zinc	ppm	<b>28</b>	37	---	---
Phosphorus	ppm	<b>1727</b>	1836	---	---
Barium	ppm	<b>&lt;1</b>	2	---	---
Boron	ppm	<b>149</b>	132	---	---

### 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:** 10888739  
**Signed:** Wes Davis  
**Report Date:** 22 Feb 2024



# CONSTRUCTION EQUIPMENT



## VOLVO GRAPHS

