



# CONSTRUCTION EQUIPMENT

497550-10 ALTER SENNEBOGEN 835 835.0.2949 - COOLANT



**Sample No:** VCP434780  
**Oil Type:** CONVENTIONAL COOLANT  
**Job No:** 497550-10 ALTER



## SAMPLE INFORMATION

Sample Number	VCP434780	---	---	---
Sample Date	01 Mar 2024	---	---	---
Machine Hours	5345	---	---	---
Sample Status	NORMAL	---	---	---



## COOLANT CONDITION

pH	Scale 0-14	■ 7.90	---	---	---
Reserve Alkalinity	Scale 0-20	---	---	---	---
Nitrites	ppm	■ NT	---	---	---
Percentage Glycol	%	■ 56.7	---	---	---
Freezing Point	°C	■ -50	---	---	---



## CONTAMINATION

Coolant Appearance	normal	---	---	---
Coolant Color	Black	---	---	---

### ALTA EQUIPMENT COMPANY

1035 WYLIE DRIVE  
BLOOMINGTON, IL  
US 61705

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

F:

### 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.

**Depot:** VOLVO5054  
**Unique No:** 10923564  
**Signed:** Jonathan Hester  
**Report Date:** 13 Mar 2024



# CONSTRUCTION EQUIPMENT

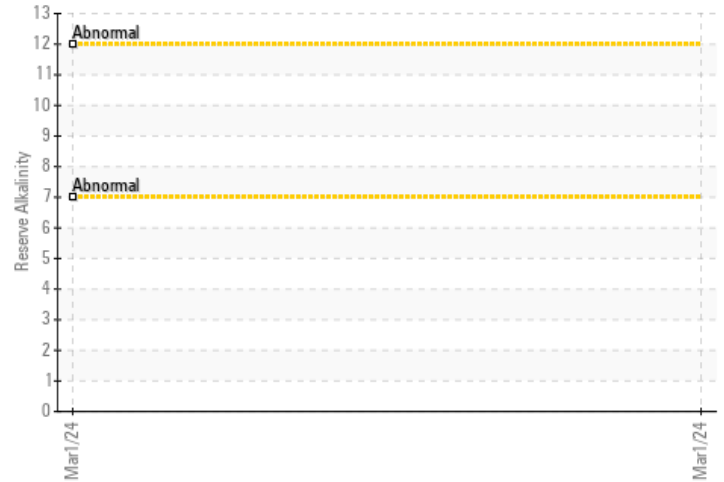


## GRAPHS

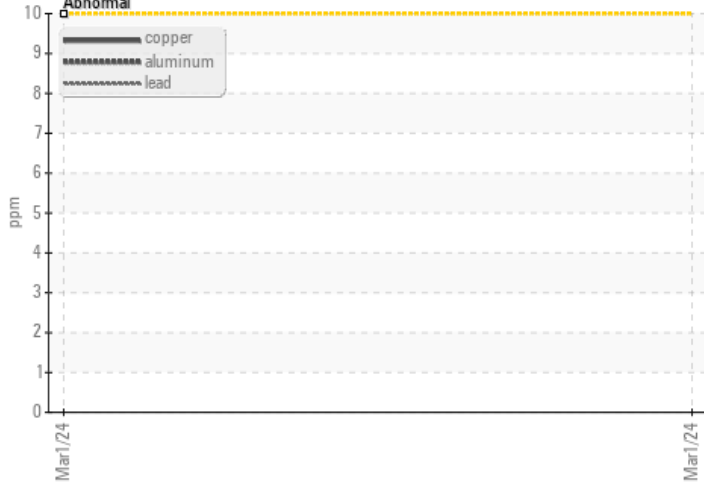
### Iron/Tin/Silver



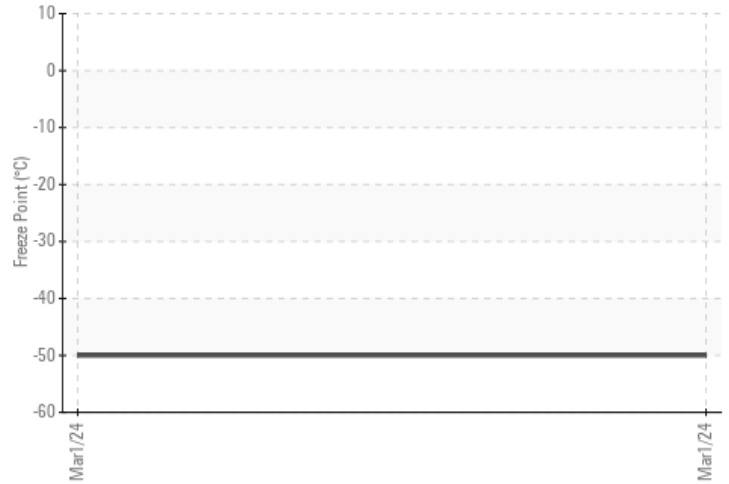
### Reserve Alkalinity



### Copper/Aluminum/Lead



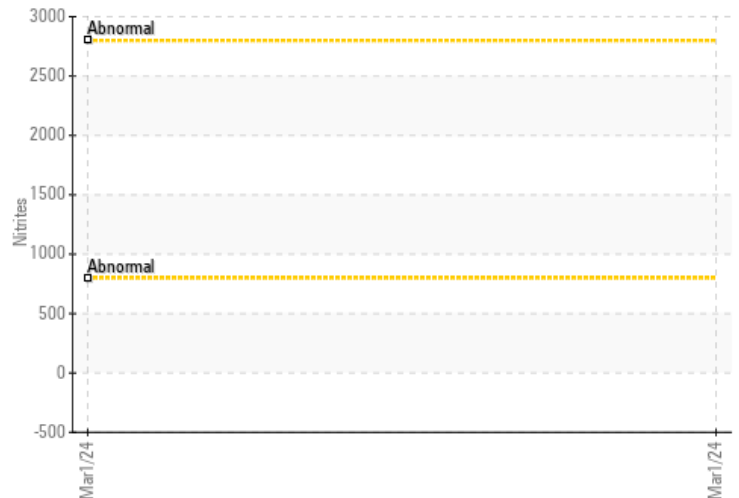
### Freeze Point



### pH



### Nitrites





# CONSTRUCTION EQUIPMENT

497550-10 ALTER PEOR SENNEBOGEN 835 835.0.2949 - DIESEL ENGINE



**Sample No:** VCP434632  
**Oil Type:** VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3  
**Job No:** 497550-10 ALTER PEOR



## SAMPLE INFORMATION

Sample Number	<b>VCP434632</b>	VCP396390	VCP363692	---
Sample Date	<b>01 Mar 2024</b>	10 Oct 2023	01 Nov 2022	---
Machine Hours	<b>5345</b>	4362	1872	---
Oil Hours	<b>1000</b>	500	500	---
Oil Changed	<b>Changed</b>	Changed	Changed	---
Sample Status	<b>SEVERE</b>	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	<b>▲ 10.7</b>	■ 13.6	■ 13.1	---
Base Number (BN)	mg KOH/g	<b>■ 4.1</b>	■ 5.7	■ 10.9	---
Oxidation (PA)	%	<b>141</b>	107	65	---

### Diagnosis

We advise that you check the fuel injection system. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition. All component wear rates are normal. There is a high amount of fuel present in the oil. Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.



## CONTAMINATION

Water	%	<b>NEG</b>	NEG	NEG	---
Soot %	%	<b>■ 0.2</b>	■ 0.4	■ 0.1	---
Nitration (PA)	%	<b>88</b>	99	63	---
Sulfation (PA)	%	<b>78</b>	73	57	---
Glycol	%	<b>NEG</b>	NEG	NEG	---
Fuel	%	<b>▲ 9.7</b>	<1.0	<1.0	---
Silicon	ppm	<b>■ 4</b>	■ 6	■ 3	---
Sodium	ppm	<b>■ &lt;1</b>	■ 1	■ 3	---
Potassium	ppm	<b>■ 6</b>	■ 22	■ 8	---



## WEAR METALS

Iron	ppm	<b>■ 26</b>	■ 73	■ 5	---
Copper	ppm	<b>■ 2</b>	■ 2	■ 1	---
Lead	ppm	<b>■ &lt;1</b>	■ 0	■ 0	---
Tin	ppm	<b>■ &lt;1</b>	■ <1	■ <1	---
Aluminum	ppm	<b>■ 3</b>	■ 8	■ 2	---
Chromium	ppm	<b>■ 1</b>	■ 3	■ <1	---
Molybdenum	ppm	<b>■ 58</b>	■ 63	■ 58	---
Nickel	ppm	<b>■ &lt;1</b>	■ <1	■ 2	---
Titanium	ppm	<b>&lt;1</b>	0	0	---
Silver	ppm	<b>■ &lt;1</b>	■ 0	■ <1	---
Manganese	ppm	<b>■ &lt;1</b>	■ <1	■ <1	---
Vanadium	ppm	<b>&lt;1</b>	0	<1	---



## ADDITIVES

Calcium	ppm	<b>1006</b>	■ 1227	■ 1136	---
Magnesium	ppm	<b>859</b>	■ 909	■ 942	---
Zinc	ppm	<b>■ 1095</b>	■ 1343	■ 1270	---
Phosphorus	ppm	<b>■ 919</b>	■ 1062	■ 1028	---
Barium	ppm	<b>■ 0</b>	■ 1	■ 0	---
Boron	ppm	<b>■ 0</b>	■ 6	■ 4	---

**Depot:** VOLVO5054  
**Unique No:** 10922808  
**Signed:** Sean Felton  
**Report Date:** 13 Mar 2024

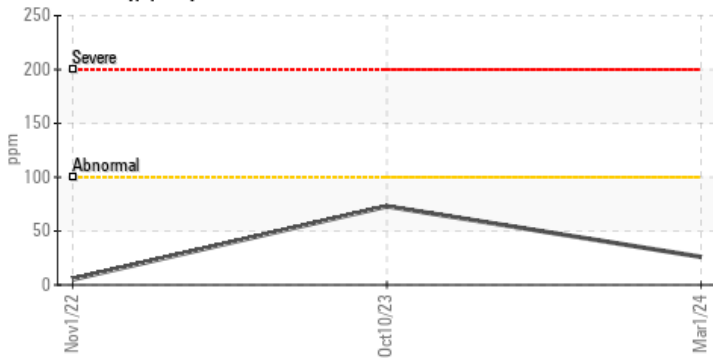


# CONSTRUCTION EQUIPMENT

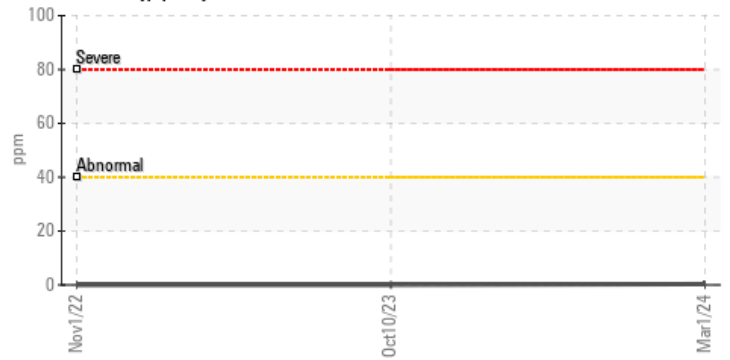


## GRAPHS

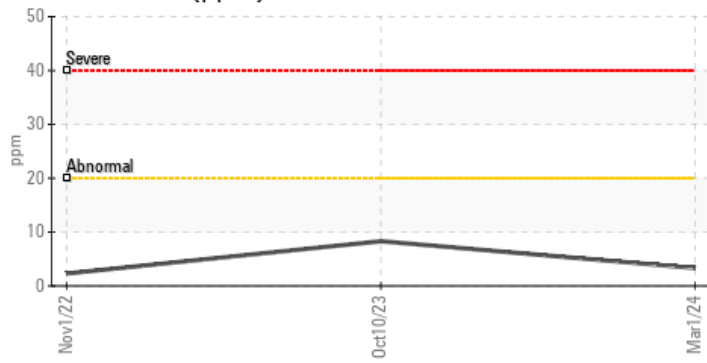
### Iron (ppm)



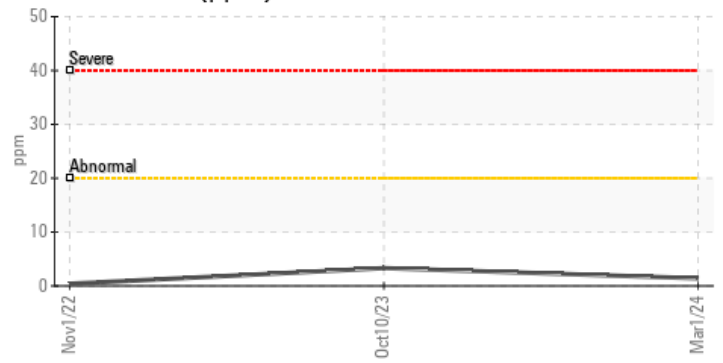
### Lead (ppm)



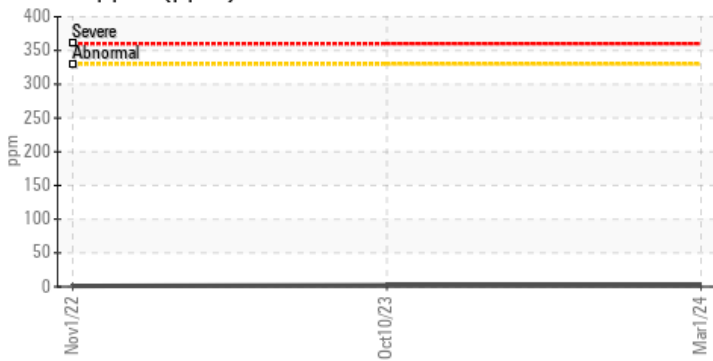
### Aluminum (ppm)



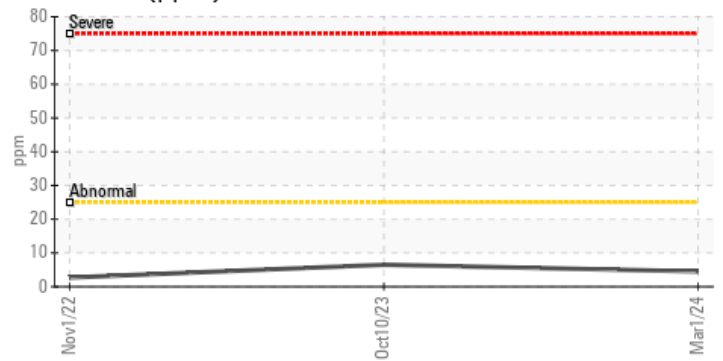
### Chromium (ppm)



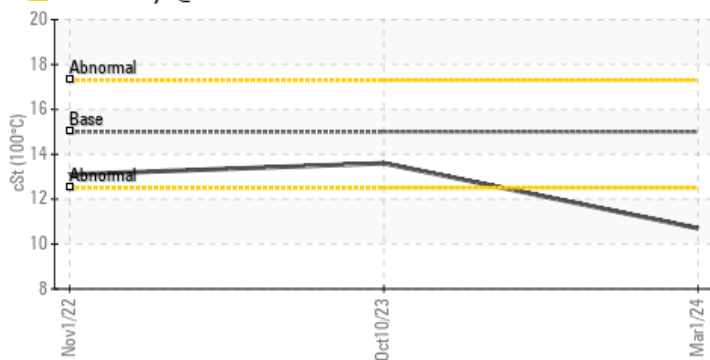
### Copper (ppm)



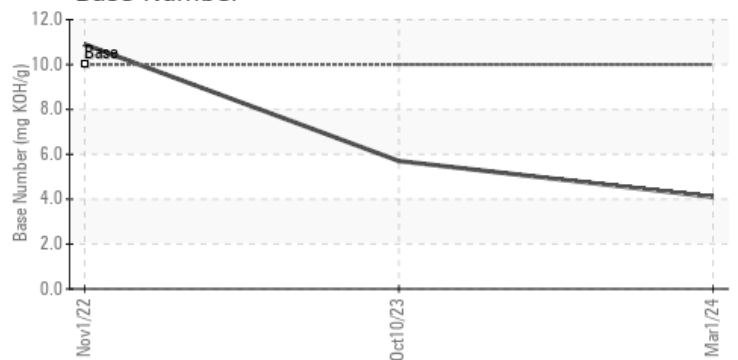
### Silicon (ppm)



### ▲ Viscosity @ 100°C



### Base Number



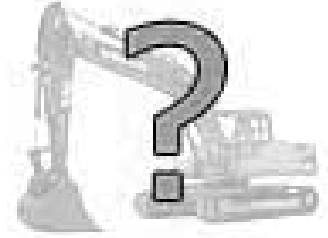


# CONSTRUCTION EQUIPMENT

497550-10 ALTER SENNEBOGEN 835 835.0.2949 - TRANSMISSION



**Sample No:** VCP434948  
**Oil Type:** VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3  
**Job No:** 497550-10 ALTER



## SAMPLE INFORMATION

Sample Number	VCP434948	VCP367853	---	---
Sample Date	01 Mar 2024	10 Oct 2023	---	---
Machine Hours	5345	4362	---	---
Oil Hours	1000	2000	---	---
Oil Changed	Changed	Changed	---	---
Sample Status	NORMAL	ABNORMAL	---	---

### ALTA EQUIPMENT COMPANY

1035 WYLIE DRIVE  
 BLOOMINGTON, IL  
 US 61705

Contact: MIKE MARTIN  
 mike.martin@altaequipment.com

T:  
 F:



## OIL CONDITION

Visc @ 40°C	cSt	67.0	66.1	---	---
-------------	-----	------	------	-----	-----



## CONTAMINATION

Water	%	NEG	NEG	---	---
Silicon	ppm	8	6	---	---
Sodium	ppm	5	9	---	---
Potassium	ppm	2	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	43	45	---	---
Copper	ppm	40	51	---	---
Lead	ppm	<1	0	---	---
Tin	ppm	2	2	---	---
Aluminum	ppm	2	2	---	---
Chromium	ppm	<1	<1	---	---
Molybdenum	ppm	45	27	---	---
Nickel	ppm	0	0	---	---
Titanium	ppm	0	0	---	---
Silver	ppm	0	0	---	---
Manganese	ppm	10	10	---	---
Vanadium	ppm	0	0	---	---



## ADDITIVES

Calcium	ppm	1197	1317	---	---
Magnesium	ppm	822	663	---	---
Zinc	ppm	1117	972	---	---
Phosphorus	ppm	1045	908	---	---
Barium	ppm	0	1	---	---
Boron	ppm	23	42	---	---

**Depot:** VOLVO5054  
**Unique No:** 10923526  
**Signed:** Jonathan Hester  
**Report Date:** 13 Mar 2024



# CONSTRUCTION EQUIPMENT

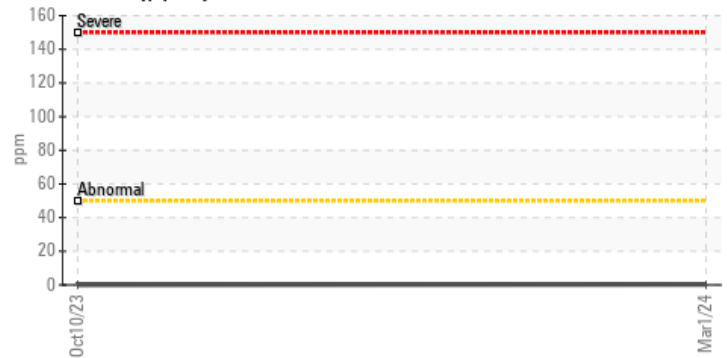


## GRAPHS

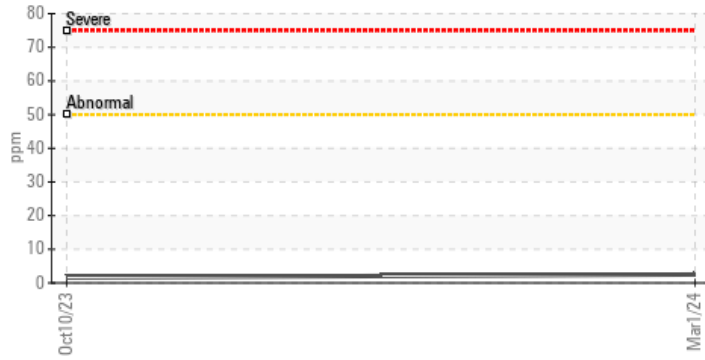
### Iron (ppm)



### Lead (ppm)



### Aluminum (ppm)



### Chromium (ppm)



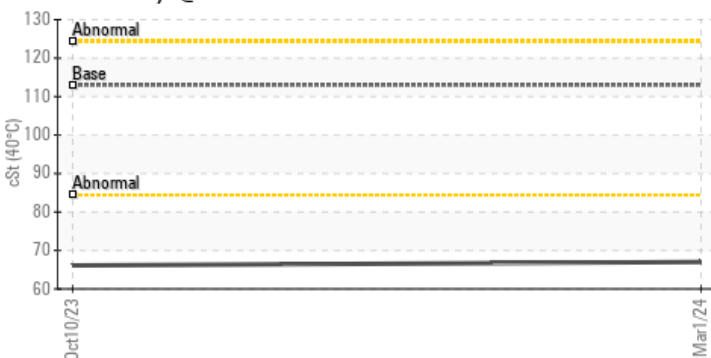
### Copper (ppm)



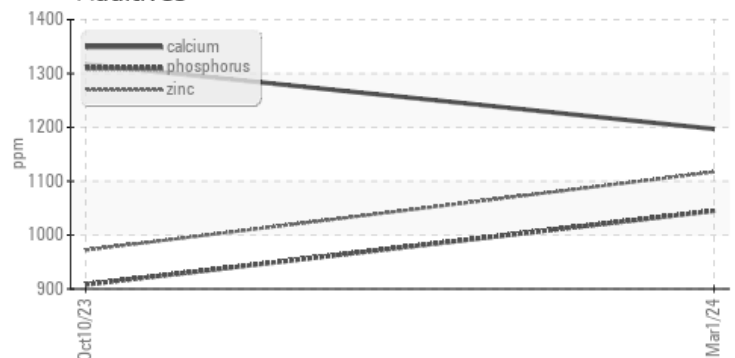
### Silicon (ppm)



### Viscosity @ 40°C



### Additives





# CONSTRUCTION EQUIPMENT

SWA497550-10 ALTER P SENNEBOGEN 835 835.0.2949 - HYDRAULIC SYSTEM



**Sample No:** VCP434446  
**Oil Type:** VOLVO SUPER HYDRAULIC OIL 46  
**Job No:** SWA497550-10 ALTER P



## SAMPLE INFORMATION

Sample Number	VCP434446	VCP396388	---	---
Sample Date	01 Mar 2024	10 Oct 2023	---	---
Machine Hours	5345	4362	---	---
Oil Hours	5345	4362	---	---
Oil Changed	Not Chngd	Changed	---	---
Sample Status	ATTENTION	ATTENTION	---	---

### 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	34.9	33.16	---	---
Acid Number (AN)	mg KOH/g	0.89	0.99	---	---

## CONTAMINATION

Water	%	NEG	NEG	---	---
Particles >4µm		2600	1049	---	---
Particles >6µm		811	370	---	---
Particles >14µm		55	51	---	---
ISO 4406:1999 (c)		19/17/13	17/16/13	---	---
Silicon	ppm	<1	2	---	---
Sodium	ppm	7	7	---	---
Potassium	ppm	0	0	---	---

### Diagnosis

No corrective action is recommended at this time. 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. Viscosity of sample indicates oil is within ISO 32 range, advise investigate. Confirm oil type. The AN level is acceptable for this fluid.

## WEAR METALS

Iron	ppm	5	7	---	---
Copper	ppm	2	2	---	---
Lead	ppm	0	<1	---	---
Tin	ppm	0	0	---	---
Aluminum	ppm	0	0	---	---
Chromium	ppm	<1	<1	---	---
Molybdenum	ppm	0	0	---	---
Nickel	ppm	0	0	---	---
Titanium	ppm	0	0	---	---
Silver	ppm	0	0	---	---
Manganese	ppm	0	0	---	---
Vanadium	ppm	0	0	---	---

## ADDITIVES

Calcium	ppm	714	1197	---	---
Magnesium	ppm	0	8	---	---
Zinc	ppm	478	679	---	---
Phosphorus	ppm	377	562	---	---
Barium	ppm	0	0	---	---
Boron	ppm	0	0	---	---

**Depot:** VOLVO5054  
**Unique No:** 10923026  
**Signed:** Don Baldrige  
**Report Date:** 12 Mar 2024

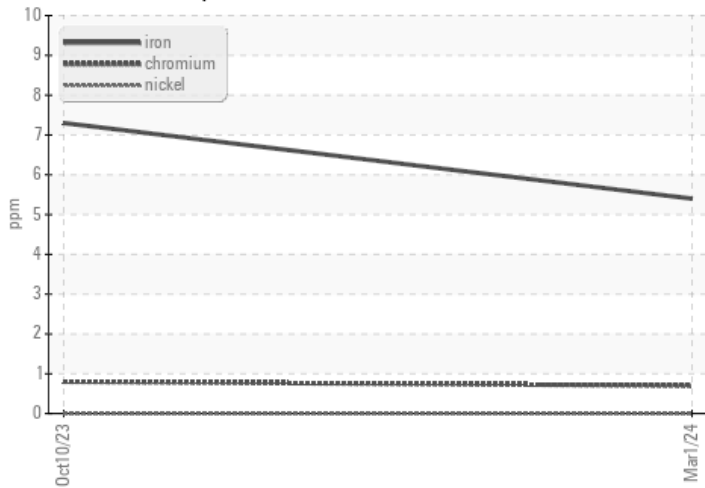


# CONSTRUCTION EQUIPMENT

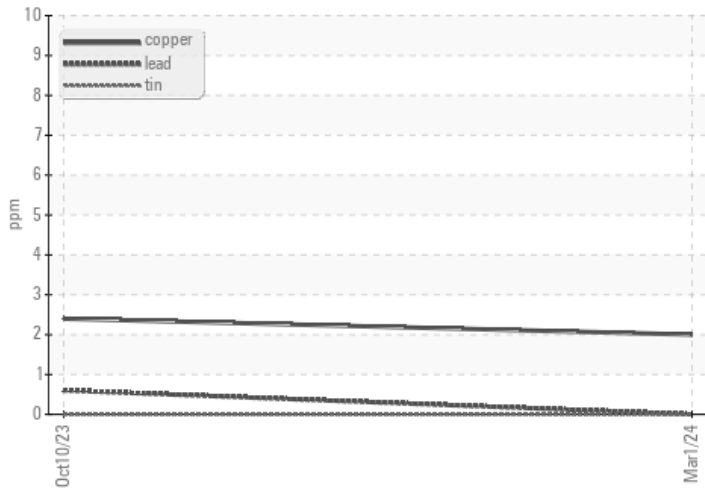


## GRAPHS

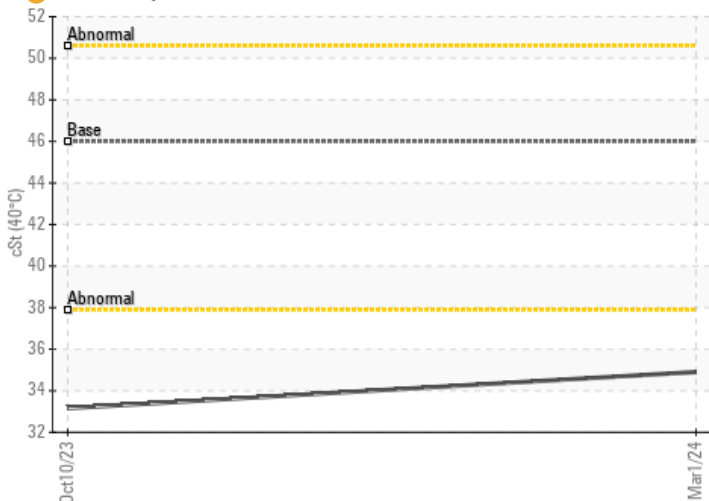
### Ferrous Alloys



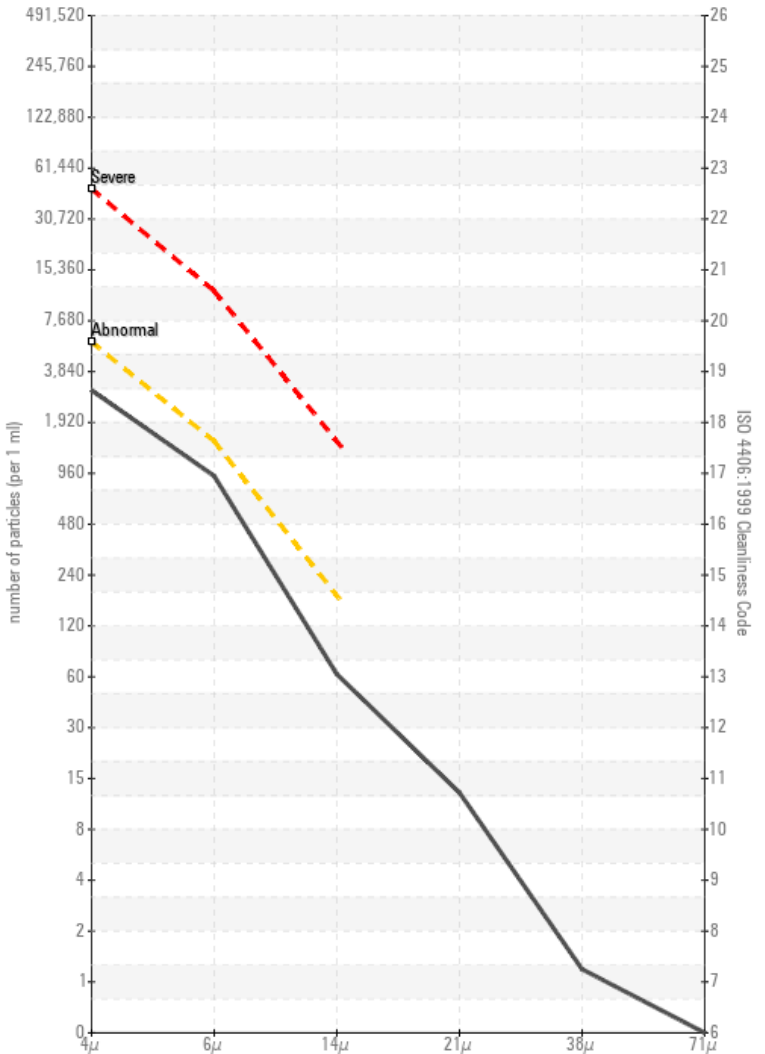
### Non-ferrous Metals



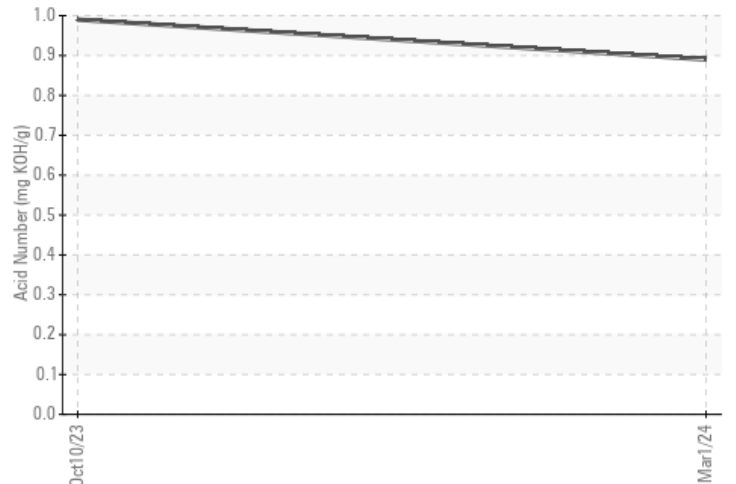
### Viscosity @ 40°C



### Particle Count



### Acid Number







# CONSTRUCTION EQUIPMENT

497550-10 ALTER SENNEBOGEN 835 835.0.2949 - LEFT SWING DRIVE



**Sample No:** VCP434158  
**Oil Type:** SHELL OMALA S4 GX 220  
**Job No:** 497550-10 ALTER



## SAMPLE INFORMATION

Sample Number	VCP434158	VCP396391	---	---
Sample Date	01 Mar 2024	10 Oct 2023	---	---
Machine Hours	5345	4362	---	---
Oil Hours	1000	2000	---	---
Oil Changed	Not Chngd	Changed	---	---
Sample Status	NORMAL	ABNORMAL	---	---

### ALTA EQUIPMENT COMPANY

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



## OIL CONDITION

Visc @ 40°C	cSt	236	215	---	---
-------------	-----	-----	-----	-----	-----



## CONTAMINATION

Water	%	NEG	0.366	---	---
Silicon	ppm	9	18	---	---
Sodium	ppm	3	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	262	470	---	---
Copper	ppm	63	101	---	---
Lead	ppm	<1	0	---	---
Tin	ppm	6	12	---	---
Aluminum	ppm	2	<1	---	---
Chromium	ppm	2	2	---	---
Molybdenum	ppm	<1	0	---	---
Nickel	ppm	2	2	---	---
Titanium	ppm	<1	0	---	---
Silver	ppm	0	0	---	---
Manganese	ppm	2	4	---	---
Vanadium	ppm	<1	0	---	---



## ADDITIVES

Calcium	ppm	9	9	---	---
Magnesium	ppm	1	4	---	---
Zinc	ppm	52	71	---	---
Phosphorus	ppm	407	341	---	---
Barium	ppm	0	2	---	---
Boron	ppm	16	5	---	---

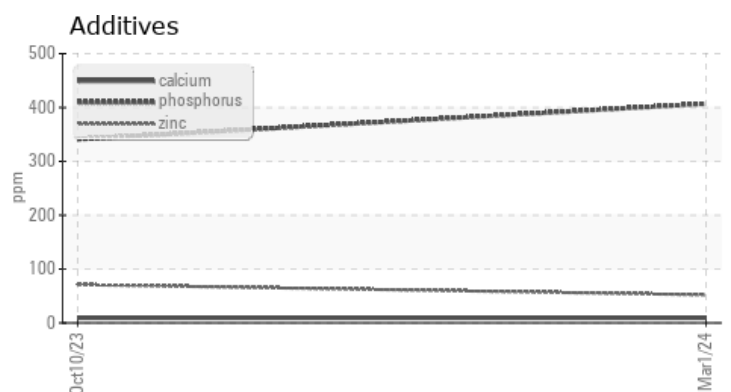
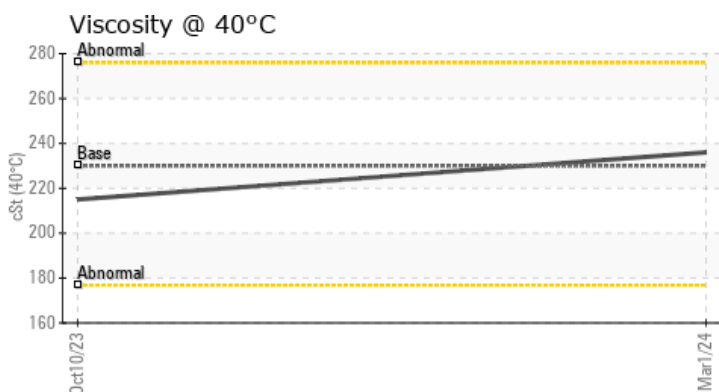
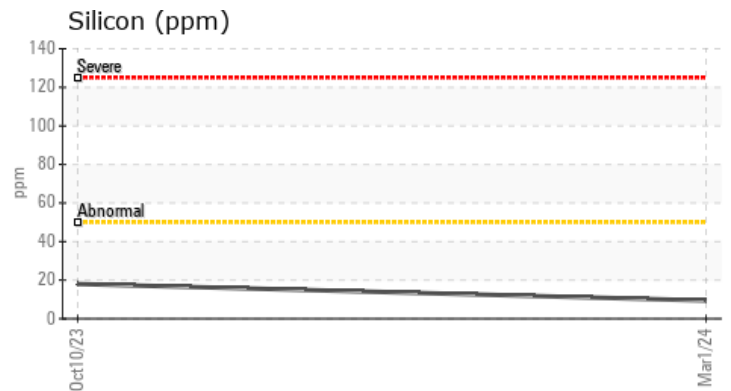
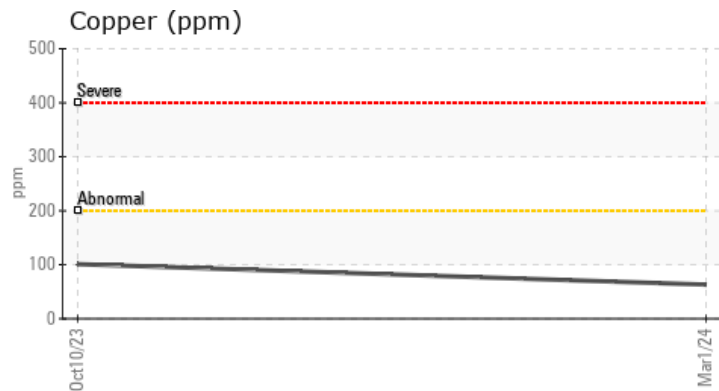
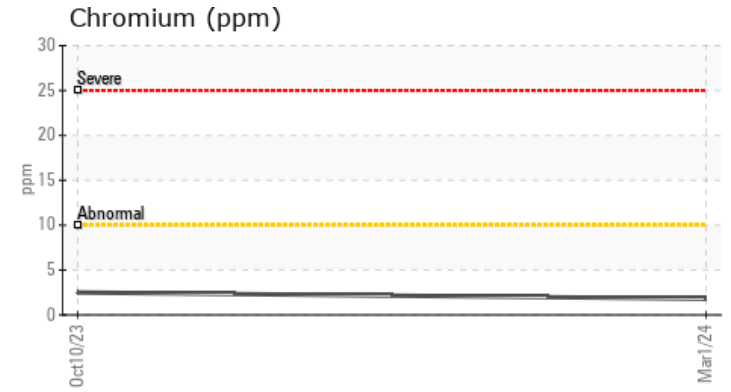
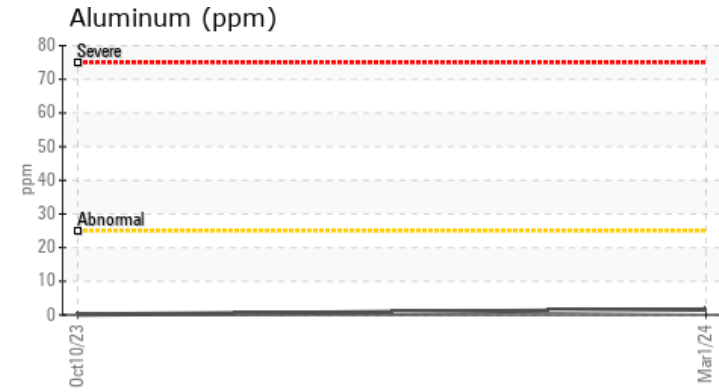
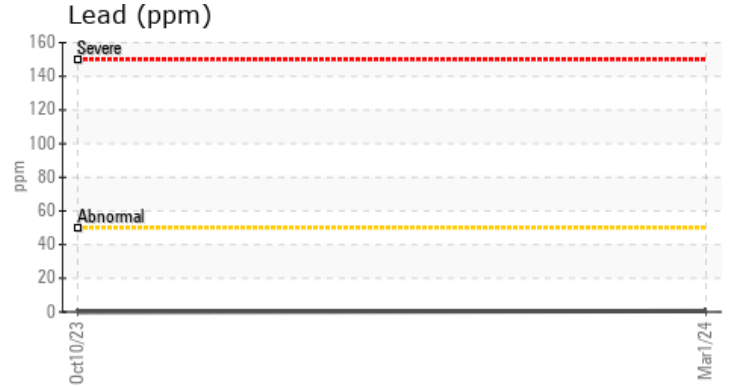
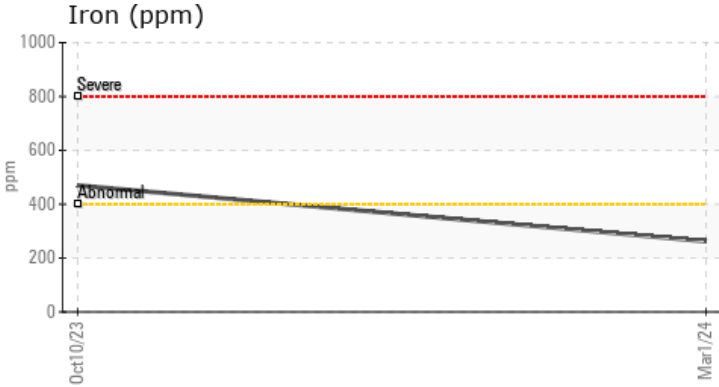
**Depot:** VOLVO5054  
**Unique No:** 10923484  
**Signed:** Wes Davis  
**Report Date:** 12 Mar 2024



# CONSTRUCTION EQUIPMENT



## VOLVO GRAPHS





# CONSTRUCTION EQUIPMENT

497550-10 ALTER SENNEBOGEN 835 835.0.2949 - RIGHT SWING DRIVE



**Sample No:** VCP434443  
**Oil Type:** SHELL OMALA S4 GX 220  
**Job No:** 497550-10 ALTER



## SAMPLE INFORMATION

Sample Number	VCP434443	VCP396387	---	---
Sample Date	01 Mar 2024	10 Oct 2023	---	---
Machine Hours	5345	4362	---	---
Oil Hours	1000	2000	---	---
Oil Changed	Not Chngd	Changed	---	---
Sample Status	NORMAL	ABNORMAL	---	---

## ALTA EQUIPMENT COMPANY

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



## OIL CONDITION

Visc @ 40°C	cSt	█ 224	█ 215	---	---
-------------	-----	-------	-------	-----	-----



## CONTAMINATION

Water	%	NEG	▲ 0.234	---	---
Silicon	ppm	█ 11	█ 17	---	---
Sodium	ppm	█ 2	█ <1	---	---
Potassium	ppm	█ 2	█ <1	---	---

## 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	█ 354	█ 344	---	---
Copper	ppm	█ 79	█ 92	---	---
Lead	ppm	█ <1	█ 0	---	---
Tin	ppm	█ 9	█ 12	---	---
Aluminum	ppm	█ 2	█ <1	---	---
Chromium	ppm	█ 2	█ 2	---	---
Molybdenum	ppm	█ <1	█ 0	---	---
Nickel	ppm	█ 1	█ <1	---	---
Titanium	ppm	<1	0	---	---
Silver	ppm	0	0	---	---
Manganese	ppm	█ 3	█ 3	---	---
Vanadium	ppm	0	0	---	---



## ADDITIVES

Calcium	ppm	█ 7	█ 8	---	---
Magnesium	ppm	█ <1	█ 3	---	---
Zinc	ppm	█ 53	█ 52	---	---
Phosphorus	ppm	█ 407	█ 329	---	---
Barium	ppm	█ 0	█ 1	---	---
Boron	ppm	█ 17	█ 3	---	---

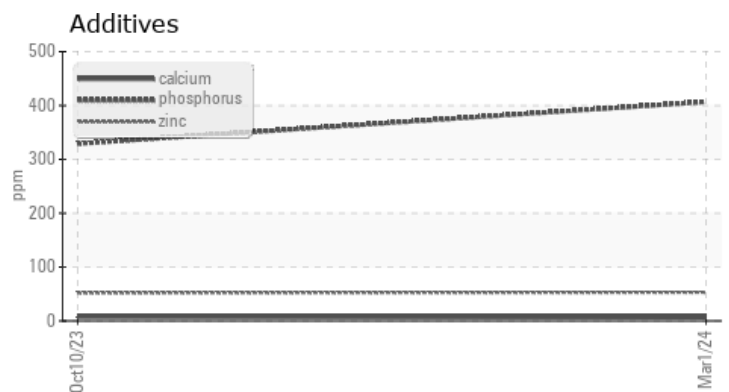
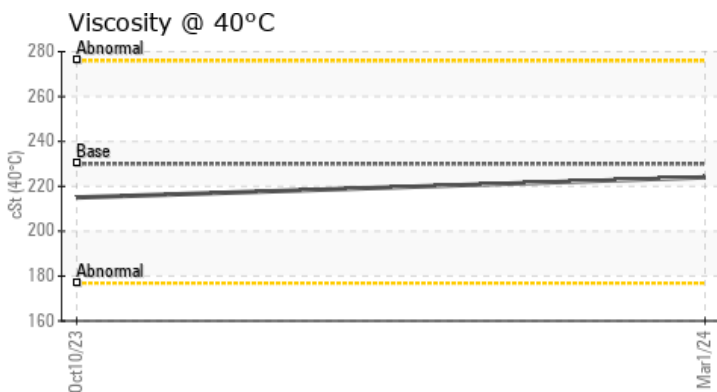
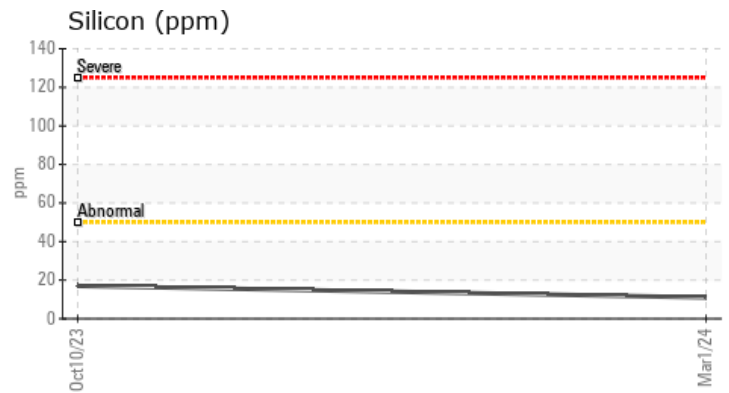
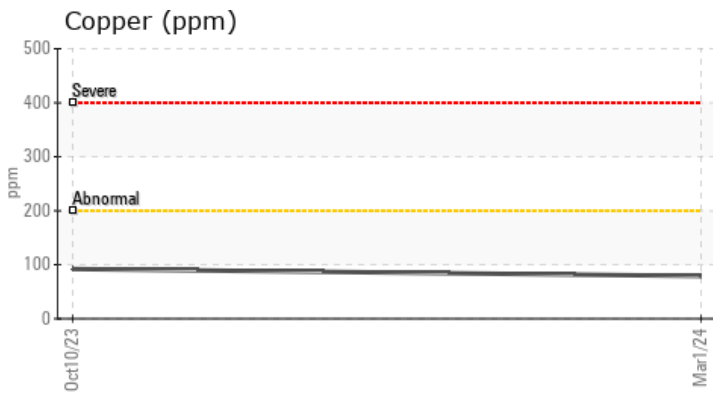
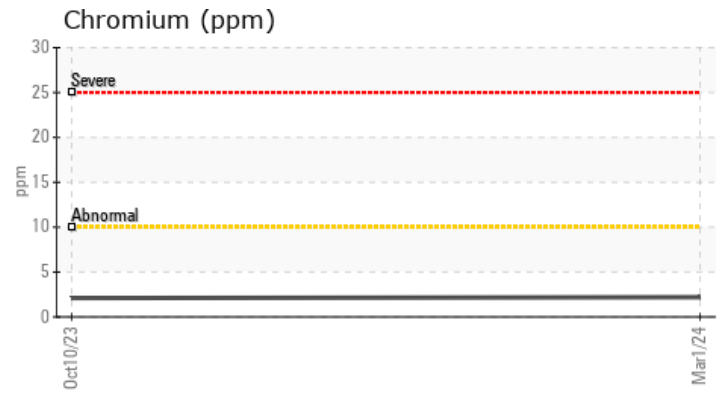
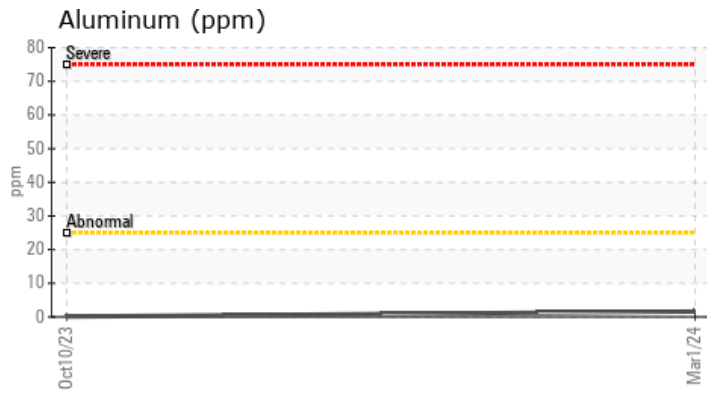
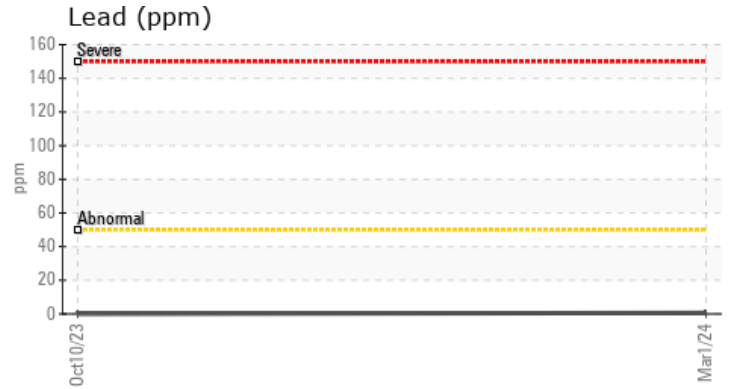
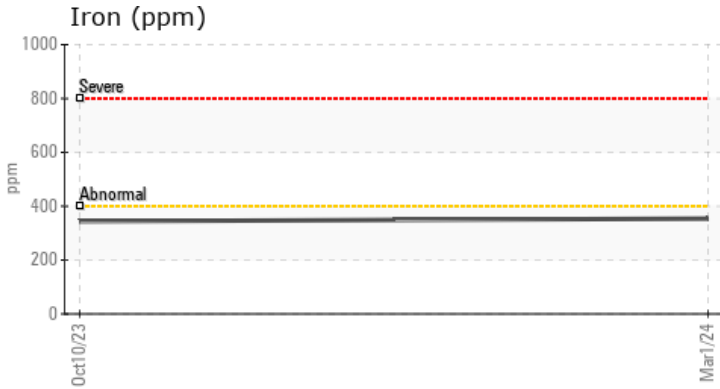
**Depot:** VOLVO5054  
**Unique No:** 10923485  
**Signed:** Don Baldrige  
**Report Date:** 13 Mar 2024



# CONSTRUCTION EQUIPMENT



## GRAPHS



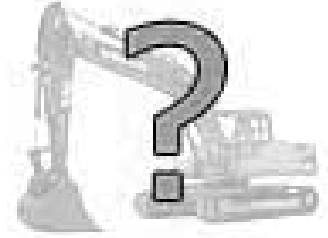


# CONSTRUCTION EQUIPMENT

497550-10 ALTER SENNEBOGEN 835 835.0.2949 - FRONT LEFT FINAL DRIVE



**Sample No:** VCP434983  
**Oil Type:** VOLVO PREMIUM GEAR OIL 80W-90 GL-5  
**Job No:** 497550-10 ALTER



## SAMPLE INFORMATION

Sample Number	<b>VCP434983</b>	VCP396392	VCP396389	VCP363694
Sample Date	<b>01 Mar 2024</b>	10 Oct 2023	10 Oct 2023	01 Nov 2022
Machine Hours	<b>5345</b>	4362	4362	1872
Oil Hours	<b>1000</b>	2000	2000	2000
Oil Changed	<b>Not Changed</b>	Changed	Changed	Changed
Sample Status	<b>ABNORMAL</b>	NORMAL	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	<b>137</b>	142	141	152
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## CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Silicon	ppm	<b>5</b>	6	7	3
Sodium	ppm	<b>2</b>	1	4	2
Potassium	ppm	<b>&lt;1</b>	0	0	1



## WEAR METALS

Iron	ppm	<b>286</b>	190	641	175
Copper	ppm	<b>73</b>	23	202	117
Lead	ppm	<b>&lt;1</b>	0	0	<1
Tin	ppm	<b>0</b>	0	0	0
Aluminum	ppm	<b>3</b>	<1	8	5
Chromium	ppm	<b>1</b>	1	3	<1
Molybdenum	ppm	<b>0</b>	0	0	<1
Nickel	ppm	<b>0</b>	<1	0	0
Titanium	ppm	<b>0</b>	0	<1	<1
Silver	ppm	<b>0</b>	0	0	<1
Manganese	ppm	<b>5</b>	4	15	7
Vanadium	ppm	<b>0</b>	0	0	0



## ADDITIVES

Calcium	ppm	<b>67</b>	157	223	6
Magnesium	ppm	<b>2</b>	5	6	1
Zinc	ppm	<b>74</b>	87	241	97
Phosphorus	ppm	<b>1881</b>	1748	1733	1797
Barium	ppm	<b>1</b>	7	15	18
Boron	ppm	<b>147</b>	86	108	100

## Diagnosis

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.

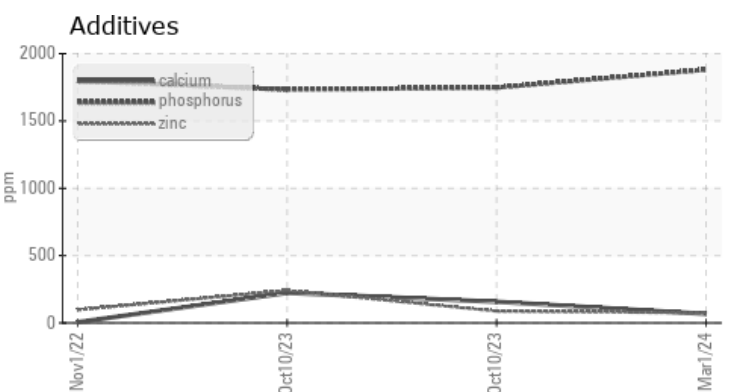
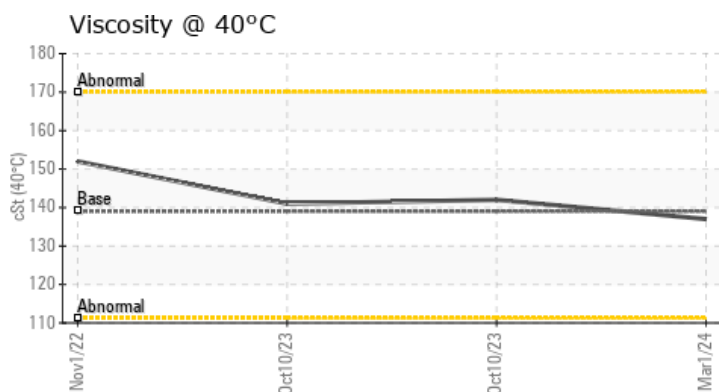
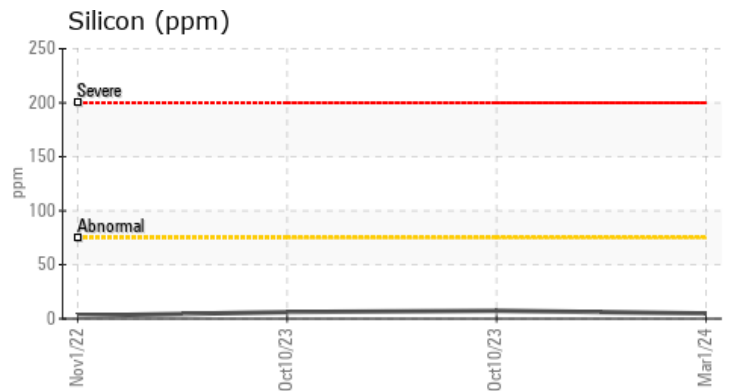
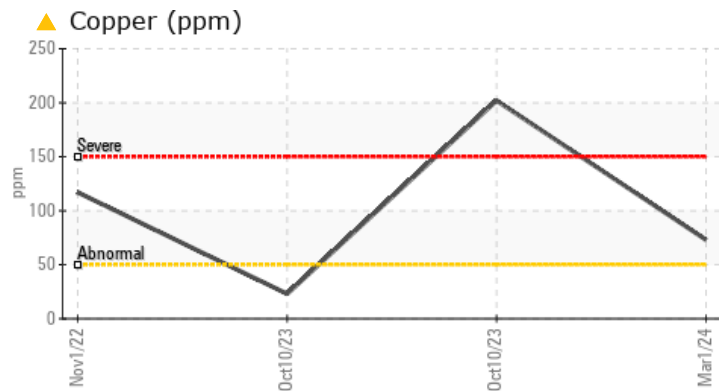
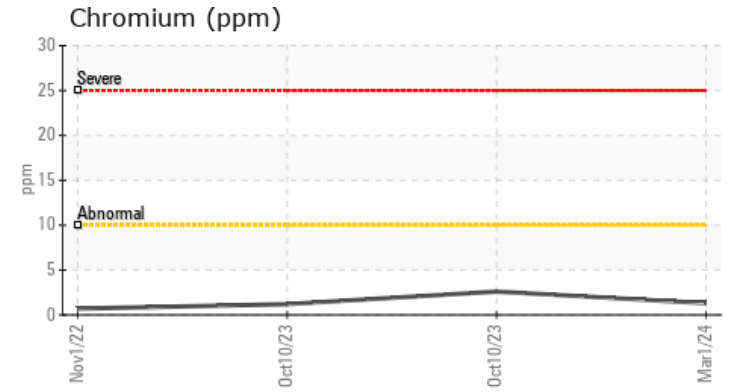
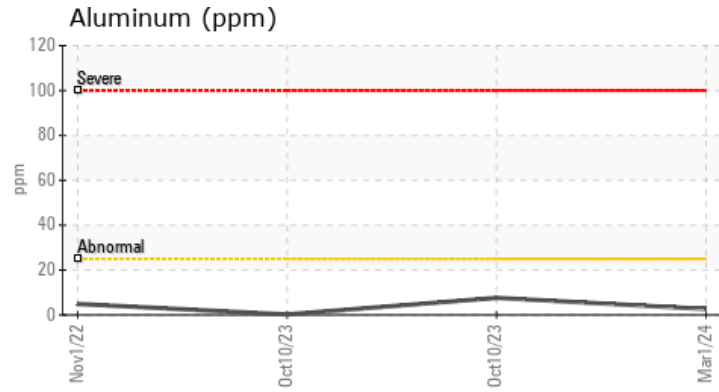
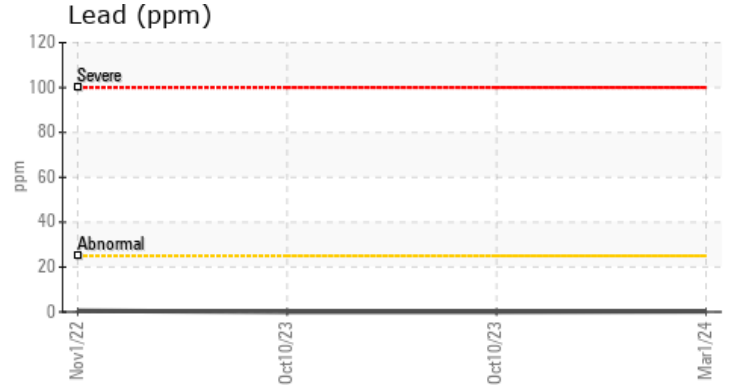
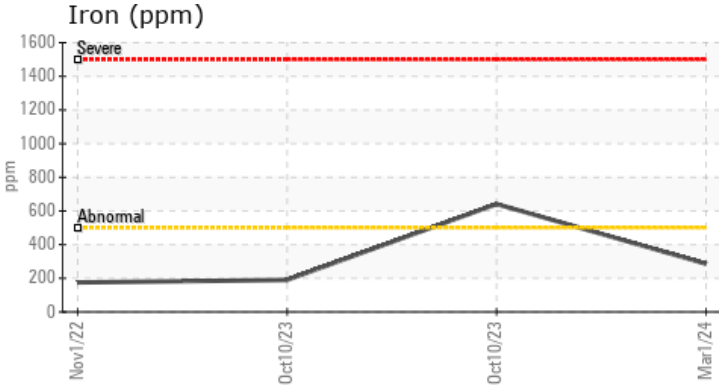
**Depot:** VOLVO5054  
**Unique No:** 10923503  
**Signed:** Sean Felton  
**Report Date:** 14 Mar 2024



# CONSTRUCTION EQUIPMENT



## VOLVO GRAPHS





# CONSTRUCTION EQUIPMENT

497550-10 ALTER SENNEBOGEN 835 835.0.2949 - FRONT AXLE



**Sample No:** VCP434448  
**Oil Type:** VOLVO PREMIUM GEAR OIL 80W-90 GL-5  
**Job No:** 497550-10 ALTER



## SAMPLE INFORMATION

Sample Number	<b>VCP434448</b>	VCP395852	VCP363684	---
Sample Date	<b>01 Mar 2024</b>	10 Oct 2023	01 Nov 2022	---
Machine Hours	<b>5345</b>	4362	1872	---
Oil Hours	<b>1000</b>	2000	2000	---
Oil Changed	<b>Not Chngd</b>	Changed	Changed	---
Sample Status	<b>NORMAL</b>	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	<b>138</b>	137	153	---
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## CONTAMINATION

Water	%	<b>NEG</b>	NEG	NEG	---
Silicon	ppm	<b>6</b>	3	2	---
Sodium	ppm	<b>2</b>	<1	0	---
Potassium	ppm	<b>1</b>	0	1	---

### 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>287</b>	14	11	---
Copper	ppm	<b>72</b>	22	45	---
Lead	ppm	<b>&lt;1</b>	0	0	---
Tin	ppm	<b>&lt;1</b>	0	0	---
Aluminum	ppm	<b>3</b>	0	0	---
Chromium	ppm	<b>2</b>	0	0	---
Molybdenum	ppm	<b>&lt;1</b>	0	0	---
Nickel	ppm	<b>&lt;1</b>	0	0	---
Titanium	ppm	<b>&lt;1</b>	0	0	---
Silver	ppm	<b>0</b>	0	1	---
Manganese	ppm	<b>6</b>	<1	<1	---
Vanadium	ppm	<b>0</b>	0	0	---



## ADDITIVES

Calcium	ppm	<b>59</b>	249	4	---
Magnesium	ppm	<b>1</b>	4	<1	---
Zinc	ppm	<b>70</b>	151	26	---
Phosphorus	ppm	<b>1813</b>	1540	1705	---
Barium	ppm	<b>1</b>	2	0	---
Boron	ppm	<b>147</b>	57	94	---

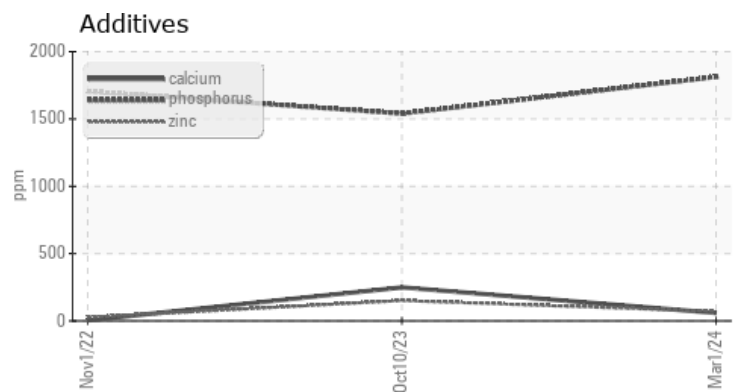
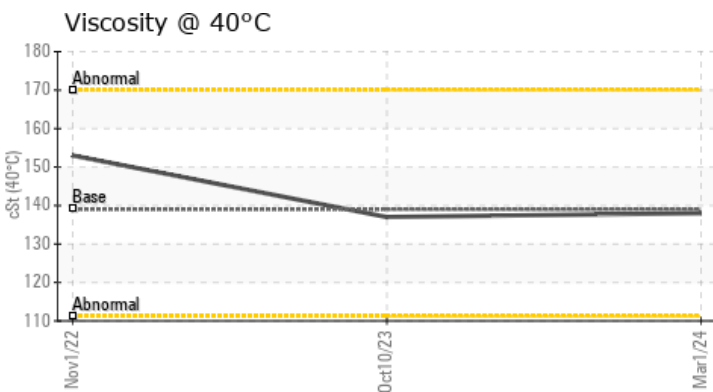
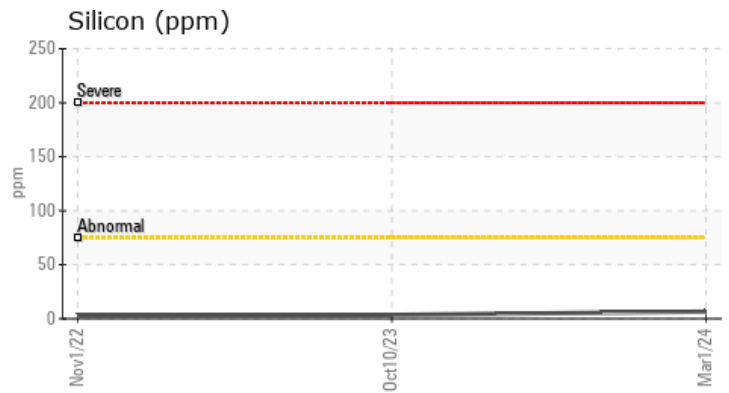
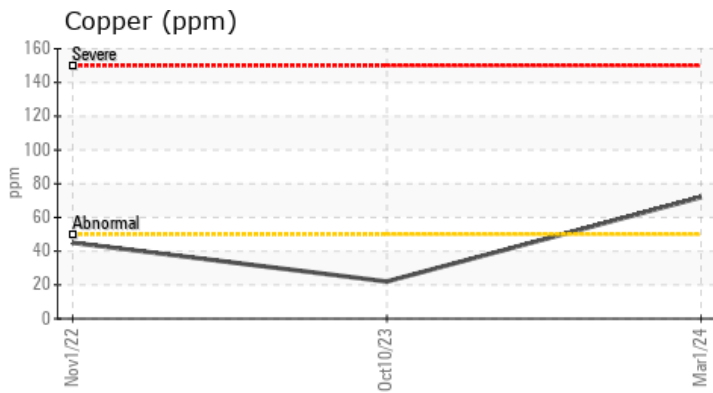
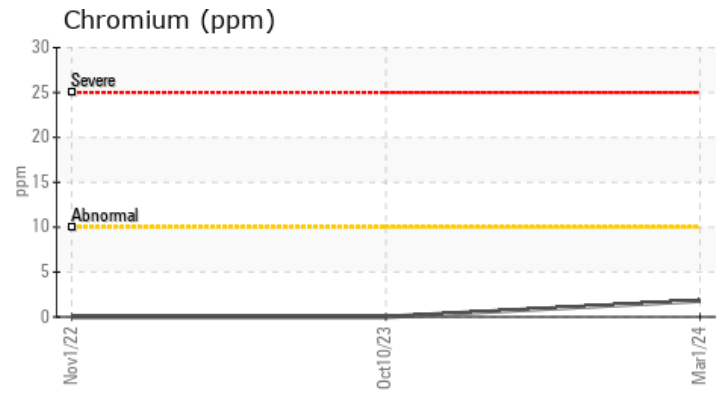
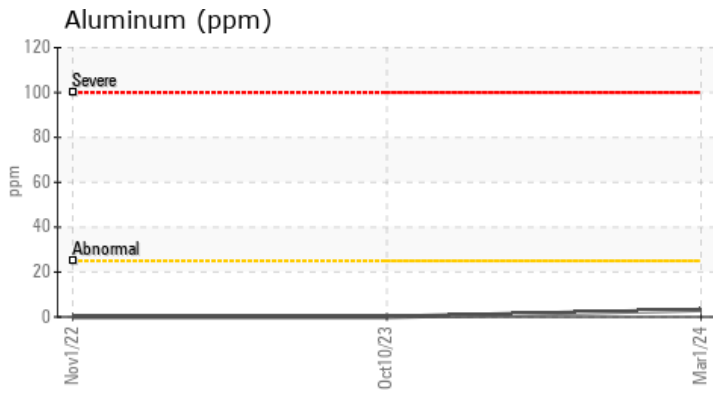
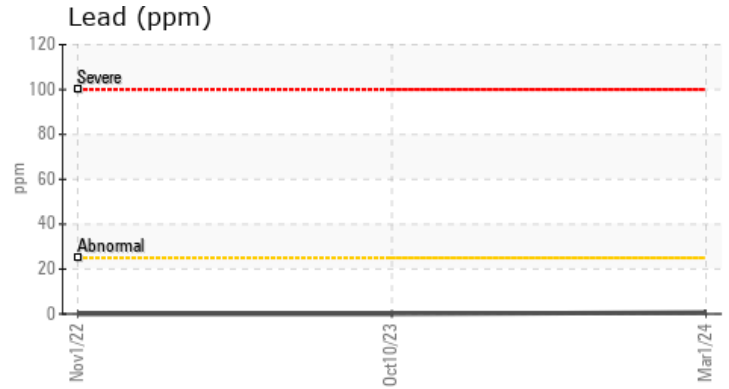
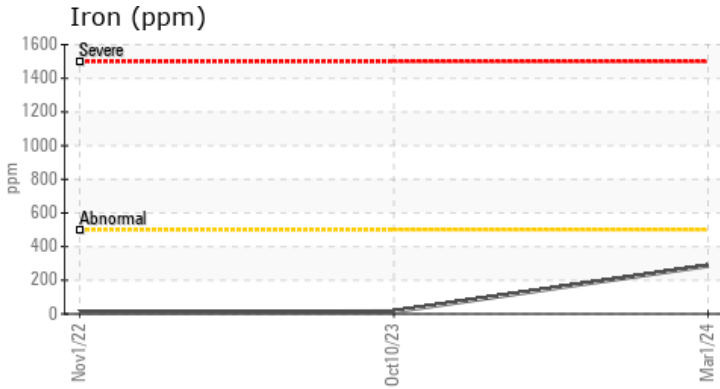
**Depot:** VOLVO5054  
**Unique No:** 10923486  
**Signed:** Don Baldrige  
**Report Date:** 13 Mar 2024



# CONSTRUCTION EQUIPMENT



## GRAPHS







# CONSTRUCTION EQUIPMENT

497550-10 ALTER SENNEBOGEN 835 835.0.2949 - FRONT RIGHT FINAL DRIVE



**Sample No:** VCP434447  
**Oil Type:** VOLVO PREMIUM GEAR OIL 80W-90 GL-5  
**Job No:** 497550-10 ALTER



## SAMPLE INFORMATION

Sample Number	<b>VCP434447</b>	VCP396393	VCP363685	---
Sample Date	<b>01 Mar 2024</b>	10 Oct 2023	01 Nov 2022	---
Machine Hours	<b>5345</b>	4362	1872	---
Oil Hours	<b>1000</b>	2000	500	---
Oil Changed	<b>Not Chngd</b>	Changed	Not Chngd	---
Sample Status	<b>NORMAL</b>	ABNORMAL	ABNORMAL	---

## ALTA EQUIPMENT COMPANY

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



## OIL CONDITION

Visc @ 40°C	cSt	<b>137</b>	142	154	---
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## CONTAMINATION

Water	%	NEG	NEG	NEG	---
Silicon	ppm	<b>5</b>	8	5	---
Sodium	ppm	<b>2</b>	4	2	---
Potassium	ppm	<b>&lt;1</b>	0	2	---



## WEAR METALS

Iron	ppm	<b>174</b>	436	136	---
Copper	ppm	<b>23</b>	▲ 91	▲ 95	---
Lead	ppm	<b>&lt;1</b>	0	<1	---
Tin	ppm	<b>0</b>	0	0	---
Aluminum	ppm	<b>2</b>	3	4	---
Chromium	ppm	<b>&lt;1</b>	2	<1	---
Molybdenum	ppm	<b>0</b>	0	<1	---
Nickel	ppm	<b>0</b>	0	0	---
Titanium	ppm	<b>0</b>	<1	<1	---
Silver	ppm	<b>0</b>	0	1	---
Manganese	ppm	<b>2</b>	10	5	---
Vanadium	ppm	<b>0</b>	0	0	---



## ADDITIVES

Calcium	ppm	<b>81</b>	386	17	---
Magnesium	ppm	<b>2</b>	6	3	---
Zinc	ppm	<b>52</b>	245	78	---
Phosphorus	ppm	<b>1821</b>	1778	1692	---
Barium	ppm	<b>&lt;1</b>	17	29	---
Boron	ppm	<b>161</b>	107	100	---

## 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.

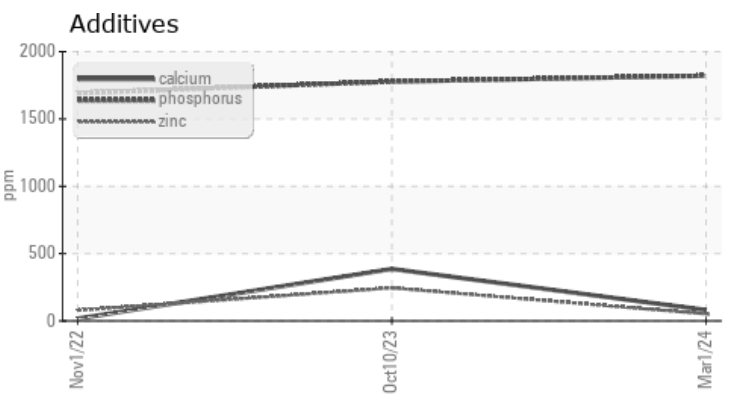
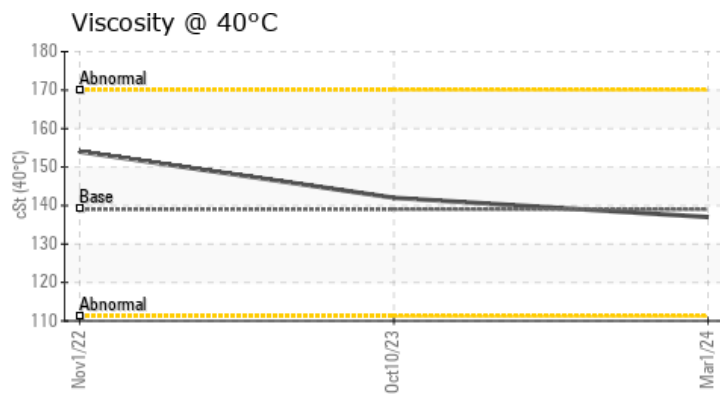
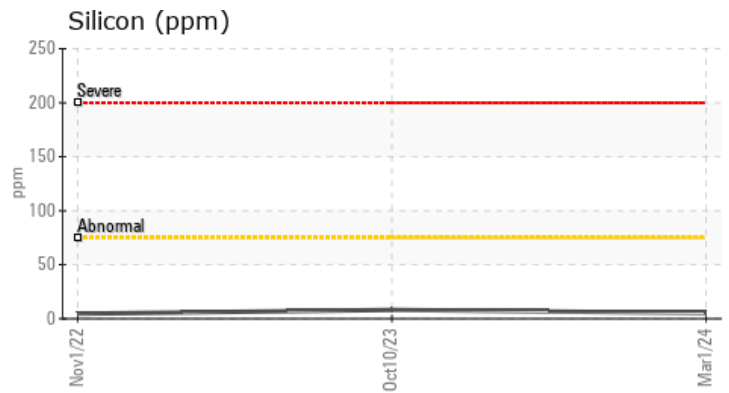
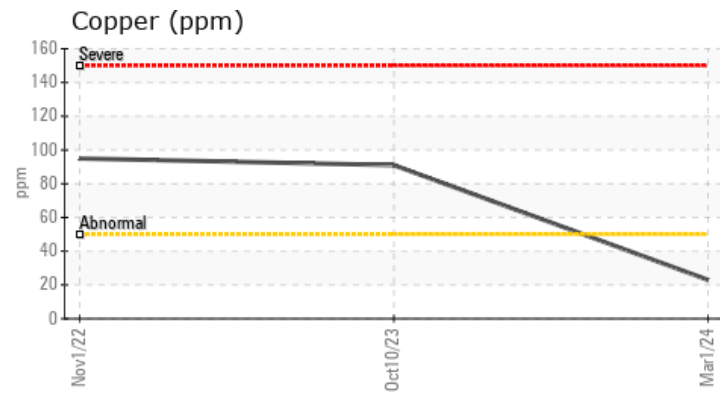
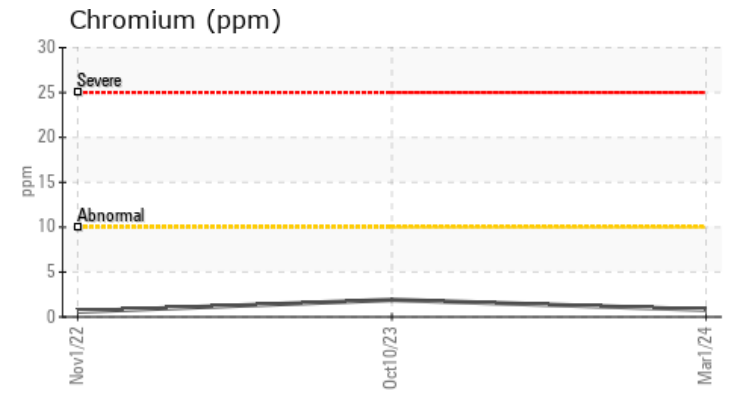
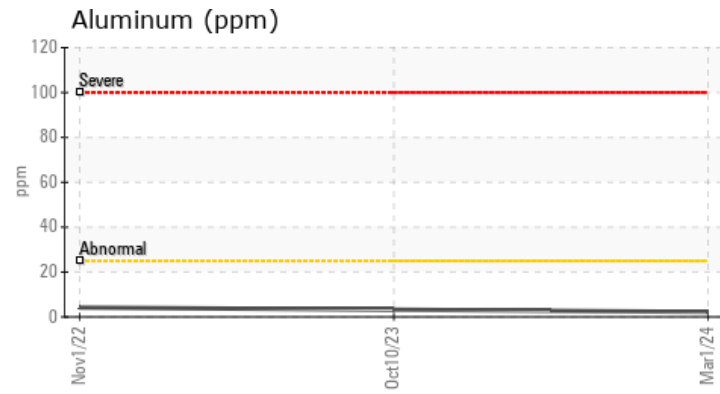
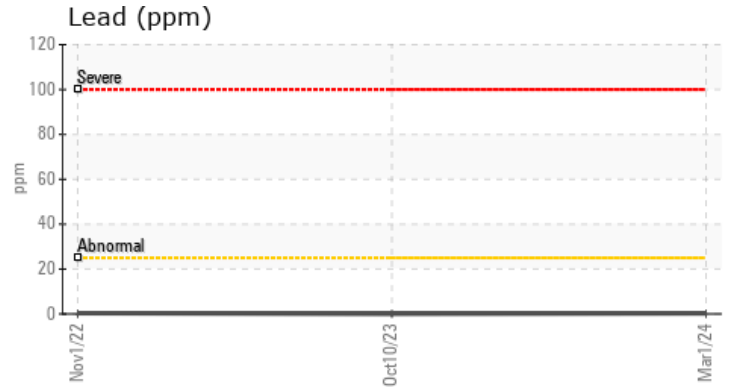
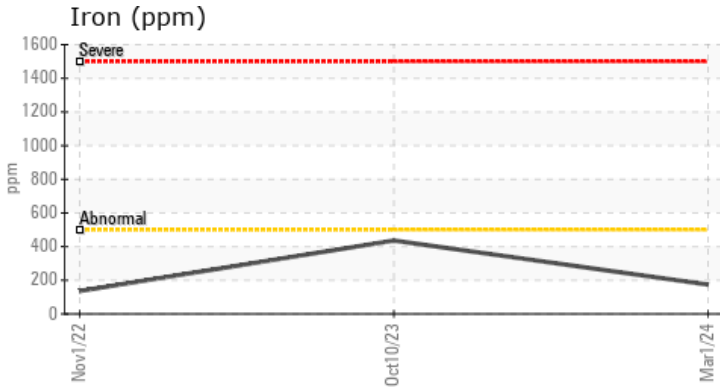
**Depot:** VOLVO5054  
**Unique No:** 10923505  
**Signed:** Wes Davis  
**Report Date:** 12 Mar 2024



# CONSTRUCTION EQUIPMENT



## GRAPHS





# CONSTRUCTION EQUIPMENT

497550-10 ALTER SENNEBOGEN 835 835.0.2949 - REAR LEFT FINAL DRIVE



**Sample No:** VCP434943  
**Oil Type:** VOLVO PREMIUM GEAR OIL 80W-90 GL-5  
**Job No:** 497550-10 ALTER



## SAMPLE INFORMATION

Sample Number	<b>VCP434943</b>	VCP396386	VCP363686	---
Sample Date	<b>01 Mar 2024</b>	10 Oct 2023	01 Nov 2022	---
Machine Hours	<b>5345</b>	4362	1872	---
Oil Hours	<b>1000</b>	2000	2000	---
Oil Changed	<b>Not Changed</b>	Changed	Changed	---
Sample Status	<b>NORMAL</b>	NORMAL	NORMAL	---

### ALTA EQUIPMENT COMPANY

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

T:  
F:



## OIL CONDITION

Visc @ 40°C	cSt	<b>137</b>	142	152	---
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## CONTAMINATION

Water	%	<b>NEG</b>	NEG	NEG	---
Silicon	ppm	<b>6</b>	6	2	---
Sodium	ppm	<b>&lt;1</b>	2	0	---
Potassium	ppm	<b>&lt;1</b>	0	1	---

### 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	<b>136</b>	188	39	---
Copper	ppm	<b>5</b>	23	11	---
Lead	ppm	<b>&lt;1</b>	0	<1	---
Tin	ppm	<b>0</b>	0	0	---
Aluminum	ppm	<b>2</b>	<1	0	---
Chromium	ppm	<b>&lt;1</b>	1	0	---
Molybdenum	ppm	<b>0</b>	0	0	---
Nickel	ppm	<b>&lt;1</b>	<1	0	---
Titanium	ppm	<b>0</b>	0	0	---
Silver	ppm	<b>0</b>	0	<1	---
Manganese	ppm	<b>2</b>	4	<1	---
Vanadium	ppm	<b>0</b>	0	0	---



## ADDITIVES

Calcium	ppm	<b>50</b>	158	2	---
Magnesium	ppm	<b>1</b>	4	<1	---
Zinc	ppm	<b>25</b>	85	9	---
Phosphorus	ppm	<b>1841</b>	1757	1819	---
Barium	ppm	<b>0</b>	8	<1	---
Boron	ppm	<b>122</b>	91	89	---

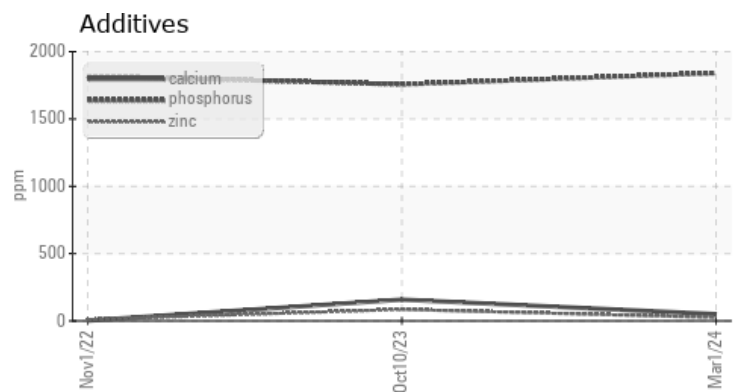
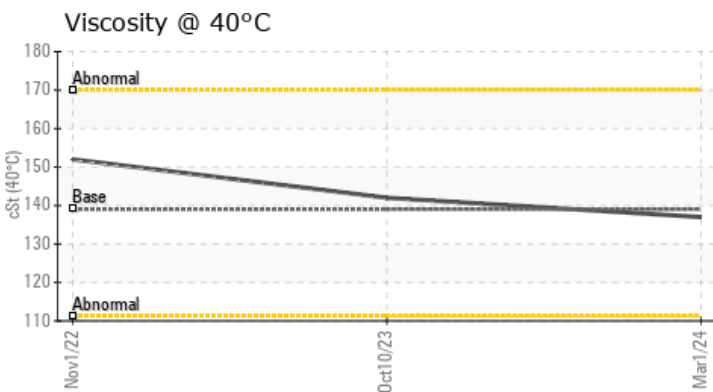
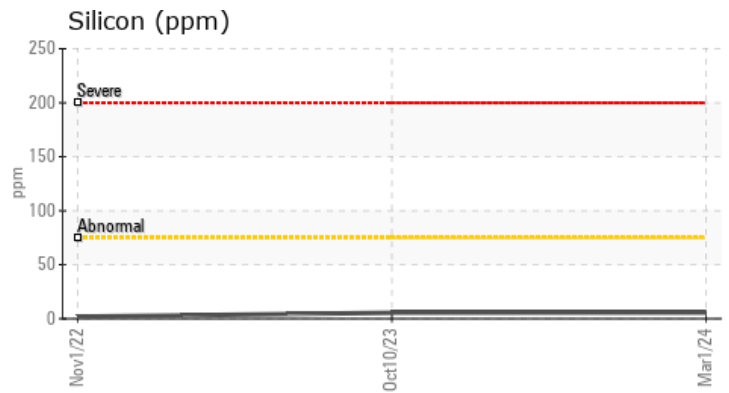
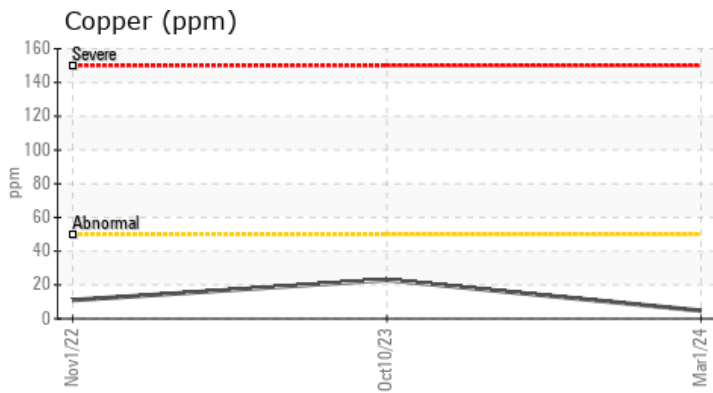
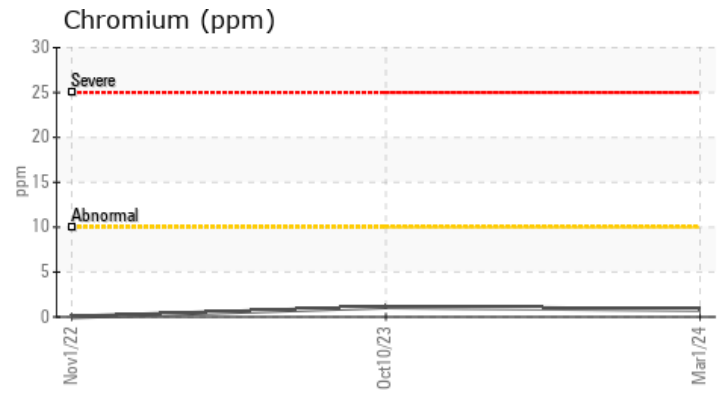
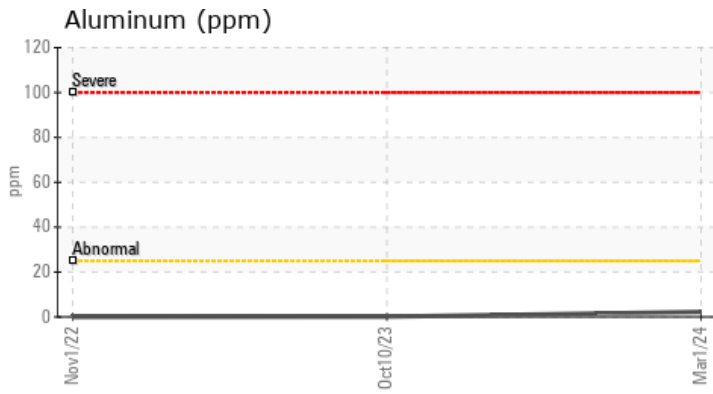
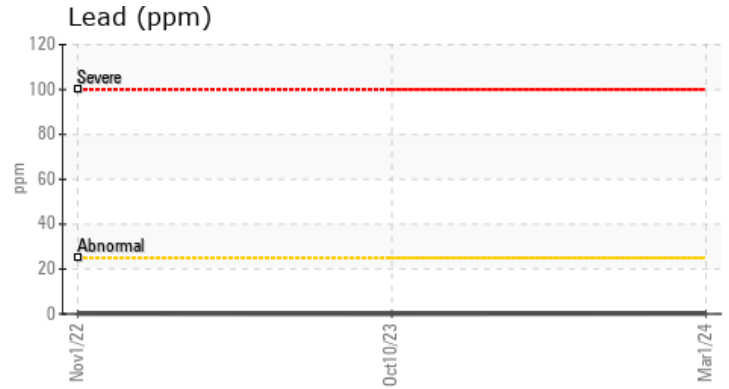
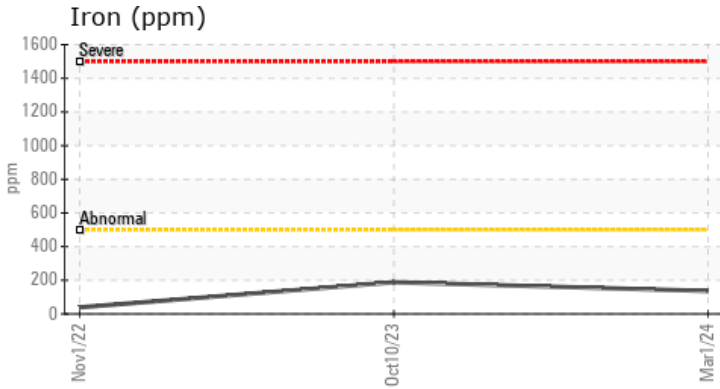
**Depot:** VOLVO5054  
**Unique No:** 10923507  
**Signed:** Wes Davis  
**Report Date:** 12 Mar 2024



# CONSTRUCTION EQUIPMENT



## GRAPHS





# CONSTRUCTION EQUIPMENT

## 497550-10 ALTER SENNEBOGEN 835 835.0.2949 - REAR AXLE



**Sample No:** VCP434444  
**Oil Type:** VOLVO PREMIUM GEAR OIL 80W-90 GL-5  
**Job No:** 497550-10 ALTER



### SAMPLE INFORMATION

Sample Number	<b>VCP434444</b>	VCP396385	VCP363688	---
Sample Date	<b>01 Mar 2024</b>	10 Oct 2023	01 Nov 2022	---
Machine Hours	<b>5345</b>	4362	1872	---
Oil Hours	<b>1000</b>	2000	2000	---
Oil Changed	<b>Not Changed</b>	Changed	Changed	---
Sample Status	<b>NORMAL</b>	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	<b>137</b>	142	152	---
-------------	-----	------------	-----	-----	-----



### CONTAMINATION

Water	%	NEG	NEG	NEG	---
Silicon	ppm	<b>5</b>	6	2	---
Sodium	ppm	<b>1</b>	1	0	---
Potassium	ppm	<b>&lt;1</b>	0	1	---

### 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	<b>108</b>	185	33	---
Copper	ppm	<b>4</b>	22	11	---
Lead	ppm	<b>&lt;1</b>	0	0	---
Tin	ppm	<b>0</b>	0	0	---
Aluminum	ppm	<b>2</b>	<1	0	---
Chromium	ppm	<b>&lt;1</b>	1	0	---
Molybdenum	ppm	<b>0</b>	0	0	---
Nickel	ppm	<b>&lt;1</b>	<1	0	---
Titanium	ppm	<b>0</b>	0	0	---
Silver	ppm	<b>3</b>	0	<1	---
Manganese	ppm	<b>1</b>	4	<1	---
Vanadium	ppm	<b>0</b>	0	0	---



### ADDITIVES

Calcium	ppm	<b>50</b>	161	61	---
Magnesium	ppm	<b>2</b>	5	<1	---
Zinc	ppm	<b>28</b>	89	33	---
Phosphorus	ppm	<b>1853</b>	1775	1844	---
Barium	ppm	<b>2</b>	7	<1	---
Boron	ppm	<b>93</b>	90	96	---

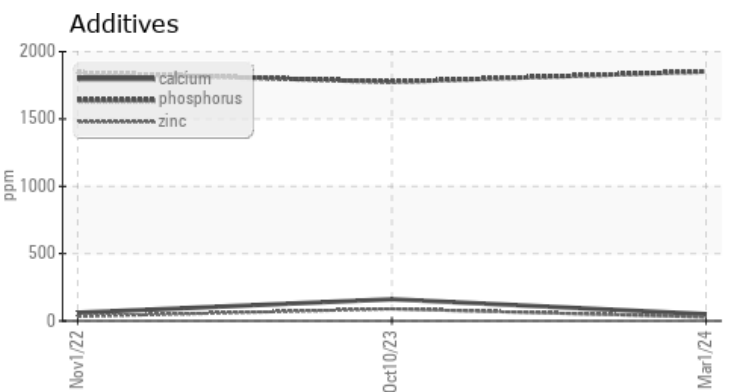
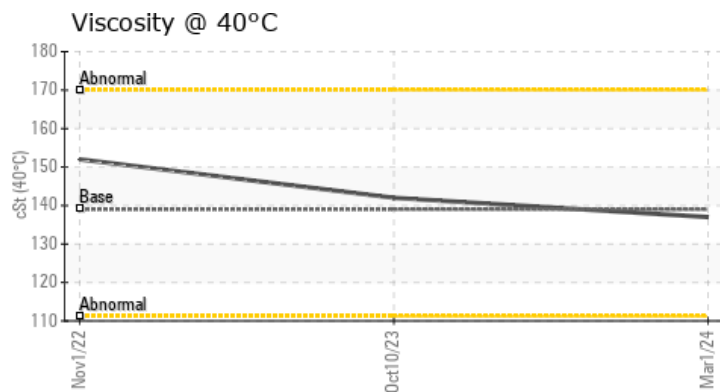
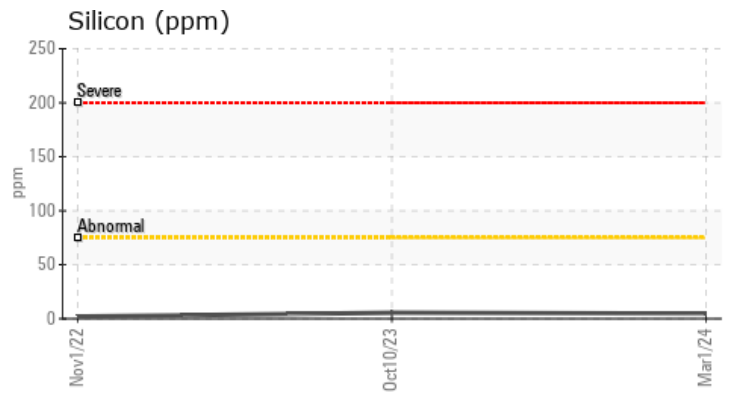
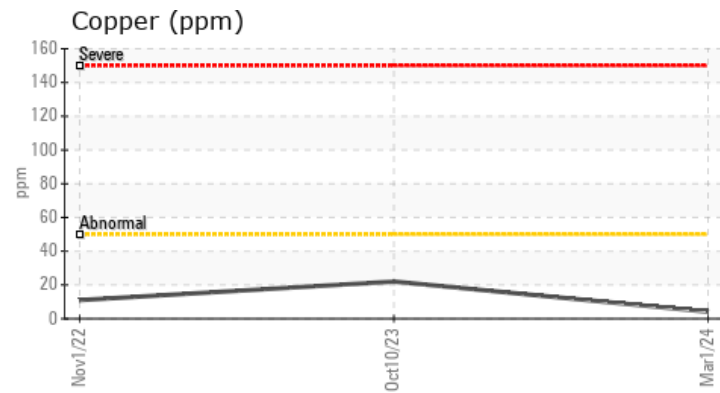
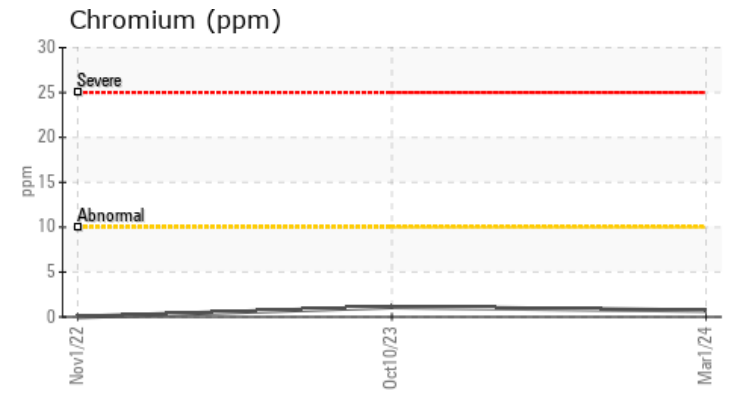
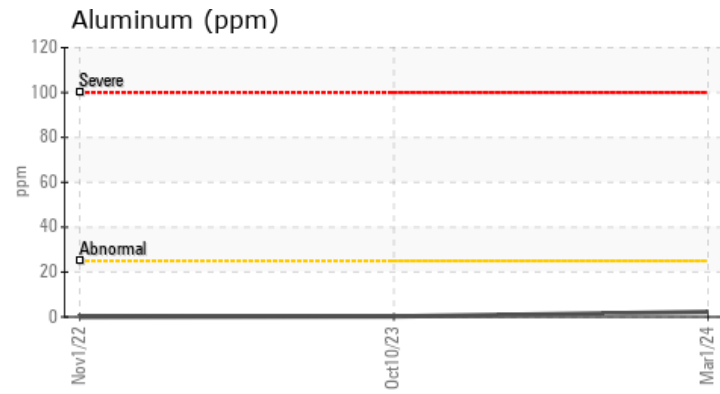
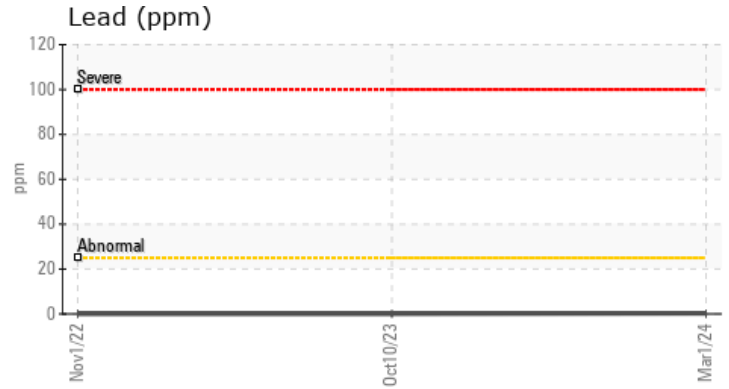
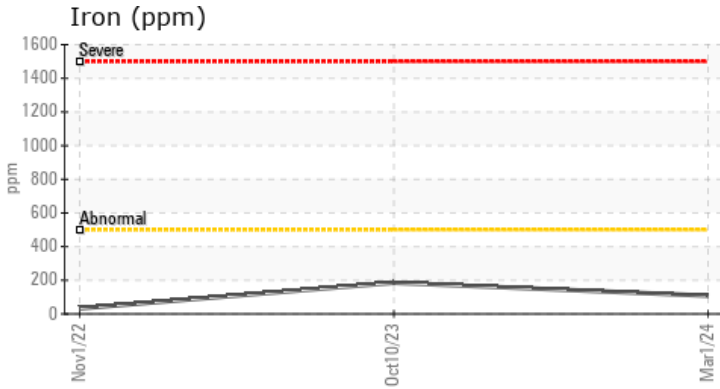
**Depot:** VOLVO5054  
**Unique No:** 10923487  
**Signed:** Wes Davis  
**Report Date:** 12 Mar 2024



# CONSTRUCTION EQUIPMENT



## GRAPHS





# CONSTRUCTION EQUIPMENT

497550-10 ALTER SENNEBOGEN 835 835.0.2949 - REAR RIGHT FINAL DRIVE



**Sample No:** VCP433765  
**Oil Type:** VOLVO PREMIUM GEAR OIL 80W-90 GL-5  
**Job No:** 497550-10 ALTER



## SAMPLE INFORMATION

Sample Number	<b>VCP433765</b>	VCP363687	---	---
Sample Date	<b>01 Mar 2024</b>	01 Nov 2022	---	---
Machine Hours	<b>5345</b>	1872	---	---
Oil Hours	<b>1000</b>	500	---	---
Oil Changed	<b>Not Chngd</b>	Not Chngd	---	---
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>136</b>	150	---	---
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## CONTAMINATION

Water	%	<b>NEG</b>	NEG	---	---
Silicon	ppm	<b>6</b>	2	---	---
Sodium	ppm	<b>&lt;1</b>	0	---	---
Potassium	ppm	<b>&lt;1</b>	1	---	---



## WEAR METALS

Iron	ppm	<b>124</b>	34	---	---
Copper	ppm	<b>6</b>	11	---	---
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>&lt;1</b>	0	---	---
Titanium	ppm	<b>0</b>	0	---	---
Silver	ppm	<b>0</b>	<1	---	---
Manganese	ppm	<b>1</b>	<1	---	---
Vanadium	ppm	<b>0</b>	0	---	---



## ADDITIVES

Calcium	ppm	<b>50</b>	4	---	---
Magnesium	ppm	<b>2</b>	<1	---	---
Zinc	ppm	<b>25</b>	10	---	---
Phosphorus	ppm	<b>1930</b>	1766	---	---
Barium	ppm	<b>0</b>	<1	---	---
Boron	ppm	<b>112</b>	96	---	---

## 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:** 10923504

**Signed:** Wes Davis

**Report Date:** 12 Mar 2024



# CONSTRUCTION EQUIPMENT



## GRAPHS

