

CONSTRUCTION EQUIPMENT
SPM715577 ALTER ROCK SENNEBOGEN 840 840.0.2192 - DIESEL E

**Sample No:** VCP446959

Oil Type: **DIESEL ENGINE OIL SAE 15W40** 

Job No: SPM715577 ALTER ROCK

VOLVO					
	NFORMATION				
	W OWN HOW			•	
Sample Number		VCP446959	VCP437356	VCP392951	VCP433264
Sample Date		10 May 2024	22 Mar 2024	02 Feb 2024	05 Dec 2023
Machine Hours		15677	15145	14505	13870
Oil Hours		0	0	0	0
Oil Changed		Changed	Changed	Changed	Changed
Sample Status		NORMAL	MARGINAL	SEVERE	NORMAL
OIL CONDI	TION				
OIL CONDI	TIUN				
Visc @ 100°C	cSt	<b>12.8</b>	<b>12.5</b>	<u>▲</u> 11.3	■13.4
Base Number (BN)	mg KOH/g	■8.6	■8.2	■8.2	■8.9
Oxidation (PA)	%	66	73	70	66

CONTAI	MINATION				
Water	%	NEG	NEG	NEG	NEG
Soot %	%	■0.2	□ 0.2	□ 0.1	□0.2
Nitration (PA)	%	67	71	73	64
Sulfation (PA)	%	54	57	55	54
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<b>△</b> 1.9	<b>▲</b> 6.0	<1.0
Silicon	ppm	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>
Sodium	ppm	<b>■&lt;1</b>	<b>-</b> <1	<1	<b>0</b>
Potassium	ppm	<b>■</b> 3	<b>0</b>	<b>0</b>	<b></b> <1

VOLVO					
WEAR M	FTAIS				
			<u> </u>		
Iron	ppm	<b>6</b>	<b>4</b>	■3	<b>2</b>
Copper	ppm	<b>■&lt;1</b>	<b></b> <1	■ 0	<b></b> <1
Lead	ppm	<b>0</b>	□ 0	<b>0</b>	<b>0</b>
Tin	ppm	<b>■</b> <1	<b>-</b> <1	<b>0</b>	□0
Aluminum	ppm	<b>2</b>	< 1	<b>-</b> <1	< 1
Chromium	ppm	<b>■&lt;1</b>	<b>-</b> <1	<b>-</b> <1	<b>0</b>
Molybdenum	ppm	<b>■</b> 59	<b>6</b> 2	□ 54	<b>5</b> 6
Nickel	ppm	<b>■&lt;1</b>	<b>0</b>	<b>0</b>	<b>0</b>
Titanium	ppm	<b>■&lt;1</b>	<b>0</b>	<b>0</b>	<b>0</b>
Silver	ppm	■0	■0	□0	<b>0</b>
Manganese	ppm	<b>0</b>	< 1	<b>-</b> <1	<b>-</b> <1
Vanadium	ppm	<1	0	0	0

ADDITI	VES					
Calcium	ppm	<b>1027</b>	□1106	■ 979	■987	
Magnesium	ppm	<b>974</b>	<b>1</b> 011	■895	□947	
Zinc	ppm	<b>1189</b>	<b>1220</b>	<b>1137</b>	<b>1242</b>	
Phosphorus	ppm	■986	□1021	■ 949	■946	
Barium	ppm	<b>0</b>	<b>0</b>	<b>0</b>	□0	
Boron	ppm	<b>■</b> 0	_2	<b>0</b>	0	



### **ALTA EQUIPMENT CO - ORLAND PARK** 5000 INDUSTRIAL HWY GARY, IN US 46406 Contact: MARK DEROSA mark.derosa@altg.com T: (248)356-5200

F:

### Diagnosis

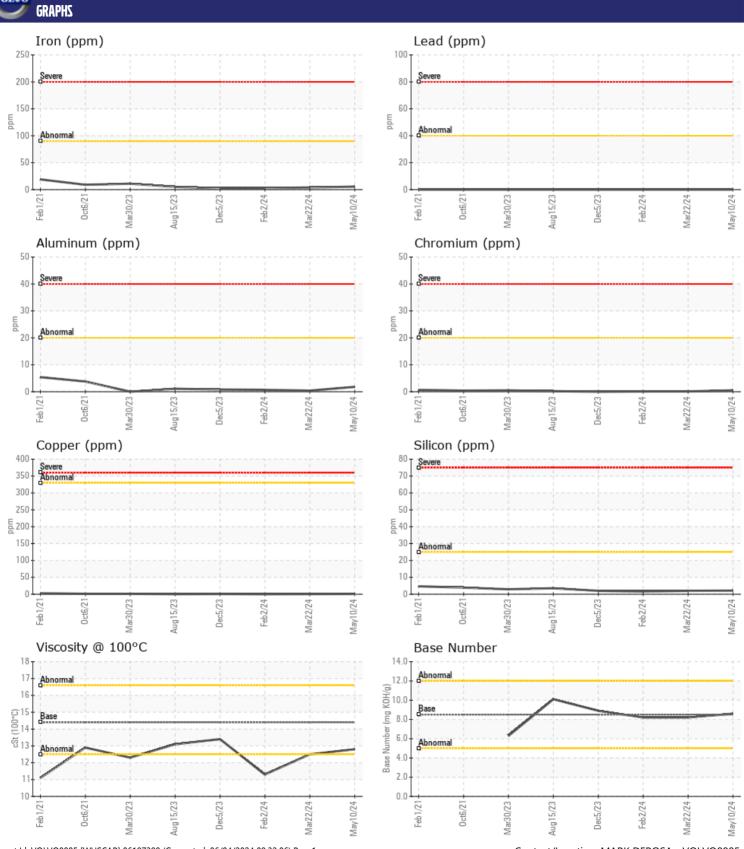
Resample at the next service interval to monitor.All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Depot: **VOLVO8885** Unique No: 11059522 Signed: Wes Davis Report Date: 04 Jun 2024











CONSTRUCTION EQUIPMENT
SPM688226 ALTER ROCK SENNEBOGEN 840 840.0.2192 - HYDRA

**Sample No:** VCP443690

Oil Type: **AW HYDRAULIC OIL ISO 46** Job No: SPM688226 ALTER ROCK

SAMPLE INFO	ORMATION			
Sample Number	-	VCP443690	VCP409185	 
Sample Date		22 Mar 2024	16 Aug 2023	 
Machine Hours		15145	12681	 
Oil Hours		0	0	 
Oil Changed		Not Changd	Changed	 
Sample Status		NORMAL	ABNORMAL	 
OIL CONDITIO	DN			
Visc @ 40°C	St	<b>41.9</b>	<b>42.1</b>	 
Acid Number (AN)	ng KOH/g	■0.46	□ 0.45	 
CONTAMINA	TION			

CONTA	MINATION				
Water	%	NEG	NEG	 	
Particles >4µm		■1864	<u>▲</u> 12245	 	
Particles >6µm		<b>185</b>	<b>△</b> 2733	 	
Particles > 14µm		■11	■98	 	
ISO 4406:1999 (d	c)	18/15/11	21/19/14	 	
Silicon	ppm	<b>■</b> 2	<b>-</b> <1	 	
Sodium	ppm	<b>1</b>	<b>4</b>	 	
Potassium	ppm	<b>2</b>	0	 	

VOLVO	AETAL C			
WEAR	AE I ALS			
Iron	ppm	<b>14</b>	<b>1</b> 9	 
Copper	ppm	<b>2</b>	<b>1</b>	 
Lead	ppm	<b>1</b>	<b>0</b>	 
Tin	ppm	■1	0	 
Aluminum	ppm	<b>2</b>	< 1	 
Chromium	ppm	<b>6</b>	<b>9</b>	 
Molybdenum	ppm	<b>■3</b>	<b>2</b>	 
Nickel	ppm	<b>■&lt;1</b>	<b>0</b>	 
Titanium	ppm	<1	0	 
Silver	ppm	0	0	 
Manganese	ppm	<b>■&lt;1</b>	<b>0</b>	 
Vanadium	ppm	<1	0	 

ADDITI	IVES			
Calcium	ppm	<b>120</b>	<b>165</b>	 
Magnesium	ppm	<b>12</b>	<b>7</b>	 
Zinc	ppm	<b>451</b>	<b>446</b>	 
Phosphorus	ppm	■393	■369	 
Barium	ppm	<b>0</b>	□0	 
Boron	ppm	<b>■&lt;1</b>	<b>0</b>	 



**ALTA EQUIPMENT CO - ORLAND PARK** 5000 INDUSTRIAL HWY GARY, IN US 46406 Contact: MARK DEROSA mark.derosa@altg.com T: (248)356-5200 F:

## Diagnosis

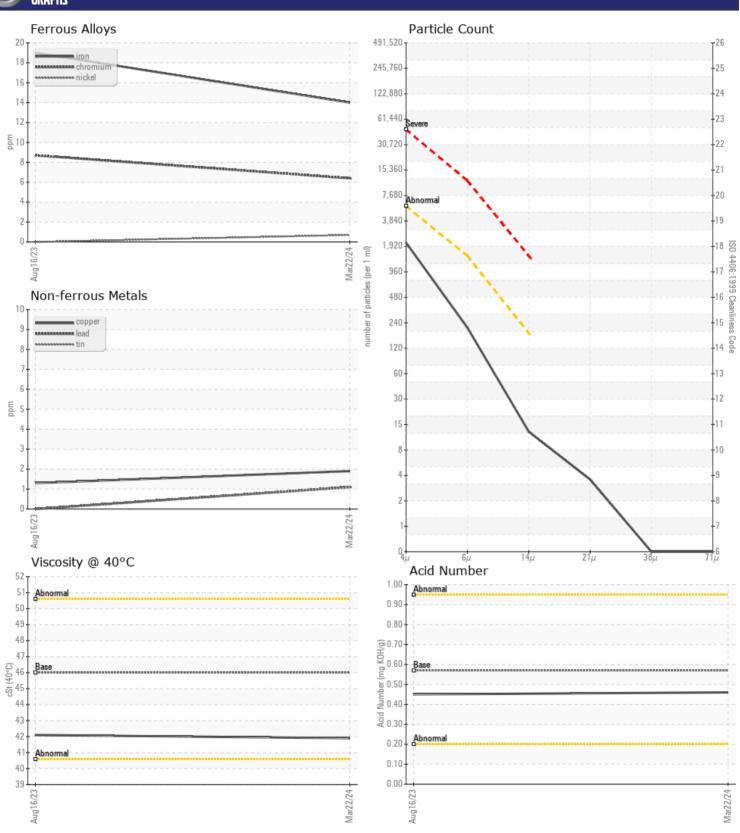
Resample at the next service interval to monitor.All component wear rates are normal. The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Depot: **VOLVO8885 Unique No:** 10955765 Signed: Wes Davis Report Date: 03 Apr 2024











CONSTRUCTION EQUIPMENT

SPM688226 ALTER ROCK SENNEBOGEN 840 840.0.2192 - LEFT SW

**Sample No:** VCP437385

Oil Type: **GEAR OIL ISO 220** 

Job No: SPM688226 ALTER ROCK

	5
1	5
	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:

CAMPLE	INFORMATION				
	- INI ONIMATION				
Sample Number		VCP437385	VCP409187	VCP344711	VCP219762
Sample Date		22 Mar 2024	16 Aug 2023	06 Oct 2021	01 Feb 2021
Machine Hours		15145	12681	5724	3486
Oil Hours		0	0	0	0
Oil Changed		Changed	Changed	N/A	Changed
Sample Status		NORMAL	NORMAL	NORMAL	NORMAL
OIL COND	ITION				
Visc @ 40°C	cSt	<b>224</b>	■220	■221	■219

CONTAN	MOITAMIN					
Water	%	NEG	NEG	NEG	NEG	
Silicon	ppm	■31	<b>2</b> 0	■21	<b>4</b>	
Sodium	ppm	<b>■&lt;1</b>	<b>1</b>	<b>0</b>	< 1	
Potassium	mag	<b>■</b> 0	<b>-</b> <1	П0	■0	

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 I	METALS				
Iron	ppm	<b>283</b>	<b>228</b>	□233	<b>□</b> 119
Copper	ppm	<b>46</b>	<b>2</b> 9	■96	<b>6</b> 2
Lead	ppm	<b>0</b>	□0	<b></b> <1	<b>0</b>
Tin	ppm	<b>6</b>	<b>6</b>	■11	<b>-</b> <1
Aluminum	ppm	<b>0</b>	<b>-</b> <1	■0	<b>&lt;</b> 1
Chromium	ppm	<b>2</b>	<b>2</b>	<b>-</b> <1	<b>-</b> <1
Molybdenum	ppm	<b>0</b>	<b>0</b>	<1	0
Nickel	ppm	<b>-&lt;1</b>	<b>-</b> <1	2	<1
Titanium	ppm	0	0	0	0
Silver	ppm	0	0	<1	0
Manganese	ppm	<b>2</b>	<b>2</b>	2	2
Vanadium	ppm	0	0	0	0

Diagnosis

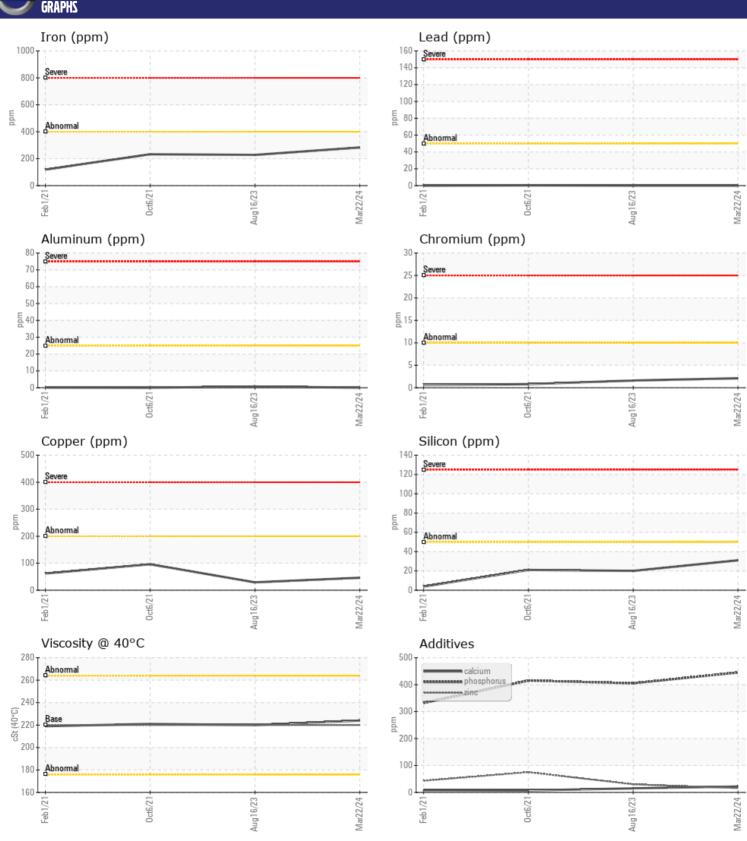
ADDITIV	23				
Calcium	ppm	<b>22</b>	<b>1</b> 5	7	8
Magnesium	ppm	■0	<b>2</b>	0	<1
Zinc	ppm	<b>16</b>	■30	75	43
Phosphorus	ppm	<b>445</b>	<b>405</b>	415	332
Barium	ppm	<b>0</b>	<b>0</b>	0	<1
Boron	ppm	<b>-&lt;1</b>	<b>-</b> <1	10	20

Depot: VOLVO8885 **Unique No:** 10956131 Signed: Don Baldridge Report Date: 04 Apr 2024











SPM688226 ALTER ROCK SENNEBOGEN 840 840.0.2192 - RIGHT SWING DR

Sample No: VCP437382

Oil Type: GEAR OIL ISO 220

**Job No:** SPM688226 ALTER ROCK

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	5000
	GARY
	US 4
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	DAVE

**ALTA EQUIPMENT CO - ORLAND PARK** 5000 INDUSTRIAL HWY

GARY, IN US 46406 Contact: DA

Contact: DAVE ENG DAVE.ENG@ALTG.COM

T: (312)350-2560

F:



CONTAMINATION Water NEG NEG NEG NEG **26 1**8 **1**9 Silicon ppm **4** Sodium 0 **-<**1 **1 1** ppm Potassium ppm **■**0

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	■348	■188	□ 154	■135	
Copper	ppm	■92	<b>2</b> 1	■ 68	<b>6</b> 7	
Lead	ppm	<b>0</b>	<b>0</b>	< 1	< 1	
Tin	ppm	<b>■</b> 7	<b>2</b>	■8	■0	
Aluminum	ppm	<b>-&lt;1</b>	< 1	□0	<b></b>	
Chromium	ppm	<b>■</b> 2	<b>1</b>	<1	<b></b> <1	
Molybdenum	ppm	<b>0</b>	<b>0</b>	1	<1	
Nickel	ppm	<b>■&lt;1</b>	<b>-</b> <1	<1	<1	
Titanium	ppm	0	0	0	0	
Silver	ppm	0	0	<1	0	
Manganese	ppm	<b>■3</b>	<b>2</b>	1	2	
Vanadium	ppm	0	0	0	0	

Diagnosis

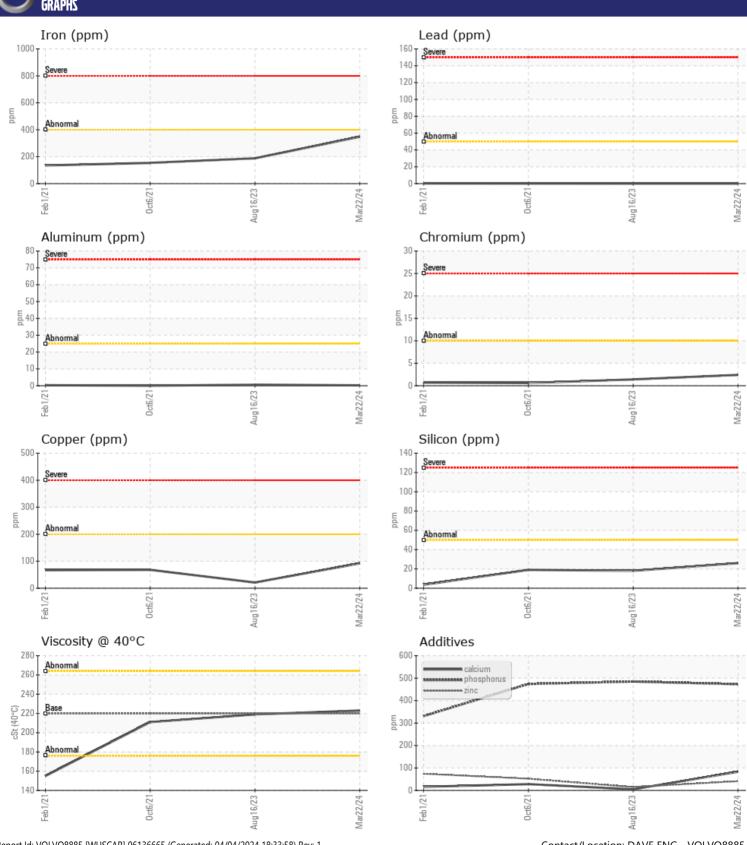
ADDITIVE	2				
Calcium	ppm	■83	<b>5</b>	28	16
Magnesium	ppm	<b>■</b> <1	<b>2</b>	6	2
Zinc	ppm	<b>41</b>	<b>1</b> 5	52	74
Phosphorus	ppm	<b>473</b>	□485	474	331
Barium	ppm	<b>0</b>	<b>0</b>	0	<1
Boron	ppm	■5	<b>2</b>	11	18

Depot: VOLVO8885
Unique No: 10956130
Signed: Don Baldridge
Report Date: 04 Apr 2024











CONSTRUCTION EQUIPMENT
SPM688226 ALTER ROCK SENNEBOGEN 840 840.0.2192 - FRONT

**Sample No:** VCP443694

Oil Type: **GEAR OIL SAE 80W90** SPM688226 ALTER ROCK Job No:

VOLVO				
SAMPLE INF	ORMATION			
Sample Number	VCP443694	VCP433265	VCP409179	VCP399747
Sample Date	22 Mar 2024	05 Dec 2023	15 Aug 2023	30 Mar 2023
Machine Hours	15145	13870	12681	11146
Oil Hours	0	0	0	0
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL
OIL CONDITI	ON			
Visc @ 40°C	cSt <b>148</b>	<b>147</b>	<b>1</b> 51	□177
CUNTUMINA	LTION			

CONT	AMINATION					
Water	%	NEG	NEG	NEG	NEG	
Silicon	ppm	■3	<b>3</b>	<b>6</b>	<b>1</b> 3	
Sodium	ppm	<b>-&lt;1</b>	< 1	<b>2</b>	<b>1</b>	
Potassium	ppm	<b>0</b>	<b>-</b> <1	■ 0	<b></b>	

WEAR	METALS				
Iron	ppm	■35	■21	<b>1</b> 6	<b>1</b> 2
Copper	ppm	<b>■&lt;1</b>	<b>2</b>	<b>□</b> 3	<b>-</b> <1
Lead	ppm	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Tin	ppm	■0	<b>-</b> <1	<b>-</b> <1	■0
Aluminum	ppm	<b>0</b>	<b></b> <1	<b>-</b> <1	<b></b> <1
Chromium	ppm	■0	0	□ 0	<b>-</b> <1
Molybdenum	ppm	<b>0</b>	<b>0</b>	<b>0</b>	<b>&lt;</b> 1
Nickel	ppm	■0	<b>0</b>	■ 0	<b></b> <1
Titanium	ppm	0	0	<1	<1
Silver	ppm	0	0	0	0
Manganese	ppm	<b>■&lt;1</b>	< 1	<b>-</b> <1	<b></b> <1
Vanadium	ppm	0	0	0	0

ADDITIV	ES				
Calcium	ppm	<b>170</b>	■346	■815	<b>2273</b>
Magnesium	ppm	■0	<b>2</b>	<b>7</b>	<b>1</b> 2
Zinc	ppm	<b>67</b>	■156	■ 343	■985
Phosphorus	ppm	<b>598</b>	<b>656</b>	■888	■1378
Barium	ppm	<b>0</b>	<b>0</b>	< 1	<b>0</b>
Boron	ppm	■8	<b>1</b> 6	■37	<b>5</b> 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

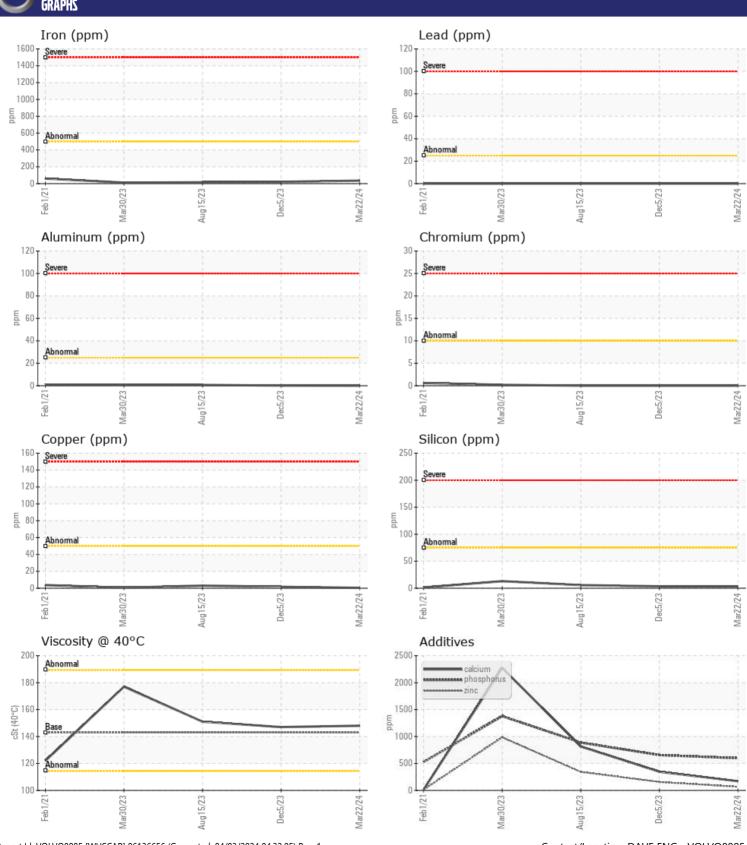
Resample at the next service interval to monitor.All component wear rates are normal. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.

Depot: **VOLVO8885 Unique No:** 10956121 Signed: Wes Davis Report Date: 03 Apr 2024











CONSTRUCTION EQUIPMENT
SPM646183 ALTER SENNEBOGEN 840 840.0.2192 - FRONT AXLE

Sample No: VCP433266

Oil Type: **GEAR OIL SAE 80W90** Job No: **SPM646183 ALTER** 

VOLVO				
SAMPLE INFORM	ATION			
Sample Number	VCP433266	VCP409188	VCP399525	VCP344710
Sample Date	05 Dec 2023	15 Aug 2023	30 Mar 2023	06 Oct 2021
Machine Hours	13870	12681	11146	5724
Oil Hours	0	0	0	0
Oil Changed	Changed	Changed	Changed	N/A
Sample Status	NORMAL	NORMAL	NORMAL	NORMAL
OIL CONDITION				
Visc @ 40°C cSt	<b>139</b>	□146	<b>185</b>	<b>145</b>
CONTAMINATION				

CONT	AMINATION					
Water	%	NEG	NEG	NEG	NEG	
Silicon	ppm	<b>■</b> 2	<b>3</b>	<b>1</b> 4	<b>2</b>	
Sodium	ppm	<b>■&lt;1</b>	<b>2</b>	<b>2</b>	■0	
Potassium	ppm	<b>■&lt;1</b>	<b>0</b>	<b>1</b>	<b>0</b>	

WEAR	METALS					
Iron	ppm	<b>1</b>	<b>2</b>	<b>□</b> 3	<b>4</b>	
Copper	ppm	<b>2</b>	<b>1</b>	<1	<b>2</b>	
Lead	ppm	<b>0</b>	<b>0</b>	□0	< 1	
Tin	ppm	<b>■</b> <1	<b>0</b>	<b></b> <1	□0	
Aluminum	ppm	<b>0</b>	< 1	<b>1</b>	■0	
Chromium	ppm	■0	0	<1	□0	
Molybdenum	ppm	<b>0</b>	<b>0</b>	< 1	□0	
Nickel	ppm	■0	<b>0</b>	<b></b> <1	0	
Titanium	ppm	0	0	0	0	
Silver	ppm	0	0	0	<1	
Manganese	ppm	<b>■&lt;1</b>	< 1	< 1	< 1	
Vanadium	ppm	0	0	0	0	

ADDITIV	VES				
Calcium	ppm	<b>14</b>	<b>174</b>	<b>2970</b>	<b>1</b> 1
Magnesium	ppm	<b>■</b> <1	<b>3</b>	□16	<b>0</b>
Zinc	ppm	<b>6</b>	<b>7</b> 7	<b>1272</b>	<b>3</b>
Phosphorus	ppm	<b>460</b>	<b>767</b>	■1187	□2080
Barium	ppm	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Boron	ppm	<b>■</b> 4	<b>2</b> 9	□ 17	<b>7</b> 3



**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

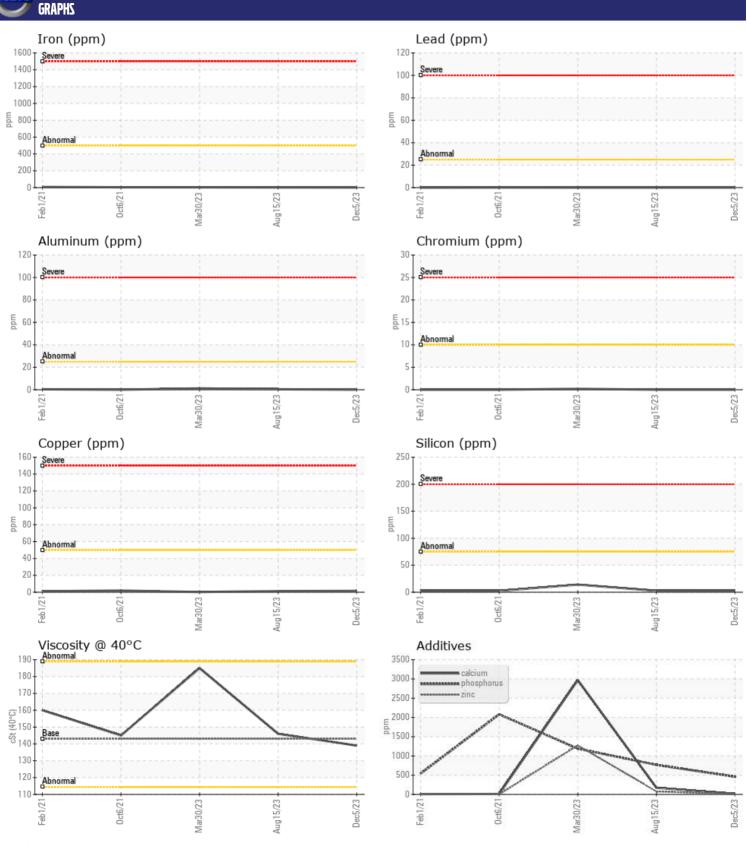
Resample at the next service interval to monitor.All component wear rates are normal. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.

Depot: VOLVO8885 **Unique No:** 10793380 Signed: Wes Davis Report Date: 19 Dec 2023











CONSTRUCTION EQUIPMENT

SPM688226 ALTER ROCK SENNEBOGEN 840 840.0.2192 - FRONT RIGHT

Sample No: VCP439357

Oil Type: **GEAR OIL SAE 80W90** SPM688226 ALTER ROCK Job No:

SAMPLE	INFORMATIO	DN			
Sample Number	•	VCP439357	VCP433262	VCP409180	VCP399527
Sample Date		22 Mar 2024	05 Dec 2023	15 Aug 2023	30 Mar 2023
Machine Hours		15145	13870	12681	11146
Oil Hours		0	0	0	0
Oil Changed		Changed	Changed	Changed	Changed
Sample Status		NORMAL	NORMAL	NORMAL	NORMAL
OIL COND	ITION				
Visc @ 40°C	cSt	<b>142</b>	<b>148</b>	□ 147	□169
VOLVO					
CONTAM	NATION				

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

WEAR M	METALS					
Iron	ppm	<b>41</b>	<b>2</b> 7	■ 25	<b>1</b> 9	
Copper	ppm	<b>■&lt;1</b>	<b>2</b>	■3	<b>1</b>	
Lead	ppm	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	
Tin	ppm	■0	<b>-</b> <1	<b>-</b> <1	<b>0</b>	
Aluminum	ppm	<b>0</b>	□ 0	<b>-</b> <1	<b>-</b> <1	
Chromium	ppm	■0	<b>0</b>	■0	<b>-</b> <1	
Molybdenum	ppm	<b>0</b>	<b>0</b>	<b>0</b>	<b>-</b> <1	
Nickel	ppm	■0	0	■0	<b>-</b> <1	
Titanium	ppm	0	0	0	0	
Silver	ppm	0	0	0	0	
Manganese	ppm	<b>■&lt;1</b>	<b>-</b> <1	<b>-</b> <1	< 1	
Vanadium	ppm	0	0	0	0	

ADDITIV	Zav				
Calcium	ppm	<b>78</b>	<b>181</b>	<b>7</b> 30	■1810
Magnesium	ppm	<b>■</b> 0	<b>&lt;</b> 1	<b>7</b>	■10
Zinc	ppm	<b>27</b>	■83	■315	■805
Phosphorus	ppm	<b>541</b>	<b>607</b>	■ 1069	□1566
Barium	ppm	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Boron	ppm	<b>■</b> 9	<b>1</b> 1	<b>5</b> 4	■81



**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

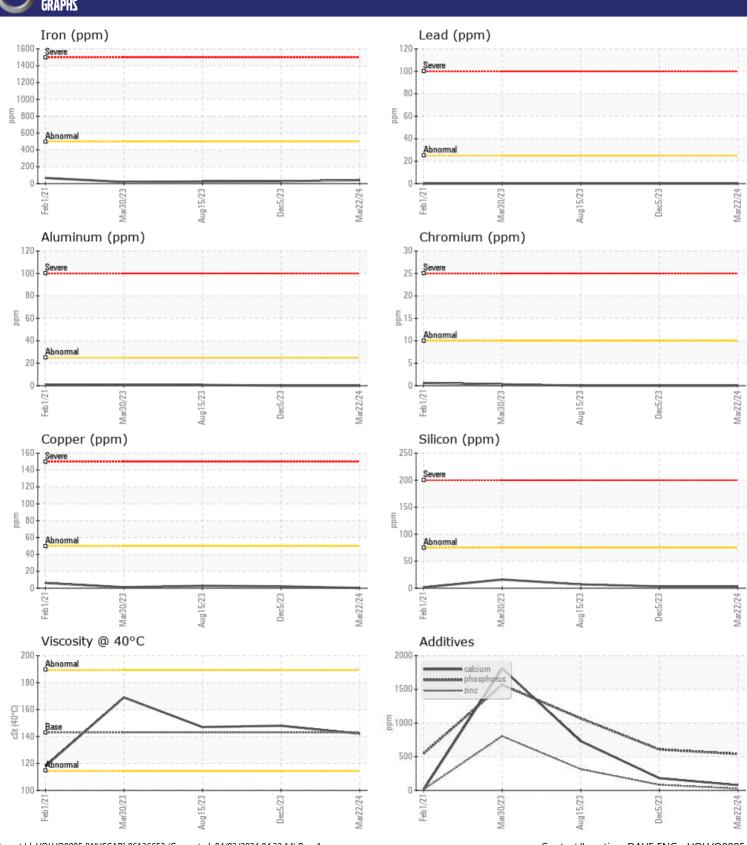
Resample at the next service interval to monitor.All component wear rates are normal. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.

Depot: **VOLVO8885 Unique No:** 10956118 Signed: Wes Davis Report Date: 03 Apr 2024











CONSTRUCTION EQUIPMENT
SPM688226 ALTER ROCK SENNEBOGEN 840 840.0.2192 - REAR

Sample No: VCP438187

Oil Type: **GEAR OIL SAE 80W90** Job No: SPM688226 ALTER ROCK

SAMPLE	NFORMATI	ON			
Sample Number	-	VCP438187	VCP433278	VCP409183	VCP399529
Sample Date		22 Mar 2024	05 Dec 2023	15 Aug 2023	30 Mar 2023
Machine Hours		15145	13870	12681	11146
Oil Hours		0	0	0	0
Oil Changed		Changed	Changed	Changed	Changed
Sample Status		NORMAL	NORMAL	NORMAL	NORMAL
OIL COND	ITION				
Visc @ 40°C	cSt	<b>139</b>	<b>1</b> 39	<b>1</b> 46	■181
CONTAMI	NATION				

CONTA	AMINATION					
Water	%	NEG	NEG	NEG	NEG	
Silicon	ppm	<b>2</b>	<b>2</b>	<b>4</b>	<b>1</b> 3	
Sodium	ppm	<b>-&lt;1</b>	< 1	<b>2</b>	<b>1</b>	
Potassium	ppm	■0	<b>-</b> <1	□0	<b>-</b> <1	

WEAR	METALS					
Iron	ppm	■5	□6	<b>□</b> 6	<b>4</b>	
Copper	ppm	■0	<b>1</b>	<b>2</b>	<b>-</b> <1	
Lead	ppm	<b>0</b>	<b>0</b>	□0	<b>0</b>	
Tin	ppm	■0	<b></b> <1	<b></b> <1	<b>0</b>	
Aluminum	ppm	<b>0</b>	<b>0</b>	< 1	<b>1</b>	
Chromium	ppm	■0	<b>0</b>	■0	<b>-</b> <1	
Molybdenum	ppm	<b>0</b>	<b>0</b>	□0	< 1	
Nickel	ppm	■0	<b>0</b>	□0	<b>-</b> <1	
Titanium	ppm	0	0	0	0	
Silver	ppm	0	0	0	0	
Manganese	ppm	<b>■&lt;1</b>	□ 0	< 1	< 1	
Vanadium	ppm	0	0	0	0	

ADDITIV	Zav				
Calcium	ppm	<b>14</b>	<b>6</b> 4	■363	■2458
Magnesium	ppm	<b>0</b>	<b>-</b> <1	<b>4</b>	■13
Zinc	ppm	0	<b>2</b> 6	<b>159</b>	■1065
Phosphorus	ppm	<b>477</b>	<b>489</b>	■818	□1269
Barium	ppm	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Boron	ppm	<1	<b>4</b>	■30	■36



**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

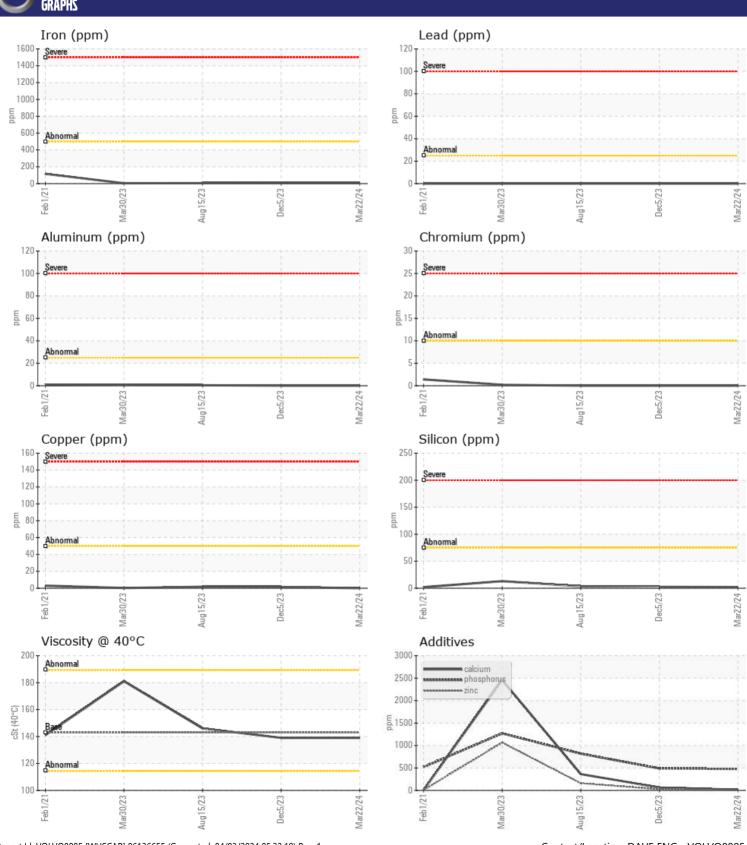
Resample at the next service interval to monitor.All component wear rates are normal. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.

Depot: **VOLVO8885 Unique No:** 10956120 Signed: Wes Davis Report Date: 03 Apr 2024











CONSTRUCTION EQUIPMENT
SPM646183 ALTER SENNEBOGEN 840 840.0.2192 - REAR AXLE

Sample No: VCP433263

Oil Type: **GEAR OIL SAE 80W90** Job No: **SPM646183 ALTER** 

SAMPLE IN	IFORMATION				
Sample Number		VCP433263	VCP409186	VCP399748	VCP327506
Sample Date		05 Dec 2023	15 Aug 2023	30 Mar 2023	06 Oct 2021
Machine Hours		13870	12681	11146	5724
Oil Hours		0	0	0	0
Oil Changed		Changed	Changed	Changed	N/A
Sample Status		NORMAL	NORMAL	NORMAL	NORMAL
OIL CONDI	TION				
Visc @ 40°C	cSt	<b>139</b>	<b>1</b> 47	<b>181</b>	□146
VOLVO	ATION				

CONT	AMINATION				
Water	%	NEG	NEG	NEG	NEG
Silicon	ppm	<b>2</b>	<b>4</b>	<b>1</b> 3	<b>2</b>
Sodium	ppm	<b>1</b>	<b>2</b>	<b>1</b>	<b>0</b>
Potassium	ppm	<b>■&lt;1</b>	<b>0</b>	<1	<b>0</b>

WEAR I	METALS					
Iron	ppm	<b>■</b> 6	<b>7</b>	■3	<b>7</b>	
Copper	ppm	<b>1</b>	<b>2</b>	<b>-</b> <1	□3	
Lead	ppm	<b>0</b>	<b>0</b>	<b>0</b>	< 1	
Tin	ppm	<b>■&lt;1</b>	0	□0	<b></b> <1	
Aluminum	ppm	<b>0</b>	<b></b> <1	<b>1</b>	□ 0	
Chromium	ppm	<b>■</b> 0	0	<b>-</b> <1	□0	
Molybdenum	ppm	<b>0</b>	<b>0</b>	<b></b>	<b>0</b>	
Nickel	ppm	<b>■</b> 0	0	<b>-</b> <1	0	
Titanium	ppm	0	0	0	0	
Silver	ppm	0	0	0	<1	
Manganese	ppm	<b>0</b>	< 1	<b></b>	< 1	
Vanadium	ppm	0	0	0	0	

ADDITI	VES				
Calcium	ppm	<b>44</b>	■363	■ 2533	<b>2</b>
Magnesium	ppm	<b>■</b> <1	<b>5</b>	□14	<b>0</b>
Zinc	ppm	<b>17</b>	<b>157</b>	■1089	<b>1</b>
Phosphorus	ppm	<b>503</b>	■813	□1288	□2018
Barium	ppm	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Boron	ppm	<b>■</b> 7	■30	■35	■90



**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

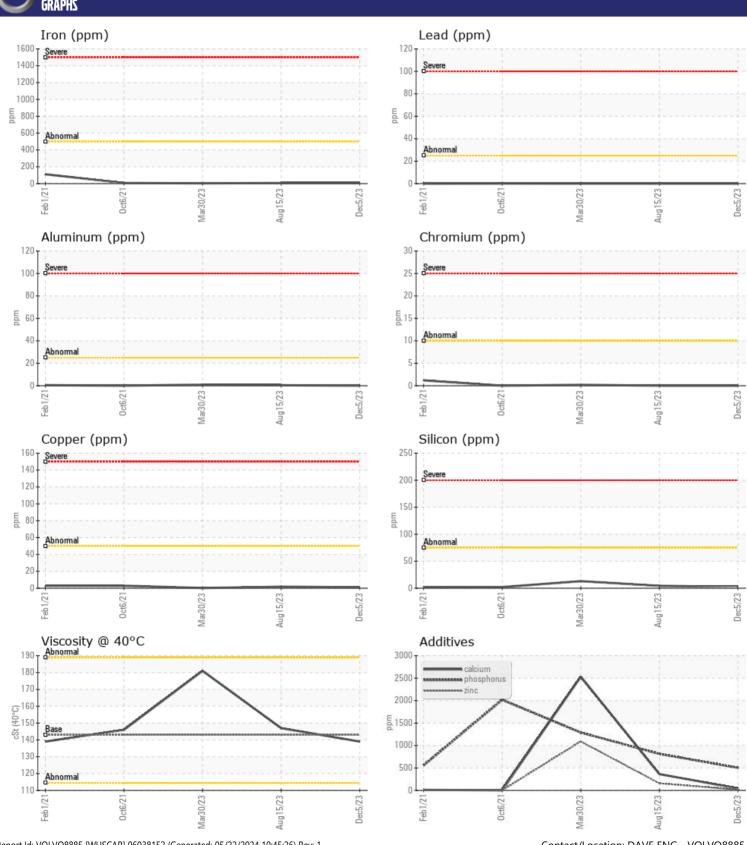
Resample at the next service interval to monitor.All component wear rates are normal. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.

Depot: VOLVO8885 **Unique No:** 10793381 Signed: Wes Davis Report Date: 19 Dec 2023











CONSTRUCTION EQUIPMENT

SPM688226 ALTER ROCK SENNEBOGEN 840 840.0.2192 - REAR RIGHT

Sample No: VCP437355

Oil Type: **GEAR OIL SAE 80W90** Job No: SPM688226 ALTER ROCK

VOLVO	FORMATION				
	FORMATION				
Sample Number		VCP437355	VCP433279	VCP409181	VCP399524
Sample Date		22 Mar 2024	05 Dec 2023	15 Aug 2023	30 Mar 2023
Machine Hours		15145	13870	12681	11146
Oil Hours		0	0	0	0
Oil Changed		Changed	Changed	Changed	Changed
Sample Status		NORMAL	NORMAL	NORMAL	NORMAL
OIL CONDIT	ION				
Visc @ 40°C	cSt	<b>139</b>	m 137	m 147	m180
		_	_	_	
VOLVO					
CONTAMINATION					

CONTAI	MINATION					
Water	%	NEG	NEG	NEG	NEG	
Silicon	ppm	<b>2</b>	<b>3</b>	<b>4</b>	<b>1</b> 3	
Sodium	ppm	<b>0</b>	< 1	<b>2</b>	<b>1</b>	
Potassium	ppm	■ 0	<b>-</b> <1	<b>2</b>	<b>-</b> <1	

WEAR N	METALS					
Iron	ppm	<b>6</b>	<b>6</b>	□10	<b>4</b>	
Copper	ppm	■0	<b>1</b>	<b>2</b>	<b>-</b> <1	
Lead	ppm	<b>0</b>	<b>0</b>	□0	<b>0</b>	
Tin	ppm	■0	<b>-</b> <1	<b></b> <1	□0	
Aluminum	ppm	<b>0</b>	<b>0</b>	< 1	<b>1</b>	
Chromium	ppm	■0	<b>0</b>	■0	<b>-</b> <1	
Molybdenum	ppm	<b>0</b>	<b>0</b>	□0	<b></b>	
Nickel	ppm	■0	0	■0	<b>-</b> <1	
Titanium	ppm	0	0	<1	0	
Silver	ppm	0	0	0	0	
Manganese	ppm	<b>■</b> <1	<b>0</b>	< 1	<b></b>	
Vanadium	ppm	0	0	0	0	

ADDITIVES					
Calcium	ppm	<b>12</b>	<b>5</b> 7	■386	□2511
Magnesium	ppm	■0	<b>0</b>	<b>4</b>	<b>1</b> 3
Zinc	ppm	0	<b>2</b> 4	<b>1</b> 56	<b>1092</b>
Phosphorus	ppm	<b>479</b>	<b>484</b>	<b>761</b>	<b>1282</b>
Barium	ppm	<b>0</b>	<b>0</b>	< 1	<b>0</b>
Boron	ppm	<b>1</b>	<b>4</b>	■29	■36



**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:** 10956119 Signed: Wes Davis Report Date: 03 Apr 2024







