



# CONSTRUCTION EQUIPMENT

## 9535 VOLVO ECR235EL 310385 - SWING DRIVE



**Sample No:** VCP413840  
**Oil Type:** CHEVRON DELO GEAR ESI OIL 85W140  
**Job No:** 9535



### SAMPLE INFORMATION

Sample Number	<b>VCP413840</b>	VCP272100	VCP214649	---
Sample Date	<b>28 Aug 2023</b>	13 Jun 2020	11 Jan 2018	---
Machine Hours	<b>4209</b>	2176	485	---
Oil Hours	<b>0</b>	0	0	---
Oil Changed	<b>Changed</b>	Changed	Changed	---
Sample Status	<b>ABNORMAL</b>	ABNORMAL	NORMAL	---

**DIRT PLUS**  
 1001 PRINCE GEORGES BLVD  
 UPPER MARLBORO, MD  
 US 20772  
 Contact: MARCO DECESARIS  
 mdecesaris@dirtyplus.biz  
 T:  
 F:



### OIL CONDITION

Visc @ 40°C	cSt	<b>297</b>	56.5	182.2	---
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### CONTAMINATION

Water	%	<b>0.273</b>	---	---	---
Silicon	ppm	<b>13</b>	0	10	---
Sodium	ppm	<b>2</b>	1	1	---
Potassium	ppm	<b>1</b>	1	5	---



### WEAR METALS

Iron	ppm	<b>1481</b>	1222	110	---
Copper	ppm	<b>11</b>	30	8	---
Lead	ppm	<b>0</b>	<1	0	---
Tin	ppm	<b>0</b>	<1	0	---
Aluminum	ppm	<b>4</b>	<1	<1	---
Chromium	ppm	<b>15</b>	13	2	---
Molybdenum	ppm	<b>0</b>	0	0	---
Nickel	ppm	<b>&lt;1</b>	<1	<1	---
Titanium	ppm	<b>&lt;1</b>	<1	<1	---
Silver	ppm	<b>0</b>	0	0	---
Manganese	ppm	<b>13</b>	11	2	---
Vanadium	ppm	<b>0</b>	<1	0	---



### ADDITIVES

Calcium	ppm	<b>28</b>	18	3	---
Magnesium	ppm	<b>4</b>	2	0	---
Zinc	ppm	<b>14</b>	33	9	---
Phosphorus	ppm	<b>1226</b>	2072	440	---
Barium	ppm	<b>0</b>	0	<1	---
Boron	ppm	<b>279</b>	136	<1	---

### Diagnosis

The oil change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor. Gear wear is indicated. All other component wear rates are normal. There is a light concentration of water present in the oil. The condition of the oil is acceptable for the time in service.

**Depot:** DIRUPP  
**Unique No:** 10635511  
**Signed:** Don Baldrige  
**Report Date:** 10 Sep 2023



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## GRAPHS

