



# CONSTRUCTION EQUIPMENT

## A11204 VOLVO ECR235EL 310119 - DIESEL ENGINE



**Sample No:** VCP416961  
**Oil Type:** MOBIL 15W40  
**Job No:** A11204



### SAMPLE INFORMATION

Sample Number	<b>VCP416961</b>	VCP388874	VCP372064	VCP356336
Sample Date	<b>27 Sep 2023</b>	24 Oct 2022	09 Jun 2022	28 Feb 2022
Machine Hours	<b>5960</b>	5165	4836	4490
Oil Hours	<b>250</b>	250	0	250
Oil Changed	<b>Changed</b>	Changed	Changed	Changed
Sample Status	<b>NORMAL</b>	NORMAL	NORMAL	NORMAL

**JAMES J ANDERSON**  
 6958 TORRESDALE AVENUE  
 PHILADELPHIA, PA  
 US 19135  
 Contact: JOHN HERBUT  
 herb@jjaconstruction.com  
 T: (215)850-9051  
 F: (215)427-0208



### OIL CONDITION

Visc @ 100°C	cSt	<b>13.7</b>	14.0	12.8	12.7
Base Number (BN)	mg KOH/g	<b>7.6</b>	8.0	10.8	11.5
Oxidation (PA)	%	<b>50</b>	66	81	84



### CONTAMINATION

Soot %	%	<b>0.2</b>	0.2	0.1	0.1
Nitration (PA)	%	<b>60</b>	85	63	62
Sulfation (PA)	%	<b>48</b>	57	60	64
Glycol	%	<b>NEG</b>	NEG	NEG	NEG
Fuel	%	<b>&lt;1.0</b>	<1.0	<1.0	<1.0
Silicon	ppm	<b>7</b>	5	8	8
Sodium	ppm	<b>5</b>	2	2	3
Potassium	ppm	<b>5</b>	2	1	<1



### WEAR METALS

Iron	ppm	<b>14</b>	11	12	14
Copper	ppm	<b>3</b>	<1	<1	<1
Lead	ppm	<b>1</b>	0	0	0
Tin	ppm	<b>1</b>	<1	<1	<1
Aluminum	ppm	<b>4</b>	4	2	4
Chromium	ppm	<b>&lt;1</b>	<1	<1	<1
Molybdenum	ppm	<b>52</b>	71	50	49
Nickel	ppm	<b>&lt;1</b>	0	0	0
Titanium	ppm	<b>&lt;1</b>	9	0	0
Silver	ppm	<b>0</b>	0	<1	0
Manganese	ppm	<b>1</b>	<1	<1	<1
Vanadium	ppm	<b>0</b>	<1	0	0



### ADDITIVES

Calcium	ppm	<b>2125</b>	2129	1663	1847
Magnesium	ppm	<b>725</b>	129	534	556
Zinc	ppm	<b>1542</b>	1219	1170	1263
Phosphorus	ppm	<b>1273</b>	1016	934	1007
Barium	ppm	<b>0</b>	2	0	0
Boron	ppm	<b>25</b>	55	56	56

### 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:** JAAPHI  
**Unique No:** 10672657  
**Signed:** Wes Davis  
**Report Date:** 03 Oct 2023

**VOLVO** **GRAPHS**

