



# CONSTRUCTION EQUIPMENT

## 270334 VOLVO SD115B 236555 - DIESEL ENGINE



**Sample No:** VCP314710  
**Oil Type:** VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3  
**Job No:** 270334



### SAMPLE INFORMATION

Sample Number	<b>VCP314710</b>	VCP305547	VCP284827	VCP262426
Sample Date	<b>12 Jun 2021</b>	18 Jan 2021	06 Aug 2020	09 Mar 2020
Machine Hours	<b>3986</b>	3328	3841	2324
Oil Hours	<b>500</b>	500	500	500
Oil Changed	<b>Changed</b>	Changed	Changed	Changed
Sample Status	<b>ATTENTION</b>	NORMAL	NORMAL	NORMAL

### RIPA AND ASSOCIATES

10149 FISHER AVENUE  
 TAMPA, FL  
 US 33619  
 Contact: ROBERT TURNER  
 rturner@ripatampa.com



### OIL CONDITION

Visc @ 100°C	cSt	<b>▲ 12.4</b>	■ 12.8	■ 12.2	■ 13.2
Oxidation (PA)	%	<b>74</b>	79	71	63



### CONTAMINATION

Water	%	<b>NEG</b>	NEG	NEG	NEG
Soot %	%	■ <b>0.4</b>	■ 0.4	■ 0.4	■ 0.3
Nitration (PA)	%	<b>82</b>	76	76	84
Sulfation (PA)	%	<b>58</b>	60	57	56
Glycol	%	<b>NEG</b>	NEG	NEG	NEG
Fuel	%	<b>▲ 3.3</b>	<1.0	<1.0	<1.0
Silicon	ppm	■ <b>5</b>	■ 11	■ 8	■ 8
Sodium	ppm	■ <b>4</b>	■ 3	■ 3	■ 3
Potassium	ppm	■ <b>1</b>	■ 4	■ 15	■ 0

### Diagnosis

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. Light fuel dilution occurring. The oil viscosity is lower than normal. Confirm oil type.



### WEAR METALS

Iron	ppm	■ <b>15</b>	■ 18	■ 15	■ 13
Copper	ppm	■ <b>3</b>	■ 3	■ 2	■ 2
Lead	ppm	■ <b>&lt;1</b>	■ 4	■ 0	■ 0
Tin	ppm	■ <b>2</b>	■ 0	■ 0	■ 0
Aluminum	ppm	■ <b>&lt;1</b>	■ 6	■ 4	■ 2
Chromium	ppm	■ <b>2</b>	■ 3	■ 2	■ 2
Molybdenum	ppm	■ <b>52</b>	■ 51	■ 42	■ 12
Nickel	ppm	■ <b>&lt;1</b>	■ 0	■ <1	■ <1
Titanium	ppm	<b>&lt;1</b>	<1	<1	<1
Silver	ppm	<b>0</b>	0	0	0
Manganese	ppm	■ <b>&lt;1</b>	■ <1	■ <1	■ <1
Vanadium	ppm	<b>0</b>	0	0	0



### ADDITIVES

Calcium	ppm	■ <b>1423</b>	■ 1726	■ 1451	■ 1250
Magnesium	ppm	<b>745</b>	■ 709	736	■ 740
Zinc	ppm	■ <b>1166</b>	■ 1222	■ 1114	■ 790
Phosphorus	ppm	■ <b>973</b>	■ 1027	■ 880	■ 726
Barium	ppm	■ <b>0</b>	■ 0	■ 0	■ 0
Boron	ppm	■ <b>20</b>	■ 18	■ 13	■ 22

**Depot:** RIPTAM  
**Unique No:** 9565441  
**Signed:** Jonathan Hester  
**Report Date:** 01 Jul 2021

**VOLVO** **GRAPHS**

