



# CONSTRUCTION EQUIPMENT

524790 VOLVO SD115B 236585 - DIESEL ENGINE



**Sample No:** VCP396765  
**Oil Type:** VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3  
**Job No:** 524790



## SAMPLE INFORMATION

Sample Number	VCP396765	VCP364320	VCP364491	VCP311894
Sample Date	03 Mar 2023	01 Sep 2022	31 Aug 2022	11 Jun 2021
Machine Hours	3197	2647	2647	1644
Oil Hours	500	500	500	600
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	NORMAL	ABNORMAL	NORMAL	NORMAL

### RIPA AND ASSOCIATES

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

T:  
 F:



## OIL CONDITION

Visc @ 100°C	cSt	13.2	12.4	13.4	12.8
Base Number (BN)	mg KOH/g	10.8	10.4	12.6	---
Oxidation (PA)	%	82	102	90	87

### 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.



## CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Soot %	%	0.6	0.5	0.5	0.8
Nitration (PA)	%	83	98	79	96
Sulfation (PA)	%	60	73	65	63
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	2.8	<1.0	<1.0
Silicon	ppm	9	28	9	9
Sodium	ppm	2	3	1	4
Potassium	ppm	2	35	2	3



## WEAR METALS

Iron	ppm	24	33	21	43
Copper	ppm	2	414	2	3
Lead	ppm	0	2	0	<1
Tin	ppm	1	3	<1	2
Aluminum	ppm	6	19	4	6
Chromium	ppm	2	2	1	3
Molybdenum	ppm	46	42	43	54
Nickel	ppm	<1	0	0	1
Titanium	ppm	<1	2	0	<1
Silver	ppm	0	0	0	0
Manganese	ppm	1	2	<1	1
Vanadium	ppm	<1	0	0	<1



## ADDITIVES

Calcium	ppm	1615	1708	1734	1749
Magnesium	ppm	610	450	519	481
Zinc	ppm	1120	1099	1158	1144
Phosphorus	ppm	917	879	966	952
Barium	ppm	0	0	0	0
Boron	ppm	19	21	22	41

**Depot:** RIPTAM  
**Unique No:** 10402555  
**Signed:** Wes Davis  
**Report Date:** 31 Mar 2023



# CONSTRUCTION EQUIPMENT



## GRAPHS

