

- DIESEL ENGINE

Sample No: VCP219018

Oil Type: VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3

SAMPLE INFORMATION

Sample Number	VCP219018	VCP194693	VCP205127	---
Sample Date	20 Sep 2017	04 May 2017	07 Dec 2016	---
Machine Hours	1727	1149	498	---
Oil Hours	600	500	0	---
Oil Changed	Changed	Changed	Changed	---
Sample Status	NORMAL	NORMAL	NORMAL	---

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OIL CONDITION

Visc @ 100°C	cSt	13.68	13.74	13.54	---
Oxidation (PA)	%	76	24	52	---

CONTAMINATION

Water	%	NEG	NEG	NEG	---
Soot %	%	0.9	0	0.5	---
Nitration (PA)	%	67	25	58	---
Sulfation (PA)	%	61	33	53	---
Glycol	%	NEG	NEG	NEG	---
Fuel	%	<1.0	<1.0	<1.0	---
Silicon	ppm	9	10	24	---
Sodium	ppm	3	4	6	---
Potassium	ppm	10	1	3	---

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.

WEAR METALS

Iron	ppm	25	28	53	---
Copper	ppm	2	3	10	---
Lead	ppm	1	<1	<1	---
Tin	ppm	0	<1	2	---
Aluminum	ppm	6	7	14	---
Chromium	ppm	2	2	4	---
Molybdenum	ppm	40	42	45	---
Nickel	ppm	<1	<1	<1	---
Titanium	ppm	<1	<1	<1	---
Silver	ppm	0	0	0	---
Manganese	ppm	<1	1	6	---
Vanadium	ppm	0	0	0	---

ADDITIVES

Calcium	ppm	1676	1605	1226	---
Magnesium	ppm	530	555	842	---
Zinc	ppm	844	906	1033	---
Phosphorus	ppm	775	783	912	---
Barium	ppm	0	0	<1	---
Boron	ppm	18	21	32	---

Depot: VOLVO0093
Unique No: 7939221
Signed: Wes Davis
Report Date: 25 Sep 2017

GRAPHS

