



# CONSTRUCTION EQUIPMENT

## 25682 VOLVO EC350 314419 - DIESEL ENGINE



**Sample No:** VCP447517  
**Oil Type:** VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3  
**Job No:** 25682



### SAMPLE INFORMATION

Sample Number	VCP447517	VCP440963	VCP405861	VCP404419
Sample Date	16 May 2024	16 Jan 2024	02 Aug 2023	21 Feb 2023
Machine Hours	2020	1507	977	477
Oil Hours	0	0	1000	500
Oil Changed	Changed	Changed	Changed	Changed
Sample Status	ABNORMAL	ABNORMAL	ATTENTION	ABNORMAL

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### OIL CONDITION

Visc @ 100°C	cSt	12.2	12.2	12.1	9.3
Base Number (BN)	mg KOH/g	8.5	7.9	7.5	6.1
Oxidation (PA)	%	80	84	74	60

### Diagnosis

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. Moderate concentration of visible metal present. All component wear rates are normal. There is no indication of any contamination in the oil. The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.



### CONTAMINATION

Water	%	NEG	NEG	NEG	NEG
Soot %	%	0.1	0.1	0.1	0.1
Nitration (PA)	%	69	73	66	89
Sulfation (PA)	%	58	61	59	53
Glycol	%	NEG	NEG	NEG	NEG
Fuel	%	<1.0	<1.0	<1.0	0.9
Silicon	ppm	7	6	8	29
Sodium	ppm	4	2	0	<1
Potassium	ppm	<1	0	2	5



### WEAR METALS

Iron	ppm	4	5	6	11
Copper	ppm	6	18	92	471
Lead	ppm	<1	0	<1	2
Tin	ppm	1	<1	1	3
Aluminum	ppm	2	<1	1	4
Chromium	ppm	0	0	0	0
Molybdenum	ppm	49	42	53	95
Nickel	ppm	0	0	<1	0
Titanium	ppm	0	<1	0	0
Silver	ppm	0	0	<1	0
Manganese	ppm	1	<1	<1	2
Vanadium	ppm	0	0	0	0



### ADDITIVES

Calcium	ppm	1680	1596	1727	2217
Magnesium	ppm	511	465	435	38
Zinc	ppm	1156	1007	1151	1149
Phosphorus	ppm	953	849	956	982
Barium	ppm	0	0	0	<1
Boron	ppm	70	56	84	63

**Depot:** VOLVO3387  
**Unique No:** 11042547  
**Signed:** Jonathan Hester  
**Report Date:** 23 May 2024



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## GRAPHS

