



# CONSTRUCTION EQUIPMENT

## WO7013105 STANLEY VOLVO A45G 342207 - DIESEL ENGINE



**Sample No:** VCP409380  
**Oil Type:** VOLVO ULTRA DIESEL ENGINE OIL 15W40 VDS-3  
**Job No:** WO7013105 STANLEY



### SAMPLE INFORMATION

Sample Number	<b>VCP409380</b>	VCP423614	VCP399448	VCP246332
Sample Date	<b>15 Aug 2023</b>	28 Jun 2023	02 May 2023	09 Dec 2022
Machine Hours	<b>0</b>	9652	9278	8521
Oil Hours	<b>185</b>	500	0	600
Oil Changed	<b>N/A</b>	Changed	N/A	Changed
Sample Status	<b>ABNORMAL</b>	ABNORMAL	NORMAL	NORMAL

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### OIL CONDITION

Visc @ 100°C	cSt	<b>12.9</b>	12.9	12.7	12.8
Base Number (BN)	mg KOH/g	<b>11.7</b>	9.9	5.3	7.7
Oxidation (PA)	%	<b>65</b>	68	63	80



### CONTAMINATION

Soot %	%	<b>0.3</b>	0.4	0.4	0.6
Nitration (PA)	%	<b>75</b>	90	77	93
Sulfation (PA)	%	<b>55</b>	56	55	63
Glycol	%	<b>NEG</b>	NEG	NEG	NEG
Fuel	%	<b>&lt;1.0</b>	<1.0	<1.0	<1.0
Silicon	ppm	<b>12</b>	17	6	3
Sodium	ppm	<b>683</b>	499	3	0
Potassium	ppm	<b>245</b>	209	3	2

### Diagnosis

We advise that you check for the source of the coolant leak. Check for low coolant level. We recommend an early resample to monitor this condition. All component wear rates are normal. Sodium and/or potassium levels are high. The BN result indicates that there is suitable alkalinity remaining in the oil.



### WEAR METALS

Iron	ppm	<b>12</b>	19	11	10
Copper	ppm	<b>2</b>	2	2	3
Lead	ppm	<b>2</b>	5	2	1
Tin	ppm	<b>&lt;1</b>	1	1	<1
Aluminum	ppm	<b>4</b>	7	3	4
Chromium	ppm	<b>&lt;1</b>	<1	<1	<1
Molybdenum	ppm	<b>53</b>	62	65	46
Nickel	ppm	<b>&lt;1</b>	1	1	0
Titanium	ppm	<b>&lt;1</b>	<1	<1	<1
Silver	ppm	<b>&lt;1</b>	0	0	<1
Manganese	ppm	<b>&lt;1</b>	<1	<1	<1
Vanadium	ppm	<b>0</b>	<1	<1	0



### ADDITIVES

Calcium	ppm	<b>1166</b>	1428	2081	1384
Magnesium	ppm	<b>654</b>	727	173	569
Zinc	ppm	<b>811</b>	971	1239	878
Phosphorus	ppm	<b>703</b>	773	1009	693
Barium	ppm	<b>2</b>	0	0	0
Boron	ppm	<b>12</b>	17	30	25

**Depot:** VOLVO8882  
**Unique No:** 10607035  
**Signed:** Jonathan Hester  
**Report Date:** 21 Aug 2023



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## VOLVO GRAPHS

